

APPENDIX F
ANALYTICAL LABORATORY REPORTS:
FISH TISSUE RESULTS

ภาคผนวก 26

ผลการวิเคราะห์คุณภาพสิ่งแวดล้อม (Environmental Monitoring)

หมายเหตุ : ผลการวิเคราะห์คุณภาพสิ่งแวดล้อมที่แสดงในภาคผนวกนี้เป็นเพียงตัวอย่างเท่านั้น ทั้งนี้รายละเอียดของ
ผลการวิเคราะห์ฉบับเต็มสามารถดูได้จากไฟล์ในซีดี

ANALYTICAL REPORT

PREPARED FOR

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Generated 8/28/2023 4:24:21 PM

JOB DESCRIPTION

Gulf of Thailand 2023 - Project T41423.20

JOB NUMBER

580-130145-4

Eurofins Seattle

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



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Case Narrative

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Job ID: 580-130145-4

Laboratory: Eurofins Seattle

Narrative

Job Narrative 580-130145-4

Comments

No additional comments.

Receipt

The samples were received on 8/2/2023 9:20 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was -20.0° C.

Metals

Method 1632A: The following samples were diluted due to the nature of the sample matrix: LAWA-1123 (580-130145-134), LAWA-1204 (580-130145-147), LAWA-1212 (580-130145-155), LAWA-1218 (580-130145-162), (580-130145-A-76-C), (580-130145-A-76-D MS) and (580-130145-A-76-E MSD). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Tetra Tech, Inc.

Job ID: 580-130145-4

Project/Site: Gulf of Thailand 2023 - Project T41423.20

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1121

Lab Sample ID: 580-130145-131

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	53		6.7	3.2	ng/g		08/14/23 10:35	08/24/23 13:05	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1121-DUP

Lab Sample ID: 580-130145-132

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	44		0.90	0.42	ng/g		08/14/23 10:35	08/24/23 20:49	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1122

Lab Sample ID: 580-130145-133

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	18		0.94	0.44	ng/g		08/14/23 10:35	08/25/23 19:27	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1123

Lab Sample ID: 580-130145-134

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.050	0.035	mg/Kg		08/16/23 16:48	08/17/23 14:36	50

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	30		2.9	0.49	ng/g		08/14/23 14:21	08/24/23 10:52	10

Method: EPA 1638 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.42	B	0.039	0.0039	mg/Kg		08/14/23 14:21	08/16/23 17:59	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1124

Lab Sample ID: 580-130145-135

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	14		0.92	0.43	ng/g		08/14/23 10:35	08/25/23 19:31	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1124-DUP

Lab Sample ID: 580-130145-136

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	16		0.90	0.42	ng/g		08/14/23 10:35	08/25/23 19:35	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1125

Lab Sample ID: 580-130145-137

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	210		7.1	3.3	ng/g		08/14/23 10:35	08/24/23 18:41	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-4

Project/Site: Gulf of Thailand 2023 - Project T41423.20

Client Sample ID: LAWA-1126

Lab Sample ID: 580-130145-138

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	41		0.98	0.46	ng/g		08/14/23 10:35	08/25/23 19:39	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1127

Lab Sample ID: 580-130145-139

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	36		0.94	0.44	ng/g		08/14/23 10:35	08/25/23 19:43	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1129

Lab Sample ID: 580-130145-140

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	48		7.2	3.4	ng/g		08/14/23 10:35	08/24/23 18:53	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1130

Lab Sample ID: 580-130145-141

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	31		0.96	0.45	ng/g		08/14/23 10:35	08/25/23 19:51	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1132

Lab Sample ID: 580-130145-142

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	190		7.1	3.3	ng/g		08/14/23 10:35	08/24/23 19:10	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1132-DUP

Lab Sample ID: 580-130145-143

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	160		7.1	3.3	ng/g		08/14/23 10:35	08/24/23 19:14	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1201

Lab Sample ID: 580-130145-144

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	25		0.93	0.44	ng/g		08/14/23 10:35	08/25/23 19:56	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1202

Lab Sample ID: 580-130145-145

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	22		0.89	0.42	ng/g		08/14/23 10:35	08/25/23 20:00	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1203

Lab Sample ID: 580-130145-146

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	45		7.0	3.3	ng/g		08/14/23 10:35	08/24/23 19:26	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1204

Lab Sample ID: 580-130145-147

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.047	0.033	mg/Kg		08/16/23 16:48	08/17/23 14:42	50

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	21		2.8	0.46	ng/g		08/14/23 14:21	08/24/23 10:56	10

Method: EPA 1638 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.37	B	0.037	0.0037	mg/Kg		08/14/23 14:21	08/16/23 18:02	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1205

Lab Sample ID: 580-130145-148

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	25		0.96	0.45	ng/g		08/14/23 10:35	08/25/23 20:12	20

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-4

Project/Site: Gulf of Thailand 2023 - Project T41423.20

Client Sample ID: LAWA-1206

Lab Sample ID: 580-130145-149

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	36		0.90	0.42	ng/g		08/14/23 10:35	08/25/23 20:16	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1207

Lab Sample ID: 580-130145-150

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	38		0.98	0.46	ng/g		08/14/23 10:35	08/25/23 20:20	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1208

Lab Sample ID: 580-130145-151

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	15		0.94	0.44	ng/g		08/14/23 10:35	08/25/23 20:25	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1209

Lab Sample ID: 580-130145-152

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	29		0.91	0.43	ng/g		08/14/23 10:35	08/25/23 20:29	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1210

Lab Sample ID: 580-130145-153

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	22		0.99	0.47	ng/g		08/14/23 10:35	08/25/23 20:33	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1211

Lab Sample ID: 580-130145-154

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	20		0.91	0.43	ng/g		08/14/23 10:35	08/25/23 20:37	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1212

Lab Sample ID: 580-130145-155

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.048	0.034	mg/Kg		08/16/23 16:48	08/17/23 14:48	50

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	17		2.8	0.46	ng/g		08/14/23 14:21	08/24/23 11:00	10

Method: EPA 1638 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.64	B	0.037	0.0037	mg/Kg		08/14/23 14:21	08/16/23 18:06	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1213

Lab Sample ID: 580-130145-156

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	29		0.96	0.45	ng/g		08/14/23 10:35	08/25/23 20:41	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1214

Lab Sample ID: 580-130145-157

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	13		0.99	0.46	ng/g		08/14/23 10:35	08/24/23 20:54	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1214-DUP

Lab Sample ID: 580-130145-158

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	12		0.99	0.47	ng/g		08/14/23 10:35	08/25/23 20:45	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1215

Lab Sample ID: 580-130145-159

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	37		0.98	0.46	ng/g		08/14/23 10:35	08/25/23 20:50	20

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Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1216

Lab Sample ID: 580-130145-160

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	17		0.99	0.47	ng/g		08/14/23 10:35	08/25/23 21:02	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1217

Lab Sample ID: 580-130145-161

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	56		7.2	3.4	ng/g		08/14/23 10:35	08/24/23 13:59	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1218

Lab Sample ID: 580-130145-162

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.048	0.033	mg/Kg		08/16/23 16:48	08/17/23 14:54	50

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	22		2.9	0.48	ng/g		08/14/23 14:21	08/24/23 11:04	10

Method: EPA 1638 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	1.0	B	0.038	0.0038	mg/Kg		08/14/23 14:21	08/16/23 18:10	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1219

Lab Sample ID: 580-130145-163

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	190		6.7	3.2	ng/g		08/14/23 10:35	08/24/23 20:24	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1219-DUP

Lab Sample ID: 580-130145-164

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	170		7.2	3.4	ng/g		08/14/23 10:35	08/24/23 20:29	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1220

Lab Sample ID: 580-130145-165

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	200		6.8	3.2	ng/g		08/14/23 10:35	08/24/23 20:33	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-4

Project/Site: Gulf of Thailand 2023 - Project T41423.20

Client Sample ID: LAWA-1221

Lab Sample ID: 580-130145-166

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	61		7.3	3.4	ng/g		08/25/23 09:55	08/25/23 21:56	150

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Method: 1631B - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 580-434448/1-A

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434448

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/14/23 10:35	08/24/23 11:42	20

Lab Sample ID: MB 580-434448/2-A

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434448

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/14/23 10:35	08/24/23 11:46	20

Lab Sample ID: MB 580-434448/3-A

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434448

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/14/23 10:35	08/24/23 11:50	20

Lab Sample ID: LCS 580-434448/4-A

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 434448

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	396	433		ng/g		109	75 - 125

Lab Sample ID: LCSD 580-434448/5-A

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 434448

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	396	413		ng/g		104	75 - 125	5	24

Lab Sample ID: 580-130145-131 MS

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: LAWA-1121

Prep Type: Total/NA

Prep Batch: 434448

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	53		392	446		ng/g		100	71 - 125

Lab Sample ID: 580-130145-131 MSD

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: LAWA-1121

Prep Type: Total/NA

Prep Batch: 434448

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	53		365	417		ng/g		100	71 - 125	7	24

Lab Sample ID: 580-130145-132 MS

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: LAWA-1121-DUP

Prep Type: Total/NA

Prep Batch: 434448

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	44		367	419		ng/g		102	71 - 125

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Method: 1631B - Mercury, Low Level (CVAFS)

Lab Sample ID: 580-130145-132 MSD

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: LAWA-1121-DUP

Prep Type: Total/NA

Prep Batch: 434448

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	44		378	417		ng/g		99	71 - 125	1	24

Lab Sample ID: MB 580-434450/1-A

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434450

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/14/23 10:35	08/24/23 11:54	20

Lab Sample ID: MB 580-434450/2-A

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434450

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/14/23 10:35	08/24/23 11:58	20

Lab Sample ID: MB 580-434450/3-A

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434450

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/14/23 10:35	08/24/23 12:02	20

Lab Sample ID: LCS 580-434450/4-A

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 434450

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	396	427		ng/g		108	75 - 125

Lab Sample ID: LCSD 580-434450/5-A

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 434450

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	396	411		ng/g		104	75 - 125	4	24

Lab Sample ID: 580-130145-157 MS

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: LAWA-1214

Prep Type: Total/NA

Prep Batch: 434450

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	13		361	376		ng/g		100	71 - 125

Lab Sample ID: 580-130145-157 MSD

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: LAWA-1214

Prep Type: Total/NA

Prep Batch: 434450

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	13		355	368		ng/g		100	71 - 125	2	24

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Method: 1631B - Mercury, Low Level (CVAFS)

Lab Sample ID: 580-130145-161 MS

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: LAWA-1217

Prep Type: Total/NA

Prep Batch: 434450

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	56		370	418		ng/g		98	71 - 125

Lab Sample ID: 580-130145-161 MSD

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: LAWA-1217

Prep Type: Total/NA

Prep Batch: 434450

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Mercury	56		386	435		ng/g		98	71 - 125	4	24

Lab Sample ID: MB 580-435784/1-A

Matrix: Tissue

Analysis Batch: 435967

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 435784

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/25/23 09:55	08/25/23 21:06	20

Lab Sample ID: MB 580-435784/2-A

Matrix: Tissue

Analysis Batch: 435967

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 435784

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/25/23 09:55	08/25/23 21:10	20

Lab Sample ID: MB 580-435784/3-A

Matrix: Tissue

Analysis Batch: 435967

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 435784

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/25/23 09:55	08/25/23 21:14	20

Lab Sample ID: LCS 580-435784/4-A

Matrix: Tissue

Analysis Batch: 435967

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 435784

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	396	414		ng/g		105	75 - 125

Lab Sample ID: LCSD 580-435784/5-A

Matrix: Tissue

Analysis Batch: 435967

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 435784

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Mercury	396	409		ng/g		103	75 - 125	1	24

Lab Sample ID: 580-130145-166 MS

Matrix: Tissue

Analysis Batch: 435967

Client Sample ID: LAWA-1221

Prep Type: Total/NA

Prep Batch: 435784

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	61		394	469		ng/g		104	71 - 125

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Method: 1631B - Mercury, Low Level (CVAFS)

Lab Sample ID: 580-130145-166 MSD

Matrix: Tissue

Analysis Batch: 435967

Client Sample ID: LAWA-1221

Prep Type: Total/NA

Prep Batch: 435784

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	61		370	430		ng/g		100	71 - 125	9	24

Lab Sample ID: MB 580-434568/1-A

Matrix: Tissue

Analysis Batch: 435373

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 434568

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		3.0	0.50	ng/g		08/14/23 14:21	08/21/23 14:09	10

Lab Sample ID: MB 580-434568/2-A

Matrix: Tissue

Analysis Batch: 435373

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 434568

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		3.0	0.50	ng/g		08/14/23 14:21	08/21/23 14:13	10

Lab Sample ID: MB 580-434568/3-A

Matrix: Tissue

Analysis Batch: 435373

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 434568

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		3.0	0.50	ng/g		08/14/23 14:21	08/21/23 14:26	10

Lab Sample ID: LCS 580-434568/4-A

Matrix: Tissue

Analysis Batch: 435373

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 434568

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	396	392		ng/g		99	75 - 125

Lab Sample ID: LCSD 580-434568/5-A

Matrix: Tissue

Analysis Batch: 435373

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 434568

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	396	390		ng/g		98	75 - 125	1	24

Method: 1638 - Metals (ICP/MS)

Lab Sample ID: MB 580-434568/1-A

Matrix: Tissue

Analysis Batch: 434975

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 434568

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.00887	J	0.040	0.0040	mg/Kg		08/14/23 14:21	08/16/23 15:28	1

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Method: 1638 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 580-434568/2-A

Matrix: Tissue

Analysis Batch: 434975

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 434568

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.00409	J	0.040	0.0040	mg/Kg		08/14/23 14:21	08/16/23 15:32	1

Lab Sample ID: LCS 580-434568/4-A

Matrix: Tissue

Analysis Batch: 434975

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 434568

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	5.00	5.17		mg/Kg		103	85 - 115

Lab Sample ID: LCSD 580-434568/5-A

Matrix: Tissue

Analysis Batch: 434975

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 434568

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Barium	5.00	5.18		mg/Kg		104	85 - 115	0	20

Lab Sample ID: MB 580-434599/1-A

Matrix: Tissue

Analysis Batch: 434975

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 434599

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.00943	J	0.040	0.0040	mg/Kg		08/14/23 14:21	08/16/23 15:43	1

Lab Sample ID: MB 580-434599/2-A

Matrix: Tissue

Analysis Batch: 434975

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 434599

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.00600	J	0.040	0.0040	mg/Kg		08/14/23 14:21	08/16/23 15:47	1

Lab Sample ID: LCS 580-434599/4-A

Matrix: Tissue

Analysis Batch: 434975

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 434599

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	5.00	5.29		mg/Kg		106	85 - 115

Lab Sample ID: LCSD 580-434599/5-A

Matrix: Tissue

Analysis Batch: 434975

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 434599

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Barium	5.00	5.23		mg/Kg		105	85 - 115	1	20

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1121

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-131

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434448	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 13:05

Client Sample ID: LAWA-1121-DUP

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-132

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434448	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435791	D1C	EET SEA	08/24/23 20:49

Client Sample ID: LAWA-1122

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-133

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434448	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435967	COW	EET SEA	08/25/23 19:27

Client Sample ID: LAWA-1123

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-134

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	1632			434825	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 14:36
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1631B		10	435791	D1C	EET SEA	08/24/23 10:52
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1638		1	434975	V1R	EET SEA	08/16/23 17:59

Client Sample ID: LAWA-1124

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-135

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434448	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435967	COW	EET SEA	08/25/23 19:31

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1124-DUP

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-136

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434448	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435967	COW	EET SEA	08/25/23 19:35

Client Sample ID: LAWA-1125

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-137

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434448	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 18:41

Client Sample ID: LAWA-1126

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-138

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434448	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435967	COW	EET SEA	08/25/23 19:39

Client Sample ID: LAWA-1127

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-139

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434448	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435967	COW	EET SEA	08/25/23 19:43

Client Sample ID: LAWA-1129

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-140

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434448	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 18:53

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1130

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-141

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434448	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435967	COW	EET SEA	08/25/23 19:51

Client Sample ID: LAWA-1132

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-142

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434448	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 19:10

Client Sample ID: LAWA-1132-DUP

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-143

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434448	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 19:14

Client Sample ID: LAWA-1201

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-144

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434448	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435967	COW	EET SEA	08/25/23 19:56

Client Sample ID: LAWA-1202

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-145

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434448	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435967	COW	EET SEA	08/25/23 20:00

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1203

Lab Sample ID: 580-130145-146

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434448	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 19:26

Client Sample ID: LAWA-1204

Lab Sample ID: 580-130145-147

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	1632			434825	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 14:42
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1631B		10	435791	D1C	EET SEA	08/24/23 10:56
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1638		1	434975	V1R	EET SEA	08/16/23 18:02

Client Sample ID: LAWA-1205

Lab Sample ID: 580-130145-148

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434448	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435967	COW	EET SEA	08/25/23 20:12

Client Sample ID: LAWA-1206

Lab Sample ID: 580-130145-149

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434448	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435967	COW	EET SEA	08/25/23 20:16

Client Sample ID: LAWA-1207

Lab Sample ID: 580-130145-150

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434448	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435967	COW	EET SEA	08/25/23 20:20

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1208

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-151

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434448	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435967	COW	EET SEA	08/25/23 20:25

Client Sample ID: LAWA-1209

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-152

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434448	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435967	COW	EET SEA	08/25/23 20:29

Client Sample ID: LAWA-1210

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-153

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434450	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435967	COW	EET SEA	08/25/23 20:33

Client Sample ID: LAWA-1211

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-154

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434450	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435967	COW	EET SEA	08/25/23 20:37

Client Sample ID: LAWA-1212

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-155

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	1632			434825	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 14:48
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1631B		10	435791	D1C	EET SEA	08/24/23 11:00
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1638		1	434975	V1R	EET SEA	08/16/23 18:06

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1213

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-156

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434450	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435967	COW	EET SEA	08/25/23 20:41

Client Sample ID: LAWA-1214

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-157

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434450	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435791	D1C	EET SEA	08/24/23 20:54

Client Sample ID: LAWA-1214-DUP

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-158

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434450	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435967	COW	EET SEA	08/25/23 20:45

Client Sample ID: LAWA-1215

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-159

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434450	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435967	COW	EET SEA	08/25/23 20:50

Client Sample ID: LAWA-1216

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-160

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434450	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435967	COW	EET SEA	08/25/23 21:02

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Client Sample ID: LAWA-1217

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-161

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434450	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 13:59

Client Sample ID: LAWA-1218

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-162

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	1632			434825	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 14:54
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1631B		10	435791	D1C	EET SEA	08/24/23 11:04
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1638		1	434975	V1R	EET SEA	08/16/23 18:10

Client Sample ID: LAWA-1219

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-163

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434450	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 20:24

Client Sample ID: LAWA-1219-DUP

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-164

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434450	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 20:29

Client Sample ID: LAWA-1220

Date Collected: 07/03/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-165

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434450	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 20:33

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.

Job ID: 580-130145-4

Project/Site: Gulf of Thailand 2023 - Project T41423.20

Client Sample ID: LAWA-1221

Lab Sample ID: 580-130145-166

Date Collected: 07/03/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			435784	V1R	EET SEA	08/25/23 09:55
Total/NA	Analysis	1631B		150	435967	COW	EET SEA	08/25/23 21:56

Laboratory References:

EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Tetra Tech, Inc.

Job ID: 580-130145-4

Project/Site: Gulf of Thailand 2023 - Project T41423.20

Laboratory: Eurofins Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1631B	70:30 Acid Prep	Tissue	Mercury
1631B	HNO3 Prep	Tissue	Mercury
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium

ANAB	Dept. of Defense ELAP	L2236	01-19-25
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium

ANAB	Dept. of Energy	L2236	01-19-25
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium

ANAB	ISO/IEC 17025	L2236	01-19-25
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium

California	State	2954	07-07-23 *
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Florida	NELAP	E87575	06-30-23 *
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Louisiana (All)	NELAP	03073	07-01-24
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1632A	1632	Tissue	Inorganic Arsenic

Maine	State	WA01273	05-02-24
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1631B	70:30 Acid Prep	Tissue	Mercury
1631B	HNO3 Prep	Tissue	Mercury
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium

Montana (UST)	State	NA	04-14-27
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1631B	70:30 Acid Prep	Tissue	Mercury

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Seattle

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Laboratory: Eurofins Seattle (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	HNO3 Prep	Tissue	Mercury
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium
New Jersey	NELAP	WA014	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	70:30 Acid Prep	Tissue	Mercury
1631B	HNO3 Prep	Tissue	Mercury
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium
New York	NELAP	11662	03-31-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	70:30 Acid Prep	Tissue	Mercury
1631B	HNO3 Prep	Tissue	Mercury
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium
Oregon	NELAP	4167	07-07-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1632A	1632	Tissue	Inorganic Arsenic
US Fish & Wildlife	US Federal Programs	A20571	06-30-23 *
USDA	US Federal Programs	525-23-4-22573	01-04-26
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	70:30 Acid Prep	Tissue	Mercury
1631B	HNO3 Prep	Tissue	Mercury
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium
Washington	State	C788	07-13-23 *
Wisconsin	State	399133460	08-31-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Seattle

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.20

Job ID: 580-130145-4

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-130145-131	LAWA-1121	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-132	LAWA-1121-DUP	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-133	LAWA-1122	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-134	LAWA-1123	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-135	LAWA-1124	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-136	LAWA-1124-DUP	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-137	LAWA-1125	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-138	LAWA-1126	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-139	LAWA-1127	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-140	LAWA-1129	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-141	LAWA-1130	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-142	LAWA-1132	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-143	LAWA-1132-DUP	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-144	LAWA-1201	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-145	LAWA-1202	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-146	LAWA-1203	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-147	LAWA-1204	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-148	LAWA-1205	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-149	LAWA-1206	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-150	LAWA-1207	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-151	LAWA-1208	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-152	LAWA-1209	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-153	LAWA-1210	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-154	LAWA-1211	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-155	LAWA-1212	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-156	LAWA-1213	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-157	LAWA-1214	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-158	LAWA-1214-DUP	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-159	LAWA-1215	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-160	LAWA-1216	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-161	LAWA-1217	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-162	LAWA-1218	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-163	LAWA-1219	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-164	LAWA-1219-DUP	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-165	LAWA-1220	Tissue	07/03/23 23:59	08/02/23 09:20
580-130145-166	LAWA-1221	Tissue	07/03/23 23:59	08/02/23 09:20

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CHAIN OF CUSTODY

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580-130145 Chain of Custody

General Notes:
Please report results separately for each Project ID
Please report all results to the MDL. J-flag results between MDL and RL
Please report results in PDF format with Excel EDD deliverable
Quote: see proposal of 19 July 2020 for agreed rates
Please INVOICE separately for each Project ID

Project ID	Sample ID	Date	Time	Medium	Preservation	Hg (EPA 1631E)	Total Arsenic - (EPA 1640)	Total Inorganic Arsenic (EPA 1632)	Hg (Tissue, EPA 1631B)	Total Arsenic (EPA 1638M)	Total Inorganic Arsenic (EPA 1632)	Barium (EPA 1638M)
T423.22	PACPP-TB	5/11/2023	14:26	SW	FROZEN	1	1	1				
T423.22	PACPP-WB	5/21/2023	8:30	SW	FROZEN	1	1	1				
T423.22	PACPP-EQ-PRE	5/21/2023	8:35	SW	FROZEN	1	1	1				
T423.22	PACPP-SW-1	5/21/2023	11:57	SW	FROZEN	1	1	1				
T423.22	PACPP-SW-10	5/21/2023	11:51	SW	FROZEN	1	1	1				
T423.22	PACPP-SW-20	5/21/2023	11:38	SW	FROZEN	1	1	1				
T423.22	PACPP-SW-20-DUP	5/21/2023	11:45	SW	FROZEN	1	1	1				
T423.22	PACPP-SW-40	5/21/2023	11:30	SW	FROZEN	1	1	1				
T423.22	PACPP-SW-B	5/21/2023	11:20	SW	FROZEN	1	1	1				
T423.22	PACPP-FB	5/21/2023	12:04	SW	FROZEN	1	1	1				
T423.22	PACPP-EQ-POST	5/21/2023	12:10	SW	FROZEN	1	1	1				
MKT2023	SKLMKT-001	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-001-DUP	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-002	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-003	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-003-DUP	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-004	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-005	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-006	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-007	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-008	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-008-DUP	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-009	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-010	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-011	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-012	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-013	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-014	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-014-DUP	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-015	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-016	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-017	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-018	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-019	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-020	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-021	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-022	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-023	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-024	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-025	5/11/2023		Tiss-Fish	FROZEN				1			

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CHAIN OF CUSTODY

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Project ID	SampleID	Date	Time	Medium	Preservation	Hg (EPA 1631E)	Total Arsenic - (EPA 1640)	Total Inorganic Arsenic (EPA 1632)	Hg (Tissue, EPA 1631B)	Total Arsenic (EPA 1638M)	Total Inorganic Arsenic (EPA 1632)	Barium (EPA 1638M)
MKT2023	SKLMKT-026	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-027	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-028	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-029	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-030	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-031	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-032	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-033	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-034	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-035	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-036	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-037	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-038	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-039	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-040	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-041	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-042	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-043	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-044	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-045	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-046	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-047	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-048	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-048-DUP	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-049	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-050	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-051	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-052	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-053	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-054	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-055	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-056	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-057	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-058	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-059	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-060	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-061	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-062	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-063	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-064	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-065	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-066	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-067	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-068	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-069	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-070	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-071	5/11/2023		Tiss-Fish	FROZEN				1			

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MKT2023	SKLMKT-072	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-073	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-074	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-075	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-076	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-077	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-078	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-079	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-080	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-081	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-081-DUP	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-082	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-083	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-084	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-085	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-086	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-087	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-088	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-089	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-090	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-091	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-092	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-093	5/11/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1001	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1001-DUP	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1002	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1002-DUP	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1003	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1003-DUP	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1005	5/17/2023		Tiss-Fish	FROZEN				1		1	
T41423.17	YUWA-1022	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1023	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1027	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1028	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1041	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1042	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1043	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1044	5/17/2023		Tiss-Fish	FROZEN				1		1	
T41423.17	YUWA-1046	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1047	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1048	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1049	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1141	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1141-DUP	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1142	7/1/2023		Tiss-Fish	FROZEN				1			

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T41423.19	MAWG-1142-DUP	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1143	7/1/2023		Tiss-Fish	FROZEN				1		1	
T41423.19	MAWG-1144	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1145	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1145-DUP	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1149	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1161	7/1/2023		Tiss-Fish	FROZEN				1		1	
T41423.19	MAWG-1181	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1182	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1121	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1121-DUP	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1122	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1123	7/3/2023		Tiss-Fish	FROZEN				1		1	1
T41423.20	LAWA-1124	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1124-DUP	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1125	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1126	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1127	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1129	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1130	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1132	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1132-DUP	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1201	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1202	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1203	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1204	7/3/2023		Tiss-Fish	FROZEN				1		1	1
T41423.20	LAWA-1205	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1206	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1207	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1208	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1209	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1210	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1211	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1212	7/3/2023		Tiss-Fish	FROZEN				1		1	1
T41423.20	LAWA-1214	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1214-DUP	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1215	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1216	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1217	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1218	7/3/2023		Tiss-Fish	FROZEN				1		1	1
T41423.20	LAWA-1219	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1219-DUP	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1220	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1221	7/3/2023		Tiss-Fish	FROZEN				1			

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CHAIN OF CUSTODY

Report to:
Dr. Ted Donn
Tetra Tech
3697 Mt. Diablo Blvd.
Lafayette, CA
ted.donn@tetratech.com

Project ID	SampleID	Date	Time	Medium	Preservation	Hg (EPA 1631E)	Total Arsenic - (EPA 1640)	Total Inorganic Arsenic (EPA 1632)	Hg (Tissue, EPA 1631B)	Total Arsenic (EPA 1638M)	Total Inorganic Arsenic (EPA 1632)	Barium (EPA 1638M)
T41423.22	PACPP-1081	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1081-DUP	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1082	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1083	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1084	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1085	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1086	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1087	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1087-DUP	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1088	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1089	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1090	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1091	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1092	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1092-DUP	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1093	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1094	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1095	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1096	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1097	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1098	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1099	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1100	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1101	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1101-DUP	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1102	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1103	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1104	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1105	5/22/2023		Tiss-Fish	FROZEN				1	1	1	

Relinquished by:  1 AUG 2023

Received by:

Relinquished by:  8/3/23. 5:20
Received by:

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 580-130145-4

Login Number: 130145

List Number: 1

Creator: Groden, Kyle J

List Source: Eurofins Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

PREPARED FOR

Attn: Ted Donn
Tetra Tech, Inc.
3697 Mt. Diablo Blvd.
Suite 150
Lafayette, California 94549

Generated 8/29/2023 7:38:31 AM

JOB DESCRIPTION

Gulf of Thailand 2023 - Project MKT2023

JOB NUMBER

580-130145-1

Eurofins Seattle

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



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8/29/2023 7:38:31 AM

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Case Narrative

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Job ID: 580-130145-1

Laboratory: Eurofins Seattle

Narrative

Job Narrative 580-130145-1

Comments

No additional comments.

Receipt

The samples were received on 8/2/2023 9:20 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was -20.0° C.

Metals

Method 1632A: The following samples were diluted due to the nature of the sample matrix: SKLMKT-004 (580-130145-6), SKLMKT-013 (580-130145-16), SKLMKT-022 (580-130145-26), SKLMKT-032 (580-130145-36), SKLMKT-042 (580-130145-46), SKLMKT-051 (580-130145-56), SKLMKT-061 (580-130145-66), SKLMKT-071 (580-130145-76), SKLMKT-080 (580-130145-85), SKLMKT-091 (580-130145-97), PACPP-1101 (580-130145-190), (580-130145-A-76-D MS), (580-130145-A-76-E MSD), (580-130145-A-128-G), (580-130145-A-128-H MS), (580-130145-A-128-I MSD), (580-130145-A-194-C), (580-130145-A-194-D MS) and (580-130145-A-194-E MSD). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-001

Lab Sample ID: 580-130145-1

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1100		14	6.6	ng/g		08/11/23 12:12	08/22/23 15:40	300

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-001-DUP

Lab Sample ID: 580-130145-2

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1300		15	7.0	ng/g		08/11/23 12:12	08/22/23 15:45	300

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-002

Lab Sample ID: 580-130145-3

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1700		22	11	ng/g		08/11/23 12:12	08/22/23 15:57	500

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-003

Lab Sample ID: 580-130145-4

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	470		18	8.6	ng/g		08/11/23 12:12	08/22/23 16:01	400

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-003-DUP

Lab Sample ID: 580-130145-5

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	450		19	9.0	ng/g		08/11/23 12:12	08/22/23 16:05	400

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-004

Lab Sample ID: 580-130145-6

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.050	0.035	mg/Kg		08/16/23 16:48	08/17/23 12:33	50

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	200		15	2.5	ng/g		08/14/23 14:21	08/21/23 18:34	50

Method: EPA 1638 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.022	J B	0.039	0.0039	mg/Kg		08/14/23 14:21	08/16/23 17:22	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-005

Lab Sample ID: 580-130145-7

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	410		18	8.5	ng/g		08/11/23 12:12	08/22/23 16:09	400

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-006

Lab Sample ID: 580-130145-8

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	130		10	4.7	ng/g		08/11/23 12:12	08/22/23 12:39	200

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-007

Lab Sample ID: 580-130145-9

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	270		20	9.3	ng/g		08/11/23 12:12	08/22/23 16:14	400

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-008

Lab Sample ID: 580-130145-10

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	120		14	6.6	ng/g		08/11/23 12:12	08/22/23 19:29	300

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-008-DUP

Lab Sample ID: 580-130145-11

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	120		15	6.9	ng/g		08/11/23 12:12	08/22/23 19:33	300

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-009

Lab Sample ID: 580-130145-12

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	110		14	6.4	ng/g		08/11/23 12:12	08/22/23 19:37	300

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-010

Lab Sample ID: 580-130145-13

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	210		20	9.2	ng/g		08/11/23 12:12	08/22/23 16:30	400

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-011

Lab Sample ID: 580-130145-14

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	190		19	8.8	ng/g		08/11/23 12:12	08/22/23 16:34	400

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-012

Lab Sample ID: 580-130145-15

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	230		20	9.3	ng/g		08/11/23 12:12	08/22/23 16:47	400

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-013

Lab Sample ID: 580-130145-16

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.049	0.034	mg/Kg		08/16/23 16:48	08/17/23 12:40	50

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	160		14	2.4	ng/g		08/14/23 14:21	08/21/23 18:39	50

Method: EPA 1638 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.029	J B	0.039	0.0039	mg/Kg		08/14/23 14:21	08/16/23 17:26	1

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-014

Lab Sample ID: 580-130145-17

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	130		9.0	4.2	ng/g		08/11/23 12:12	08/22/23 12:35	200

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-014-DUP

Lab Sample ID: 580-130145-18

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	130		15	6.8	ng/g		08/11/23 12:12	08/22/23 19:41	300

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-015

Lab Sample ID: 580-130145-19

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	78		7.3	3.4	ng/g		08/11/23 12:12	08/22/23 19:45	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-016

Lab Sample ID: 580-130145-20

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	87		7.0	3.3	ng/g		08/11/23 12:12	08/22/23 19:49	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-017

Lab Sample ID: 580-130145-21

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	440		19	8.8	ng/g		08/11/23 12:12	08/22/23 17:03	400

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-018

Lab Sample ID: 580-130145-22

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	63		1.0	0.47	ng/g		08/11/23 12:12	08/22/23 19:53	20

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-019

Lab Sample ID: 580-130145-23

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	150		15	6.9	ng/g		08/11/23 12:12	08/23/23 12:51	300

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-020

Lab Sample ID: 580-130145-24

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	140		14	6.8	ng/g		08/11/23 12:12	08/23/23 12:55	300

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-021

Lab Sample ID: 580-130145-25

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	150		14	6.7	ng/g		08/11/23 12:12	08/23/23 12:59	300

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-022

Lab Sample ID: 580-130145-26

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.050	0.035	mg/Kg		08/16/23 16:48	08/17/23 12:46	50

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	260		14	2.3	ng/g		08/14/23 14:21	08/21/23 18:43	50

Method: EPA 1638 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.015	J B	0.037	0.0037	mg/Kg		08/14/23 14:21	08/16/23 17:29	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-023

Lab Sample ID: 580-130145-27

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	230		20	9.3	ng/g		08/11/23 12:12	08/22/23 18:10	400

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-024

Lab Sample ID: 580-130145-28

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	290		18	8.6	ng/g		08/11/23 12:12	08/22/23 18:14	400

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-025

Lab Sample ID: 580-130145-29

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	93		7.4	3.5	ng/g		08/11/23 12:12	08/22/23 15:36	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-026

Lab Sample ID: 580-130145-30

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	79		7.0	3.3	ng/g		08/11/23 12:12	08/23/23 13:03	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-027

Lab Sample ID: 580-130145-31

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	130		7.2	3.4	ng/g		08/11/23 12:12	08/23/23 13:07	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-028

Lab Sample ID: 580-130145-32

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	76		7.3	3.4	ng/g		08/11/23 12:12	08/22/23 15:32	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-029

Lab Sample ID: 580-130145-33

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	140		14	6.4	ng/g		08/11/23 12:12	08/23/23 13:11	300

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-030

Lab Sample ID: 580-130145-34

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	68		0.94	0.44	ng/g		08/11/23 12:12	08/23/23 13:24	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-031

Lab Sample ID: 580-130145-35

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	59		0.93	0.44	ng/g		08/11/23 12:12	08/23/23 13:28	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-032

Lab Sample ID: 580-130145-36

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.050	0.035	mg/Kg		08/16/23 16:48	08/17/23 12:52	50

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	66		15	2.5	ng/g		08/14/23 14:21	08/21/23 18:47	50

Method: EPA 1638 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.094	B	0.040	0.0040	mg/Kg		08/14/23 14:21	08/16/23 17:40	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-033

Lab Sample ID: 580-130145-37

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	36		0.97	0.46	ng/g		08/11/23 12:12	08/23/23 13:32	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-034

Lab Sample ID: 580-130145-38

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	46		0.96	0.45	ng/g		08/11/23 12:12	08/23/23 13:36	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-035

Lab Sample ID: 580-130145-39

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	31		0.97	0.46	ng/g		08/11/23 12:12	08/23/23 13:41	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-036

Lab Sample ID: 580-130145-40

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	400		18	8.6	ng/g		08/11/23 12:12	08/22/23 19:00	400

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-037

Lab Sample ID: 580-130145-41

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	710		19	9.0	ng/g		08/11/23 12:12	08/22/23 19:04	400

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-038

Lab Sample ID: 580-130145-42

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	600		19	8.8	ng/g		08/11/23 12:12	08/22/23 19:16	400

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-039

Lab Sample ID: 580-130145-43

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	390		19	9.0	ng/g		08/11/23 12:12	08/22/23 19:20	400

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-040

Lab Sample ID: 580-130145-44

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	130		15	6.9	ng/g		08/11/23 12:12	08/23/23 13:45	300

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-041

Lab Sample ID: 580-130145-45

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	540		7.4	3.5	ng/g		08/11/23 14:29	08/23/23 15:24	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-042

Lab Sample ID: 580-130145-46

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.050	0.035	mg/Kg		08/16/23 16:48	08/17/23 12:58	50

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	190		14	2.3	ng/g		08/14/23 14:21	08/21/23 15:49	50

Method: EPA 1638 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.071	B	0.037	0.0037	mg/Kg		08/14/23 14:21	08/16/23 16:20	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-043

Lab Sample ID: 580-130145-47

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	620		7.3	3.4	ng/g		08/11/23 14:29	08/23/23 15:28	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-044

Lab Sample ID: 580-130145-48

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	190		7.4	3.5	ng/g		08/11/23 14:29	08/23/23 15:33	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-045

Lab Sample ID: 580-130145-49

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	190		7.0	3.3	ng/g		08/11/23 14:29	08/23/23 15:37	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-046

Lab Sample ID: 580-130145-50

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	200		7.2	3.4	ng/g		08/11/23 14:29	08/23/23 15:41	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-047

Lab Sample ID: 580-130145-51

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	260		7.0	3.3	ng/g		08/11/23 14:29	08/23/23 12:34	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-048

Lab Sample ID: 580-130145-52

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	210		7.1	3.3	ng/g		08/11/23 14:29	08/23/23 15:53	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-048-DUP

Lab Sample ID: 580-130145-53

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	200		6.9	3.2	ng/g		08/11/23 14:29	08/23/23 15:57	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-049

Lab Sample ID: 580-130145-54

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	210		7.4	3.5	ng/g		08/11/23 14:29	08/23/23 16:02	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-050

Lab Sample ID: 580-130145-55

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	140		6.9	3.2	ng/g		08/11/23 14:29	08/23/23 12:38	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-051

Lab Sample ID: 580-130145-56

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.049	0.035	mg/Kg		08/16/23 16:48	08/17/23 13:04	50

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	110		14	2.3	ng/g		08/14/23 14:21	08/21/23 18:51	50

Method: EPA 1638 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.023	J B	0.037	0.0037	mg/Kg		08/14/23 14:21	08/16/23 17:44	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-052

Lab Sample ID: 580-130145-57

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	180		7.2	3.4	ng/g		08/11/23 14:29	08/23/23 16:06	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-053

Lab Sample ID: 580-130145-58

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	130		7.1	3.3	ng/g		08/11/23 14:29	08/23/23 16:10	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-054

Lab Sample ID: 580-130145-59

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	53		6.9	3.3	ng/g		08/11/23 14:29	08/23/23 16:14	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-055

Lab Sample ID: 580-130145-60

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	130		7.5	3.5	ng/g		08/11/23 14:29	08/23/23 16:18	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-056

Lab Sample ID: 580-130145-61

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	630		7.2	3.4	ng/g		08/11/23 14:29	08/23/23 16:22	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-057

Lab Sample ID: 580-130145-62

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	300		7.4	3.5	ng/g		08/11/23 14:29	08/23/23 16:26	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-058

Lab Sample ID: 580-130145-63

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	100		6.9	3.3	ng/g		08/11/23 14:29	08/23/23 16:31	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-059

Lab Sample ID: 580-130145-64

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	150		7.1	3.3	ng/g		08/11/23 14:29	08/23/23 16:47	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-060

Lab Sample ID: 580-130145-65

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	98		7.2	3.4	ng/g		08/11/23 14:29	08/23/23 16:51	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-061

Lab Sample ID: 580-130145-66

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.050	0.035	mg/Kg		08/16/23 16:48	08/17/23 13:11	50

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	82		14	2.3	ng/g		08/14/23 14:21	08/21/23 18:55	50

Method: EPA 1638 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.034	J B	0.037	0.0037	mg/Kg		08/14/23 14:21	08/16/23 17:48	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-062

Lab Sample ID: 580-130145-67

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	90		7.5	3.5	ng/g		08/11/23 14:29	08/23/23 16:55	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-063

Lab Sample ID: 580-130145-68

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	84		7.5	3.5	ng/g		08/11/23 14:29	08/23/23 17:00	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-064

Lab Sample ID: 580-130145-69

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	300		7.1	3.3	ng/g		08/11/23 14:29	08/23/23 17:04	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-065

Lab Sample ID: 580-130145-70

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	370		7.2	3.4	ng/g		08/11/23 14:29	08/23/23 12:42	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-066

Lab Sample ID: 580-130145-71

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	240		6.7	3.2	ng/g		08/11/23 14:29	08/23/23 17:08	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-067

Lab Sample ID: 580-130145-72

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	340		6.7	3.2	ng/g		08/11/23 14:29	08/23/23 17:12	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-068

Lab Sample ID: 580-130145-73

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	130		6.7	3.2	ng/g		08/11/23 14:29	08/23/23 17:16	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-069

Lab Sample ID: 580-130145-74

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	130		7.3	3.4	ng/g		08/11/23 14:29	08/23/23 17:20	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-070

Lab Sample ID: 580-130145-75

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	180		7.2	3.4	ng/g		08/11/23 14:29	08/23/23 17:33	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-071

Lab Sample ID: 580-130145-76

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.049	0.034	mg/Kg		08/16/23 16:48	08/17/23 11:43	50

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	180		15	2.5	ng/g		08/14/23 14:21	08/21/23 18:59	50

Method: EPA 1638 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.023	J B	0.040	0.0040	mg/Kg		08/14/23 14:21	08/16/23 17:51	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-072

Lab Sample ID: 580-130145-77

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	250		7.0	3.3	ng/g		08/11/23 14:29	08/23/23 17:37	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-073

Lab Sample ID: 580-130145-78

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	64		7.4	3.5	ng/g		08/11/23 14:29	08/23/23 17:41	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-074

Lab Sample ID: 580-130145-79

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	100		7.1	3.3	ng/g		08/11/23 14:29	08/23/23 17:45	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-075

Lab Sample ID: 580-130145-80

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	140		7.5	3.5	ng/g		08/11/23 14:29	08/23/23 17:49	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-076

Lab Sample ID: 580-130145-81

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	210		7.1	3.4	ng/g		08/11/23 14:29	08/23/23 12:47	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-077

Lab Sample ID: 580-130145-82

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	68		7.4	3.5	ng/g		08/11/23 14:29	08/23/23 17:54	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-078

Lab Sample ID: 580-130145-83

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	31		0.98	0.46	ng/g		08/11/23 14:29	08/25/23 19:47	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-079

Lab Sample ID: 580-130145-84

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	280		7.0	3.3	ng/g		08/11/23 14:29	08/23/23 18:02	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-080

Lab Sample ID: 580-130145-85

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.047	0.033	mg/Kg		08/16/23 16:48	08/17/23 13:17	50

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	230		14	2.4	ng/g		08/14/23 14:21	08/21/23 15:53	50

Method: EPA 1638 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.019	J B	0.039	0.0039	mg/Kg		08/14/23 14:21	08/16/23 16:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-081

Lab Sample ID: 580-130145-86

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	330		7.2	3.4	ng/g		08/11/23 14:29	08/23/23 18:06	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-081-DUP

Lab Sample ID: 580-130145-87

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	320		6.7	3.1	ng/g		08/11/23 14:29	08/23/23 18:10	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-082

Lab Sample ID: 580-130145-88

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	320		7.2	3.4	ng/g		08/11/23 14:29	08/23/23 18:23	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-083

Lab Sample ID: 580-130145-89

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	130		6.8	3.2	ng/g		08/11/23 14:29	08/23/23 18:27	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-084

Lab Sample ID: 580-130145-90

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	110		6.7	3.2	ng/g		08/14/23 10:35	08/24/23 15:26	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-085

Lab Sample ID: 580-130145-91

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	97		7.4	3.5	ng/g		08/14/23 10:35	08/24/23 12:48	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-086

Lab Sample ID: 580-130145-92

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	260		7.5	3.5	ng/g		08/14/23 10:35	08/24/23 12:52	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-087

Lab Sample ID: 580-130145-93

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	180		7.4	3.5	ng/g		08/14/23 10:35	08/24/23 15:30	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-088

Lab Sample ID: 580-130145-94

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	66		7.5	3.5	ng/g		08/14/23 10:35	08/24/23 15:34	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-089

Lab Sample ID: 580-130145-95

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	48		0.97	0.46	ng/g		08/14/23 10:35	08/24/23 20:58	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-090

Lab Sample ID: 580-130145-96

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	57		7.1	3.3	ng/g		08/14/23 10:35	08/24/23 15:51	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-091

Lab Sample ID: 580-130145-97

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.049	0.034	mg/Kg		08/16/23 16:48	08/17/23 13:23	50

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	37		15	2.5	ng/g		08/14/23 14:21	08/21/23 19:03	50

Method: EPA 1638 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.013	J B	0.040	0.0040	mg/Kg		08/14/23 14:21	08/16/23 17:55	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-092

Lab Sample ID: 580-130145-98

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	29		0.94	0.44	ng/g		08/14/23 10:35	08/24/23 21:02	20

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-093

Lab Sample ID: 580-130145-99

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	13		0.92	0.43	ng/g		08/14/23 10:35	08/24/23 21:06	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: PACPP-1101

Lab Sample ID: 580-130145-190

Date Collected: 05/22/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.048	0.034	mg/Kg		08/16/23 16:48	08/17/23 16:09	50

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Method: 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Lab Sample ID: MB 580-434825/1-A

Matrix: Tissue

Analysis Batch: 434948

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434825

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.010	0.0070	mg/Kg		08/16/23 16:48	08/17/23 11:05	10

Lab Sample ID: MB 580-434825/2-A

Matrix: Tissue

Analysis Batch: 434948

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434825

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.010	0.0070	mg/Kg		08/16/23 16:48	08/17/23 11:11	10

Lab Sample ID: LCS 580-434825/4-A

Matrix: Tissue

Analysis Batch: 434948

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 434825

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Inorganic Arsenic	0.200	0.208		mg/Kg		104	50 - 150

Lab Sample ID: LCSD 580-434825/5-A

Matrix: Tissue

Analysis Batch: 434948

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 434825

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Inorganic Arsenic	0.200	0.196		mg/Kg		98	50 - 150	6	35

Lab Sample ID: 580-130145-76 MS

Matrix: Tissue

Analysis Batch: 434948

Client Sample ID: SKLMKT-071

Prep Type: Total/NA

Prep Batch: 434825

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Inorganic Arsenic	ND		0.200	0.128		mg/Kg		64	50 - 150

Lab Sample ID: 580-130145-76 MSD

Matrix: Tissue

Analysis Batch: 434948

Client Sample ID: SKLMKT-071

Prep Type: Total/NA

Prep Batch: 434825

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Inorganic Arsenic	ND		0.198	0.139		mg/Kg		70	50 - 150	8	35

Method: 1631B - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 580-434354/1-A

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434354

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/11/23 12:12	08/22/23 12:43	20

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Method: 1631B - Mercury, Low Level (CVAFS) (Continued)

Lab Sample ID: MB 580-434354/2-A

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434354

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/11/23 12:12	08/22/23 12:47	20

Lab Sample ID: MB 580-434354/3-A

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434354

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/11/23 12:12	08/22/23 12:52	20

Lab Sample ID: LCS 580-434354/4-A

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 434354

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	396	422		ng/g		106	75 - 125

Lab Sample ID: LCSD 580-434354/5-A

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 434354

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	396	399		ng/g		101	75 - 125	5	24

Lab Sample ID: 580-130145-8 MS

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: SKLMKT-006

Prep Type: Total/NA

Prep Batch: 434354

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	130		386	475		ng/g		90	71 - 125

Lab Sample ID: 580-130145-8 MSD

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: SKLMKT-006

Prep Type: Total/NA

Prep Batch: 434354

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	130		390	516		ng/g		100	71 - 125	8	24

Lab Sample ID: 580-130145-17 MS

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: SKLMKT-014

Prep Type: Total/NA

Prep Batch: 434354

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	130		389	516		ng/g		100	71 - 125

Lab Sample ID: 580-130145-17 MSD

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: SKLMKT-014

Prep Type: Total/NA

Prep Batch: 434354

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	130		376	517		ng/g		104	71 - 125	0	24

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Method: 1631B - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 580-434357/1-A
Matrix: Tissue
Analysis Batch: 435504

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 434357

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/11/23 12:12	08/22/23 17:12	20

Lab Sample ID: MB 580-434357/2-A
Matrix: Tissue
Analysis Batch: 435504

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 434357

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/11/23 12:12	08/22/23 17:16	20

Lab Sample ID: MB 580-434357/3-A
Matrix: Tissue
Analysis Batch: 435504

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 434357

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/11/23 12:12	08/22/23 17:20	20

Lab Sample ID: LCS 580-434357/4-A
Matrix: Tissue
Analysis Batch: 435504

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 434357

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	396	395		ng/g		100	75 - 125

Lab Sample ID: LCSD 580-434357/5-A
Matrix: Tissue
Analysis Batch: 435504

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 434357

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	396	397		ng/g		100	75 - 125	0	24

Lab Sample ID: 580-130145-29 MS
Matrix: Tissue
Analysis Batch: 435504

Client Sample ID: SKLMKT-025
Prep Type: Total/NA
Prep Batch: 434357

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	93		396	510		ng/g		105	71 - 125

Lab Sample ID: 580-130145-29 MSD
Matrix: Tissue
Analysis Batch: 435504

Client Sample ID: SKLMKT-025
Prep Type: Total/NA
Prep Batch: 434357

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	93		390	484		ng/g		100	71 - 125	5	24

Lab Sample ID: 580-130145-32 MS
Matrix: Tissue
Analysis Batch: 435504

Client Sample ID: SKLMKT-028
Prep Type: Total/NA
Prep Batch: 434357

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	76		365	442		ng/g		100	71 - 125

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Method: 1631B - Mercury, Low Level (CVAFS)

Lab Sample ID: 580-130145-32 MSD

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: SKLMKT-028

Prep Type: Total/NA

Prep Batch: 434357

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	76		370	449		ng/g		101	71 - 125	2	24

Lab Sample ID: MB 580-434373/1-A

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434373

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/11/23 14:29	08/23/23 13:49	20

Lab Sample ID: MB 580-434373/2-A

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434373

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/11/23 14:29	08/23/23 13:53	20

Lab Sample ID: MB 580-434373/3-A

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434373

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/11/23 14:29	08/23/23 13:57	20

Lab Sample ID: LCS 580-434373/4-A

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 434373

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	396	408		ng/g		103	75 - 125

Lab Sample ID: LCSD 580-434373/5-A

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 434373

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	396	400		ng/g		101	75 - 125	2	24

Lab Sample ID: 580-130145-51 MS

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: SKLMKT-047

Prep Type: Total/NA

Prep Batch: 434373

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	260		380	631		ng/g		97	71 - 125

Lab Sample ID: 580-130145-51 MSD

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: SKLMKT-047

Prep Type: Total/NA

Prep Batch: 434373

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	260		382	626		ng/g		95	71 - 125	1	24

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Method: 1631B - Mercury, Low Level (CVAFS)

Lab Sample ID: 580-130145-55 MS

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: SKLMKT-050

Prep Type: Total/NA

Prep Batch: 434373

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	140		396	540		ng/g		102	71 - 125

Lab Sample ID: 580-130145-55 MSD

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: SKLMKT-050

Prep Type: Total/NA

Prep Batch: 434373

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Mercury	140		371	495		ng/g		97	71 - 125	9	24

Lab Sample ID: MB 580-434409/1-A

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434409

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/11/23 14:29	08/23/23 14:01	20

Lab Sample ID: MB 580-434409/2-A

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434409

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/11/23 14:29	08/23/23 14:18	20

Lab Sample ID: MB 580-434409/3-A

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434409

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/11/23 14:29	08/23/23 14:22	20

Lab Sample ID: LCS 580-434409/4-A

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 434409

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	396	382		ng/g		96	75 - 125

Lab Sample ID: LCSD 580-434409/5-A

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 434409

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Mercury	396	404		ng/g		102	75 - 125	6	24

Lab Sample ID: 580-130145-70 MS

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: SKLMKT-065

Prep Type: Total/NA

Prep Batch: 434409

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	370		392	802		ng/g		110	71 - 125

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Method: 1631B - Mercury, Low Level (CVAFS)

Lab Sample ID: 580-130145-70 MSD

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: SKLMKT-065

Prep Type: Total/NA

Prep Batch: 434409

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	370		385	749		ng/g		98	71 - 125	7	24

Lab Sample ID: 580-130145-81 MS

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: SKLMKT-076

Prep Type: Total/NA

Prep Batch: 434409

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	210		381	587		ng/g		98	71 - 125		

Lab Sample ID: 580-130145-81 MSD

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: SKLMKT-076

Prep Type: Total/NA

Prep Batch: 434409

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	210		355	565		ng/g		99	71 - 125	4	24

Lab Sample ID: MB 580-434435/1-A

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434435

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/14/23 10:35	08/24/23 11:08	20

Lab Sample ID: MB 580-434435/2-A

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434435

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/14/23 10:35	08/24/23 11:13	20

Lab Sample ID: MB 580-434435/3-A

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434435

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/14/23 10:35	08/24/23 11:17	20

Lab Sample ID: LCS 580-434435/4-A

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 434435

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	396	418		ng/g		105	75 - 125		

Lab Sample ID: LCSD 580-434435/5-A

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 434435

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	396	427		ng/g		108	75 - 125	2	24

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Method: 1631B - Mercury, Low Level (CVAFS)

Lab Sample ID: 580-130145-91 MS

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: SKLMKT-085

Prep Type: Total/NA

Prep Batch: 434435

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	97		368	484		ng/g		105	71 - 125		

Lab Sample ID: 580-130145-91 MSD

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: SKLMKT-085

Prep Type: Total/NA

Prep Batch: 434435

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Mercury	97		379	511		ng/g		109	71 - 125	5	24

Lab Sample ID: 580-130145-92 MS

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: SKLMKT-086

Prep Type: Total/NA

Prep Batch: 434435

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	260		355	626		ng/g		103	71 - 125		

Lab Sample ID: 580-130145-92 MSD

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: SKLMKT-086

Prep Type: Total/NA

Prep Batch: 434435

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Mercury	260		392	647		ng/g		99	71 - 125	3	24

Lab Sample ID: 580-130145-46 MS

Matrix: Tissue

Analysis Batch: 435373

Client Sample ID: SKLMKT-042

Prep Type: Total/NA

Prep Batch: 434568

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	190		365	562		ng/g		102	71 - 125		

Lab Sample ID: 580-130145-46 MSD

Matrix: Tissue

Analysis Batch: 435373

Client Sample ID: SKLMKT-042

Prep Type: Total/NA

Prep Batch: 434568

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Mercury	190		383	568		ng/g		98	71 - 125	1	24

Lab Sample ID: 580-130145-85 MS

Matrix: Tissue

Analysis Batch: 435373

Client Sample ID: SKLMKT-080

Prep Type: Total/NA

Prep Batch: 434568

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	230		381	580		ng/g		91	71 - 125		

Lab Sample ID: 580-130145-85 MSD

Matrix: Tissue

Analysis Batch: 435373

Client Sample ID: SKLMKT-080

Prep Type: Total/NA

Prep Batch: 434568

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Mercury	230		370	624		ng/g		105	71 - 125	7	24

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Method: 1631B - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 580-434568/1-A
Matrix: Tissue
Analysis Batch: 435373

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 434568

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		3.0	0.50	ng/g		08/14/23 14:21	08/21/23 14:09	10

Lab Sample ID: MB 580-434568/2-A
Matrix: Tissue
Analysis Batch: 435373

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 434568

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		3.0	0.50	ng/g		08/14/23 14:21	08/21/23 14:13	10

Lab Sample ID: MB 580-434568/3-A
Matrix: Tissue
Analysis Batch: 435373

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 434568

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		3.0	0.50	ng/g		08/14/23 14:21	08/21/23 14:26	10

Lab Sample ID: LCS 580-434568/4-A
Matrix: Tissue
Analysis Batch: 435373

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 434568

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	396	392		ng/g		99	75 - 125

Lab Sample ID: LCSD 580-434568/5-A
Matrix: Tissue
Analysis Batch: 435373

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 434568

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	396	390		ng/g		98	75 - 125	1	24

Method: 1638 - Metals (ICP/MS)

Lab Sample ID: 580-130145-46 MS
Matrix: Tissue
Analysis Batch: 434975

Client Sample ID: SKLMKT-042
Prep Type: Total/NA
Prep Batch: 434568

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	0.071	B	4.60	4.49		mg/Kg		96	80 - 120

Lab Sample ID: 580-130145-46 MSD
Matrix: Tissue
Analysis Batch: 434975

Client Sample ID: SKLMKT-042
Prep Type: Total/NA
Prep Batch: 434568

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Barium	0.071	B	4.83	5.03		mg/Kg		103	80 - 120	11	20

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Method: 1638 - Metals (ICP/MS) (Continued)

Lab Sample ID: 580-130145-85 MS

Matrix: Tissue

Analysis Batch: 434975

Client Sample ID: SKLMKT-080

Prep Type: Total/NA

Prep Batch: 434568

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	0.019	J B	4.80	4.97		mg/Kg		103	80 - 120

Lab Sample ID: 580-130145-85 MSD

Matrix: Tissue

Analysis Batch: 434975

Client Sample ID: SKLMKT-080

Prep Type: Total/NA

Prep Batch: 434568

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Barium	0.019	J B	4.67	4.85		mg/Kg		103	80 - 120	2	20

Lab Sample ID: MB 580-434568/1-A

Matrix: Tissue

Analysis Batch: 434975

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 434568

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.00887	J	0.040	0.0040	mg/Kg		08/14/23 14:21	08/16/23 15:28	1

Lab Sample ID: MB 580-434568/2-A

Matrix: Tissue

Analysis Batch: 434975

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 434568

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.00409	J	0.040	0.0040	mg/Kg		08/14/23 14:21	08/16/23 15:32	1

Lab Sample ID: LCS 580-434568/4-A

Matrix: Tissue

Analysis Batch: 434975

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 434568

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	5.00	5.17		mg/Kg		103	85 - 115

Lab Sample ID: LCSD 580-434568/5-A

Matrix: Tissue

Analysis Batch: 434975

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 434568

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Barium	5.00	5.18		mg/Kg		104	85 - 115	0	20

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-001

Lab Sample ID: 580-130145-1

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		300	435504	AJD	EET SEA	08/22/23 15:40

Client Sample ID: SKLMKT-001-DUP

Lab Sample ID: 580-130145-2

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		300	435504	AJD	EET SEA	08/22/23 15:45

Client Sample ID: SKLMKT-002

Lab Sample ID: 580-130145-3

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		500	435504	AJD	EET SEA	08/22/23 15:57

Client Sample ID: SKLMKT-003

Lab Sample ID: 580-130145-4

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 16:01

Client Sample ID: SKLMKT-003-DUP

Lab Sample ID: 580-130145-5

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 16:05

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-004

Lab Sample ID: 580-130145-6

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	1632			434825	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 12:33
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1631B		50	435373	CL	EET SEA	08/21/23 18:34
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1638		1	434975	V1R	EET SEA	08/16/23 17:22

Client Sample ID: SKLMKT-005

Lab Sample ID: 580-130145-7

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 16:09

Client Sample ID: SKLMKT-006

Lab Sample ID: 580-130145-8

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		200	435504	AJD	EET SEA	08/22/23 12:39

Client Sample ID: SKLMKT-007

Lab Sample ID: 580-130145-9

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 16:14

Client Sample ID: SKLMKT-008

Lab Sample ID: 580-130145-10

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		300	435504	AJD	EET SEA	08/22/23 19:29

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-008-DUP

Lab Sample ID: 580-130145-11

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		300	435504	AJD	EET SEA	08/22/23 19:33

Client Sample ID: SKLMKT-009

Lab Sample ID: 580-130145-12

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		300	435504	AJD	EET SEA	08/22/23 19:37

Client Sample ID: SKLMKT-010

Lab Sample ID: 580-130145-13

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 16:30

Client Sample ID: SKLMKT-011

Lab Sample ID: 580-130145-14

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 16:34

Client Sample ID: SKLMKT-012

Lab Sample ID: 580-130145-15

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 16:47

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-013

Lab Sample ID: 580-130145-16

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	1632			434825	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 12:40
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1631B		50	435373	CL	EET SEA	08/21/23 18:39
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1638		1	434975	V1R	EET SEA	08/16/23 17:26

Client Sample ID: SKLMKT-014

Lab Sample ID: 580-130145-17

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		200	435504	AJD	EET SEA	08/22/23 12:35

Client Sample ID: SKLMKT-014-DUP

Lab Sample ID: 580-130145-18

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		300	435504	AJD	EET SEA	08/22/23 19:41

Client Sample ID: SKLMKT-015

Lab Sample ID: 580-130145-19

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		150	435504	AJD	EET SEA	08/22/23 19:45

Client Sample ID: SKLMKT-016

Lab Sample ID: 580-130145-20

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		150	435504	AJD	EET SEA	08/22/23 19:49

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-017

Lab Sample ID: 580-130145-21

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 17:03

Client Sample ID: SKLMKT-018

Lab Sample ID: 580-130145-22

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		20	435504	AJD	EET SEA	08/22/23 19:53

Client Sample ID: SKLMKT-019

Lab Sample ID: 580-130145-23

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		300	435790	D1C	EET SEA	08/23/23 12:51

Client Sample ID: SKLMKT-020

Lab Sample ID: 580-130145-24

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		300	435790	D1C	EET SEA	08/23/23 12:55

Client Sample ID: SKLMKT-021

Lab Sample ID: 580-130145-25

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		300	435790	D1C	EET SEA	08/23/23 12:59

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-022

Lab Sample ID: 580-130145-26

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	1632			434825	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 12:46
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1631B		50	435373	CL	EET SEA	08/21/23 18:43
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1638		1	434975	V1R	EET SEA	08/16/23 17:29

Client Sample ID: SKLMKT-023

Lab Sample ID: 580-130145-27

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 18:10

Client Sample ID: SKLMKT-024

Lab Sample ID: 580-130145-28

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 18:14

Client Sample ID: SKLMKT-025

Lab Sample ID: 580-130145-29

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		150	435504	AJD	EET SEA	08/22/23 15:36

Client Sample ID: SKLMKT-026

Lab Sample ID: 580-130145-30

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 13:03

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-027

Lab Sample ID: 580-130145-31

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 13:07

Client Sample ID: SKLMKT-028

Lab Sample ID: 580-130145-32

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		150	435504	AJD	EET SEA	08/22/23 15:32

Client Sample ID: SKLMKT-029

Lab Sample ID: 580-130145-33

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		300	435790	D1C	EET SEA	08/23/23 13:11

Client Sample ID: SKLMKT-030

Lab Sample ID: 580-130145-34

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		20	435790	D1C	EET SEA	08/23/23 13:24

Client Sample ID: SKLMKT-031

Lab Sample ID: 580-130145-35

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		20	435790	D1C	EET SEA	08/23/23 13:28

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-032

Lab Sample ID: 580-130145-36

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	1632			434825	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 12:52
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1631B		50	435373	CL	EET SEA	08/21/23 18:47
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1638		1	434975	V1R	EET SEA	08/16/23 17:40

Client Sample ID: SKLMKT-033

Lab Sample ID: 580-130145-37

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		20	435790	D1C	EET SEA	08/23/23 13:32

Client Sample ID: SKLMKT-034

Lab Sample ID: 580-130145-38

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		20	435790	D1C	EET SEA	08/23/23 13:36

Client Sample ID: SKLMKT-035

Lab Sample ID: 580-130145-39

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		20	435790	D1C	EET SEA	08/23/23 13:41

Client Sample ID: SKLMKT-036

Lab Sample ID: 580-130145-40

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 19:00

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-037

Lab Sample ID: 580-130145-41

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 19:04

Client Sample ID: SKLMKT-038

Lab Sample ID: 580-130145-42

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 19:16

Client Sample ID: SKLMKT-039

Lab Sample ID: 580-130145-43

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 19:20

Client Sample ID: SKLMKT-040

Lab Sample ID: 580-130145-44

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		300	435790	D1C	EET SEA	08/23/23 13:45

Client Sample ID: SKLMKT-041

Lab Sample ID: 580-130145-45

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 15:24

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-042

Lab Sample ID: 580-130145-46

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	1632			434825	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 12:58
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1631B		50	435373	CL	EET SEA	08/21/23 15:49
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1638		1	434975	V1R	EET SEA	08/16/23 16:20

Client Sample ID: SKLMKT-043

Lab Sample ID: 580-130145-47

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 15:28

Client Sample ID: SKLMKT-044

Lab Sample ID: 580-130145-48

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 15:33

Client Sample ID: SKLMKT-045

Lab Sample ID: 580-130145-49

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 15:37

Client Sample ID: SKLMKT-046

Lab Sample ID: 580-130145-50

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 15:41

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-047

Lab Sample ID: 580-130145-51

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 12:34

Client Sample ID: SKLMKT-048

Lab Sample ID: 580-130145-52

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 15:53

Client Sample ID: SKLMKT-048-DUP

Lab Sample ID: 580-130145-53

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 15:57

Client Sample ID: SKLMKT-049

Lab Sample ID: 580-130145-54

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 16:02

Client Sample ID: SKLMKT-050

Lab Sample ID: 580-130145-55

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 12:38

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-051

Lab Sample ID: 580-130145-56

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	1632			434825	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 13:04
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1631B		50	435373	CL	EET SEA	08/21/23 18:51
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1638		1	434975	V1R	EET SEA	08/16/23 17:44

Client Sample ID: SKLMKT-052

Lab Sample ID: 580-130145-57

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 16:06

Client Sample ID: SKLMKT-053

Lab Sample ID: 580-130145-58

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 16:10

Client Sample ID: SKLMKT-054

Lab Sample ID: 580-130145-59

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 16:14

Client Sample ID: SKLMKT-055

Lab Sample ID: 580-130145-60

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 16:18

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-056

Lab Sample ID: 580-130145-61

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 16:22

Client Sample ID: SKLMKT-057

Lab Sample ID: 580-130145-62

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 16:26

Client Sample ID: SKLMKT-058

Lab Sample ID: 580-130145-63

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 16:31

Client Sample ID: SKLMKT-059

Lab Sample ID: 580-130145-64

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 16:47

Client Sample ID: SKLMKT-060

Lab Sample ID: 580-130145-65

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 16:51

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-061

Lab Sample ID: 580-130145-66

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	1632			434825	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 13:11
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1631B		50	435373	CL	EET SEA	08/21/23 18:55
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1638		1	434975	V1R	EET SEA	08/16/23 17:48

Client Sample ID: SKLMKT-062

Lab Sample ID: 580-130145-67

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 16:55

Client Sample ID: SKLMKT-063

Lab Sample ID: 580-130145-68

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 17:00

Client Sample ID: SKLMKT-064

Lab Sample ID: 580-130145-69

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 17:04

Client Sample ID: SKLMKT-065

Lab Sample ID: 580-130145-70

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 12:42

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-066

Lab Sample ID: 580-130145-71

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 17:08

Client Sample ID: SKLMKT-067

Lab Sample ID: 580-130145-72

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 17:12

Client Sample ID: SKLMKT-068

Lab Sample ID: 580-130145-73

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 17:16

Client Sample ID: SKLMKT-069

Lab Sample ID: 580-130145-74

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 17:20

Client Sample ID: SKLMKT-070

Lab Sample ID: 580-130145-75

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 17:33

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-071

Lab Sample ID: 580-130145-76

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	1632			434825	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 11:43
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1631B		50	435373	CL	EET SEA	08/21/23 18:59
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1638		1	434975	V1R	EET SEA	08/16/23 17:51

Client Sample ID: SKLMKT-072

Lab Sample ID: 580-130145-77

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 17:37

Client Sample ID: SKLMKT-073

Lab Sample ID: 580-130145-78

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 17:41

Client Sample ID: SKLMKT-074

Lab Sample ID: 580-130145-79

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 17:45

Client Sample ID: SKLMKT-075

Lab Sample ID: 580-130145-80

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 17:49

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-076

Lab Sample ID: 580-130145-81

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 12:47

Client Sample ID: SKLMKT-077

Lab Sample ID: 580-130145-82

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 17:54

Client Sample ID: SKLMKT-078

Lab Sample ID: 580-130145-83

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		20	435967	COW	EET SEA	08/25/23 19:47

Client Sample ID: SKLMKT-079

Lab Sample ID: 580-130145-84

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 18:02

Client Sample ID: SKLMKT-080

Lab Sample ID: 580-130145-85

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	1632			434825	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 13:17
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1631B		50	435373	CL	EET SEA	08/21/23 15:53
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1638		1	434975	V1R	EET SEA	08/16/23 16:31

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-081

Lab Sample ID: 580-130145-86

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 18:06

Client Sample ID: SKLMKT-081-DUP

Lab Sample ID: 580-130145-87

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 18:10

Client Sample ID: SKLMKT-082

Lab Sample ID: 580-130145-88

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 18:23

Client Sample ID: SKLMKT-083

Lab Sample ID: 580-130145-89

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 18:27

Client Sample ID: SKLMKT-084

Lab Sample ID: 580-130145-90

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434435	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 15:26

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-085

Lab Sample ID: 580-130145-91

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434435	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 12:48

Client Sample ID: SKLMKT-086

Lab Sample ID: 580-130145-92

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434435	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 12:52

Client Sample ID: SKLMKT-087

Lab Sample ID: 580-130145-93

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434435	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 15:30

Client Sample ID: SKLMKT-088

Lab Sample ID: 580-130145-94

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434435	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 15:34

Client Sample ID: SKLMKT-089

Lab Sample ID: 580-130145-95

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434435	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435791	D1C	EET SEA	08/24/23 20:58

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-090

Lab Sample ID: 580-130145-96

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434435	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 15:51

Client Sample ID: SKLMKT-091

Lab Sample ID: 580-130145-97

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	1632			434825	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 13:23
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1631B		50	435373	CL	EET SEA	08/21/23 19:03
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1638		1	434975	V1R	EET SEA	08/16/23 17:55

Client Sample ID: SKLMKT-092

Lab Sample ID: 580-130145-98

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434435	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435791	D1C	EET SEA	08/24/23 21:02

Client Sample ID: SKLMKT-093

Lab Sample ID: 580-130145-99

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434435	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435791	D1C	EET SEA	08/24/23 21:06

Client Sample ID: PACPP-1101

Lab Sample ID: 580-130145-190

Date Collected: 05/22/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	1632			434828	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 16:09

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Laboratory References:
EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

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Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Laboratory: Eurofins Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1631B	70:30 Acid Prep	Tissue	Mercury
1631B	HNO3 Prep	Tissue	Mercury
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium

ANAB	Dept. of Defense ELAP	L2236	01-19-25
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium

ANAB	Dept. of Energy	L2236	01-19-25
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium

ANAB	ISO/IEC 17025	L2236	01-19-25
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium

California	State	2954	07-07-23 *
Florida	NELAP	E87575	06-30-23 *
Louisiana (All)	NELAP	03073	07-01-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1632A	1632	Tissue	Inorganic Arsenic

Maine	State	WA01273	05-02-24
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1631B	70:30 Acid Prep	Tissue	Mercury
1631B	HNO3 Prep	Tissue	Mercury
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium

Montana (UST)	State	NA	04-14-27
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1631B	70:30 Acid Prep	Tissue	Mercury

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Seattle

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Laboratory: Eurofins Seattle (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	HNO3 Prep	Tissue	Mercury
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium
New Jersey	NELAP	WA014	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	70:30 Acid Prep	Tissue	Mercury
1631B	HNO3 Prep	Tissue	Mercury
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium
New York	NELAP	11662	03-31-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	70:30 Acid Prep	Tissue	Mercury
1631B	HNO3 Prep	Tissue	Mercury
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium
Oregon	NELAP	4167	07-07-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1632A	1632	Tissue	Inorganic Arsenic
US Fish & Wildlife	US Federal Programs	A20571	06-30-23 *
USDA	US Federal Programs	525-23-4-22573	01-04-26
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	70:30 Acid Prep	Tissue	Mercury
1631B	HNO3 Prep	Tissue	Mercury
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium
Washington	State	C788	07-13-23 *
Wisconsin	State	399133460	08-31-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Seattle

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-130145-1	SKLMKT-001	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-2	SKLMKT-001-DUP	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-3	SKLMKT-002	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-4	SKLMKT-003	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-5	SKLMKT-003-DUP	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-6	SKLMKT-004	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-7	SKLMKT-005	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-8	SKLMKT-006	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-9	SKLMKT-007	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-10	SKLMKT-008	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-11	SKLMKT-008-DUP	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-12	SKLMKT-009	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-13	SKLMKT-010	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-14	SKLMKT-011	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-15	SKLMKT-012	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-16	SKLMKT-013	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-17	SKLMKT-014	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-18	SKLMKT-014-DUP	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-19	SKLMKT-015	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-20	SKLMKT-016	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-21	SKLMKT-017	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-22	SKLMKT-018	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-23	SKLMKT-019	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-24	SKLMKT-020	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-25	SKLMKT-021	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-26	SKLMKT-022	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-27	SKLMKT-023	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-28	SKLMKT-024	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-29	SKLMKT-025	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-30	SKLMKT-026	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-31	SKLMKT-027	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-32	SKLMKT-028	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-33	SKLMKT-029	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-34	SKLMKT-030	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-35	SKLMKT-031	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-36	SKLMKT-032	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-37	SKLMKT-033	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-38	SKLMKT-034	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-39	SKLMKT-035	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-40	SKLMKT-036	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-41	SKLMKT-037	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-42	SKLMKT-038	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-43	SKLMKT-039	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-44	SKLMKT-040	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-45	SKLMKT-041	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-46	SKLMKT-042	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-47	SKLMKT-043	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-48	SKLMKT-044	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-49	SKLMKT-045	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-50	SKLMKT-046	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-51	SKLMKT-047	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-52	SKLMKT-048	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-53	SKLMKT-048-DUP	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-54	SKLMKT-049	Tissue	05/11/23 23:59	08/02/23 09:20

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-130145-55	SKLMKT-050	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-56	SKLMKT-051	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-57	SKLMKT-052	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-58	SKLMKT-053	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-59	SKLMKT-054	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-60	SKLMKT-055	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-61	SKLMKT-056	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-62	SKLMKT-057	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-63	SKLMKT-058	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-64	SKLMKT-059	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-65	SKLMKT-060	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-66	SKLMKT-061	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-67	SKLMKT-062	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-68	SKLMKT-063	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-69	SKLMKT-064	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-70	SKLMKT-065	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-71	SKLMKT-066	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-72	SKLMKT-067	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-73	SKLMKT-068	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-74	SKLMKT-069	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-75	SKLMKT-070	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-76	SKLMKT-071	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-77	SKLMKT-072	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-78	SKLMKT-073	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-79	SKLMKT-074	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-80	SKLMKT-075	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-81	SKLMKT-076	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-82	SKLMKT-077	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-83	SKLMKT-078	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-84	SKLMKT-079	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-85	SKLMKT-080	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-86	SKLMKT-081	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-87	SKLMKT-081-DUP	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-88	SKLMKT-082	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-89	SKLMKT-083	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-90	SKLMKT-084	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-91	SKLMKT-085	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-92	SKLMKT-086	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-93	SKLMKT-087	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-94	SKLMKT-088	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-95	SKLMKT-089	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-96	SKLMKT-090	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-97	SKLMKT-091	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-98	SKLMKT-092	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-99	SKLMKT-093	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-190	PACPP-1101	Tissue	05/22/23 23:59	08/02/23 09:20

Ship to:
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CHAIN OF CUSTODY

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Tetra Tech
3697 Mt. Diablo Blvd.
Lafayette, CA
ted.donn@tetratech.com



580-130145 Chain of Custody

General Notes:

Please report results separately for each Project ID
Please report all results to the MDL. J-flag results between MDL and RL
Please report results in PDF format with Excel EDD deliverable
Quote: see proposal of 19 July 2020 for agreed rates
Please INVOICE separately for each Project ID

Project ID	SampleID	Date	Time	Medium	Preservation	Hg (EPA 1631E)	Total Arsenic - (EPA 1640)	Total Inorganic Arsenic (EPA 1632)	Hg (Tissue, EPA 1631B)	Total Arsenic (EPA 1638M)	Total Inorganic Arsenic (EPA 1632)	Barium (EPA 1638M)
T423.22	PACPP-TB	5/11/2023	14:26	SW	FROZEN	1	1	1				
T423.22	PACPP-WB	5/21/2023	8:30	SW	FROZEN	1	1	1				
T423.22	PACPP-EQ-PRE	5/21/2023	8:35	SW	FROZEN	1	1	1				
T423.22	PACPP-SW-1	5/21/2023	11:57	SW	FROZEN	1	1	1				
T423.22	PACPP-SW-10	5/21/2023	11:51	SW	FROZEN	1	1	1				
T423.22	PACPP-SW-20	5/21/2023	11:38	SW	FROZEN	1	1	1				
T423.22	PACPP-SW-20-DUP	5/21/2023	11:45	SW	FROZEN	1	1	1				
T423.22	PACPP-SW-40	5/21/2023	11:30	SW	FROZEN	1	1	1				
T423.22	PACPP-SW-B	5/21/2023	11:20	SW	FROZEN	1	1	1				
T423.22	PACPP-FB	5/21/2023	12:04	SW	FROZEN	1	1	1				
T423.22	PACPP-EQ-POST	5/21/2023	12:10	SW	FROZEN	1	1	1				
MKT2023	SKLMKT-001	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-001-DUP	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-002	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-003	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-003-DUP	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-004	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-005	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-006	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-007	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-008	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-008-DUP	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-009	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-010	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-011	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-012	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-013	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-014	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-014-DUP	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-015	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-016	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-017	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-018	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-019	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-020	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-021	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-022	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-023	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-024	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-025	5/11/2023		Tiss-Fish	FROZEN				1			

Relinquished by: *SK*

1 AUG 2023

Received by:

Relinquished by:

Received by:

8/3/23 5:26

Therm. ID: Dig 3 Cust. Seal: Y/N 1 of 5
Incor Corr Temp 19.6/-10.6

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CHAIN OF CUSTODY

Report to:
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Lafayette, CA
ted.donn@tetratech.com

Project ID	SampleID	Date	Time	Medium	Preservation	Hg (EPA 1631E)	Total Arsenic - (EPA 1640)	Total Inorganic Arsenic (EPA 1632)	Hg (Tissue, EPA 1631B)	Total Arsenic (EPA 1638M)	Total Inorganic Arsenic (EPA 1632)	Barium (EPA 1638M)
MKT2023	SKLMKT-026	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-027	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-028	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-029	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-030	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-031	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-032	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-033	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-034	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-035	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-036	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-037	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-038	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-039	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-040	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-041	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-042	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-043	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-044	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-045	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-046	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-047	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-048	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-048-DUP	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-049	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-050	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-051	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-052	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-053	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-054	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-055	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-056	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-057	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-058	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-059	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-060	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-061	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-062	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-063	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-064	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-065	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-066	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-067	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-068	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-069	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-070	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-071	5/11/2023		Tiss-Fish	FROZEN				1		1	1

Relinquished by:

AK

1 AUG 2023

Relinquished by:

202

Received by:

5/13/23 9:20

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Ship to:
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USA

CHAIN OF CUSTODY

Report to:
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Tetra Tech
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ted.donn@tetratech.com

Project ID	SampleID	Date	Time	Medium	Preservation	Hg (EPA 1631E)	Total Arsenic - (EPA 1640)	Total Inorganic Arsenic (EPA 1632)	Hg (Tissue, EPA 1631B)	Total Arsenic (EPA 1638M)	Total Inorganic Arsenic (EPA 1632)	Barium (EPA 1638M)
MKT2023	SKLMKT-072	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-073	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-074	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-075	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-076	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-077	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-078	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-079	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-080	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-081	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-081-DUP	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-082	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-083	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-084	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-085	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-086	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-087	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-088	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-089	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-090	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-091	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-092	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-093	5/11/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1001	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1001-DUP	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1002	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1002-DUP	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1003	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1003-DUP	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1005	5/17/2023		Tiss-Fish	FROZEN				1		1	
T41423.17	YUWA-1022	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1023	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1027	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1028	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1041	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1042	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1043	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1044	5/17/2023		Tiss-Fish	FROZEN				1		1	
T41423.17	YUWA-1046	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1047	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1048	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1049	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1141	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1141-DUP	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1142	7/1/2023		Tiss-Fish	FROZEN				1			

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5755 8th St. E
Fife, WA 98424
USA

CHAIN OF CUSTODY

Report to:
Dr. Ted Donn
Tetra Tech
3697 Mt. Diablo Blvd.
Lafayette, CA
ted.donn@tetratech.com

Project ID	SampleID	Date	Time	Medium	Preservation	Hg (EPA 1631E)	Total Arsenic - (EPA 1640)	Total Inorganic Arsenic (EPA 1632)	Hg (Tissue, EPA 1631B)	Total Arsenic (EPA 1638M)	Total Inorganic Arsenic (EPA 1632)	Barium (EPA 1638M)
T41423.19	MAWG-1142-DUP	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1143	7/1/2023		Tiss-Fish	FROZEN				1		1	
T41423.19	MAWG-1144	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1145	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1145-DUP	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1149	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1161	7/1/2023		Tiss-Fish	FROZEN				1		1	
T41423.19	MAWG-1181	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1182	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1121	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1121-DUP	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1122	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1123	7/3/2023		Tiss-Fish	FROZEN				1		1	1
T41423.20	LAWA-1124	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1124-DUP	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1125	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1126	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1127	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1129	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1130	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1132	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1132-DUP	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1201	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1202	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1203	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1204	7/3/2023		Tiss-Fish	FROZEN				1		1	1
T41423.20	LAWA-1205	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1206	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1207	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1208	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1209	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1210	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1211	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1212	7/3/2023		Tiss-Fish	FROZEN				1		1	1
T41423.20	LAWA-1214	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1214-DUP	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1215	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1216	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1217	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1218	7/3/2023		Tiss-Fish	FROZEN				1		1	1
T41423.20	LAWA-1219	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1219-DUP	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1220	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1221	7/3/2023		Tiss-Fish	FROZEN				1			

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Fife, WA 98424
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CHAIN OF CUSTODY

Report to:
Dr. Ted Donn
Tetra Tech
3697 Mt. Diablo Blvd.
Lafayette, CA
ted.donn@tetratech.com

Project ID	SampleID	Date	Time	Medium	Preservation	Hg (EPA 1631E)	Total Arsenic - (EPA 1640)	Total Inorganic Arsenic (EPA 1632)	Hg (Tissue, EPA 1631B)	Total Arsenic (EPA 1638M)	Total Inorganic Arsenic (EPA 1632)	Barium (EPA 1638M)
T41423.22	PACPP-1081	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1081-DUP	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1082	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1083	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1084	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1085	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1086	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1087	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1087-DUP	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1088	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1089	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1090	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1091	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1092	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1092-DUP	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1093	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1094	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1095	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1096	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1097	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1098	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1099	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1100	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1101	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1101-DUP	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1102	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1103	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1104	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1105	5/22/2023		Tiss-Fish	FROZEN				1	1	1	

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Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 580-130145-1

Login Number: 130145

List Number: 1

Creator: Groden, Kyle J

List Source: Eurofins Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX E
ANALYTICAL LABORATORY REPORTS:
ZOOPLANKTON COMMUNITY

Zooplankton diversity (individuals in the bottle)

SPECIES/STATION	LAWA-1C1	LAWA-1C2	LAWA-1C3X
Protozoa			
Granuloreticulosea			
Foraminiferida			
Foraminiferida.unid			
Foraminiferida			
Ctenophora			
Tenlaculata			
Cydippida			
Pleurobrachiidae			
Pleurobrachiidae.unid			
Pleurobrachiidae spp.	2	2	9
Ciliophora			
Ciliatea			
Oligotrichida			
Rhabdonellidae			
Rhabdonella			
<i>Rhabdonella</i> sp.1	3	3	1
Cnidaria			
Anthozoa			
Anthozoa.unid			
Anthozoa spp.	3	3	2
Hydrozoa			
Anthoathecata			
Corymorphidae			
Euphysa			
<i>Euphysa</i> sp.1	1	2	1
Euphysora			
<i>Euphysora</i> sp.1	1	2	1
<i>Euphysora</i> sp.2			
Corynidae			
Corynidae.unid			
Corynidae sp.1		1	2
Proboscoidactylidae			
Proboscoidactylidae.unid			
Proboscoidactylidae spp.	3	4	4
Anthoathecatae			
Bougainvilliidae			
Bougainvilliidae.unid			
Bougainvilliidae sp.1	2	2	2
Bougainvilliidae sp.3	1	1	1
Tubulariidae			
Tubulariidae.unid			
Tubulariidae sp.1	1	2	1
Tubulariidae sp.3	1		2
Hydrozoa.unid			
Hydrozoa spp.	2	2	1
Leptothecata			
Eutimidae			
Eutima			
<i>Eutima</i> sp.1	2	1	1



Zooplankton diversity (individuals in the bottle)

SPECIES/STATION	LAWA-1C1	LAWA-1C2	LAWA-1C3X
Leptothecatae			
Eirenidae			
Eirene			
<i>Eirene</i> sp.1	1	1	2
<i>Eirene</i> sp.2			
Lovenellidae			
Lovenellidae.unid			
Lovenellidae spp.	1		
Mitrocomidae			
Mitrocomidae.unid			
Mitrocomidae spp.	3	2	3
Siphonophora			
Abylidae			
Abylidae.unid			
Abylidae spp.	6	4	4
Siphonophorae			
Diphyidae			
Diphyidae.unid			
Diphyidae spp.	11	6	11
Trachymedusae			
Geryoniidae			
Liriope			
<i>Liriope</i> sp.1	2	2	2
Rhopalonematidae			
Rhopalonematidae.unid			
Rhopalonematidae spp.	3	5	3
Scyphozoa			
Coronatae			
Nausithoidae			
Nausithoe			
<i>Nausithoe</i> sp.1	1	2	1
<i>Nausithoe</i> sp.3	1	1	2
Rhizostomeae			
Rhizostomatidae			
Rhizostomatidae.unid			
Rhizostomatidae spp.	1	1	1
Semaeostomeae			
Pelagiidae			
Pelagiidae.unid			
Pelagiidae sp.1			
Platyhelminthes			
Turbellaria			
Turbellaria.unid			
Turbellaria spp.	1	1	3
Annelida			
Polychaeta.unid			
Polychaete larvae	7	12	17



Zooplankton diversity (individuals in the bottle)

SPECIES/STATION	LAWA-1C1	LAWA-1C2	LAWA-1C3X
Mollusca			
Bivalvia			
Bivalvia.unid			
Bivalve larvae	10	4	6
Cephalopoda			
Cephalopoda.unid			
Squid larvae	1		
Gastropoda			
Gastropoda.unid			
Gastropoda sp.	8	5	5
Neotaenioglossa			
Atlantidae			
Atlanta			
<i>Atlanta</i> sp.	4	5	4
Thecosomata			
Cavoliniidae			
Cavoliniidae.unid			
Cavoliniidae sp.1	3	5	4
Cavoliniidae sp.2	2		2
Creseis			
<i>Creseis acicula</i>	3	6	3
<i>Creseis virgula</i>	2		
Diacria			
<i>Diacria</i> sp.1	2	4	4
Arthropoda			
Malacostraca			
Amphipoda			
Amphipoda.unid			
Amphipoda sp.			
Caprellidae			
Caprellidae.unid			
Caprellidae spp.	4	5	6
Dexaminidae			
Dexaminidae.unid			
Dexaminidae spp.	1	1	
Hyperiidae			
Hyperiidae.unid			
Hyperiidae sp.1	4	8	2
Hyperiidae sp.2	6	7	5
Hyperiidae sp.3	3	3	3
Hyperiidae sp.4	8	5	2
Hyperiidae sp.5	2	2	2
Oxycephalidae			
Rhabdosoma			
<i>Rhabdosoma</i> spp.	5	4	5
Tullbergella			
<i>Tullbergella</i> spp.	2	2	2



Zooplankton diversity (individuals in the bottle)

SPECIES/STATION	LAWA-1C1	LAWA-1C2	LAWA-1C3X
Decapoda			
Alpheidae			
Alpheidae.unid			
Alpheidae spp.	1	2	1
Crangonidae			
Crangonidae.unid			
Crangonidae spp.	1	1	
Decapoda.unid			
Crab zoea		3	1
Dendrobranchiata.unid			
Shrimp larvae sp.C	2	2	
Shrimp larvae sp.J	2	2	1
Shrimp larvae sp.R	2	2	1
Shrimp larvae sp.S			
Diogenidae			
Diogenidae.unid			
Diogenidae sp.1	2	1	1
Diogenidae sp.2			
Diogenidae sp.3	2	1	1
Hippidae			
Hippidae.unid			
Hippidae spp.			1
Hippolytidae			
Hippolytidae.unid			
Hippolytidae spp.	2	2	2
Laomediidae			
Laomediidae.unid			
Laomediidae spp.	1		2
Luciferidae			
Lucifer			
<i>Lucifer spp.</i>	5	4	4
Paguridae			
Paguridae.unid			
Paguridae spp.	2	3	4
Palaemonidae			
Palaemonidae.unid			
Palaemonidae sp.1	1		
Palaemonidae sp.3	3		
Parapaguridae			
Parapaguridae.unid			
Parapaguridae spp.	2	3	2
Pasiphaeidae			
Leptochela			
<i>Leptochela</i> sp.1	2	2	2
Pleocyemata.unid			
Brachyura Larvae	6	7	7
Porcellanidae			
Porcellanidae.unid			
Porcellanidae spp.		1	1



Zooplankton diversity (individuals in the bottle)

SPECIES/STATION	LAWA-1C1	LAWA-1C2	LAWA-1C3X
Scyllaridae			
Scyllaridae.unid			
Phyllosoma larvae	1		
Sergestidae			
Sergestidae.unid			
Sergestidae spp.	2	3	3
Solenoceridae			
Solenoceridae.unid			
Solenoceridae spp.	3	3	1
Upogebiidae			
Upogebiidae.unid			
Upogebiidae spp.	5	4	6
Malacostraca.unid			
<i>Mysid sp.</i>			
Mysida			
Mysidae			
Siriella			
<i>Siriella sp.</i> 1	1		1
Stomatopoda			
Squillidae			
Squilla			
Alima larvae	2	4	1
Maxillopoda			
Calanoida			
Acartiidae			
Acartiidae.unid			
Acartiidae spp.	65	90	52
Calanidae			
Calanidae.unid			
Calanidae spp.	607	510	435
Centropagidae			
Centropagidae.unid			
Centropagidae spp.	36	32	43
Eucalanidae			
Eucalanidae.unid			
Eucalanidae spp.	175	79	126
Euchaetidae			
Euchaetidae.unid			
Euchaetidae spp.			
Paracalanidae			
Paracalanidae.unid			
Paracalanidae spp.	22	22	64
Pontellidae			
Pontellidae.unid			
Pontellidae spp.	30	30	40
Temoridae			
Temoridae.unid			
Temoridae spp.	14	11	31



Zooplankton diversity (individuals in the bottle)

SPECIES/STATION	LAWA-1C1	LAWA-1C2	LAWA-1C3X
Tortanidae			
Tortanidae.unid			
Tortanidae spp.	26	15	18
Tortanus			
<i>Tortanus spp.</i>	10	6	13
Copepoda.unid			
Copepod Nauplii	284	180	292
Cyclopoida			
Oithonidae			
Oithona			
<i>Oithona spp.</i>			
Harpacticoida			
Ectinosomatidae			
Microsetella			
<i>Microsetella spp.</i>	150	180	115
Poecilostomatoida			
Corycaeidae			
Corycaeus			
<i>Corycaeus spp.</i>			
Sapphirinidae			
Copilia			
<i>Copilia spp.</i>	2	3	6
Sappharina			
<i>Sappharina spp.</i>	3	3	3
Ostracoda			
Halocyprida			
Halocyprididae			
Euconchoecia			
<i>Euconchoecia sp.1</i>	37	24	45
Myodocopida			
Cypridinidae			
Cypridinidae.unid			
Cypridinidae sp.1	4	12	16
Cypridinidae sp.2	9	8	8
Echinodermata			
Echinodermata.unid			
Echinoderm Larvae	4	14	24
Chaetognatha			
Sagittoidea			
Aphragmophora			
Sagittidae			
Sagitta			
<i>Sagitta spp.</i>	187	168	144



Zooplankton diversity (individuals in the bottle)

SPECIES/STATION	LAWA-1C1	LAWA-1C2	LAWA-1C3X
Chordata			
Appendicularia			
Copelata			
Oikopleuridae			
Oikopleura			
<i>Oikopleura spp.</i>	20	9	25
Thaliacea			
Doliolida			
Doliolidae			
Dolioletta			
<i>Dolioletta spp.</i>	5	16	17
Doliolum			
<i>Doliolum spp.</i>	10	5	5
Salpida			
Salpidae			
Salpa			
<i>Salpa spp.</i>	8	8	13
Thalia			
<i>Thalia spp.</i>			
Actinopterygii			
Actinopterygii.unid			
Fish Egg	4		3
Fish larvae	2		2
TOTAL	1894	1603	1715



Zooplankton diversity (individuals in the bo

SPECIES/STATION	LAWA-1D1	LAWA-1D2	LAWA-1D3X
Protozoa			
Granuloreticulosea			
Foraminiferida			
Foraminiferida.unid			
Foraminiferida			
Ctenophora			
Tenlaculata			
Cydippida			
Pleurobrachiidae			
Pleurobrachiidae.unid			
Pleurobrachiidae spp.	5	5	2
Ciliophora			
Ciliatea			
Oligotrichida			
Rhabdonellidae			
Rhabdonella			
<i>Rhabdonella</i> sp.1	4		2
Cnidaria			
Anthozoa			
Anthozoa.unid			
Anthozoa spp.	3	3	3
Hydrozoa			
Anthoathecata			
Corymorphidae			
Euphysa			
<i>Euphysa</i> sp.1	2	1	2
Euphysora			
<i>Euphysora</i> sp.1	1	1	2
<i>Euphysora</i> sp.2			
Corynidae			
Corynidae.unid			
Corynidae sp.1	1		1
Proboscoidactylidae			
Proboscoidactylidae.unid			
Proboscoidactylidae spp.	3	3	4
Anthoathecatae			
Bougainvilliidae			
Bougainvilliidae.unid			
Bougainvilliidae sp.1	2	2	2
Bougainvilliidae sp.3	1	1	2
Tubulariidae			
Tubulariidae.unid			
Tubulariidae sp.1	2	1	1
Tubulariidae sp.3	1	1	2
Hydrozoa.unid			
Hydrozoa spp.	2	2	2
Leptothecata			
Eutimidae			
Eutima			
<i>Eutima</i> sp.1	1	3	2



Zooplankton diversity (individuals in the bo

SPECIES/STATION	LAWA-1D1	LAWA-1D2	LAWA-1D3X
Leptothecatae			
Eirenidae			
Eirene			
<i>Eirene</i> sp.1	2	3	3
<i>Eirene</i> sp.2	1		
Lovenellidae			
Lovenellidae.unid			
Lovenellidae spp.	1	1	1
Mitrocomidae			
Mitrocomidae.unid			
Mitrocomidae spp.	2	5	5
Siphonophora			
Abylidae			
Abylidae.unid			
Abylidae spp.	8	10	7
Siphonophorae			
Diphyidae			
Diphyidae.unid			
Diphyidae spp.	15	110	131
Trachymedusae			
Geryoniidae			
Liriope			
<i>Liriope</i> sp.1	3	3	2
Rhopalonematidae			
Rhopalonematidae.unid			
Rhopalonematidae spp.	4	3	5
Scyphozoa			
Coronatae			
Nausithoidae			
Nausithoe			
<i>Nausithoe</i> sp.1	2	2	2
<i>Nausithoe</i> sp.3	1	2	2
Rhizostomeae			
Rhizostomatidae			
Rhizostomatidae.unid			
Rhizostomatidae spp.	2	1	2
Semaeostomeae			
Pelagiidae			
Pelagiidae.unid			
Pelagiidae sp.1			
Platyhelminthes			
Turbellaria			
Turbellaria.unid			
Turbellaria spp.	1		2
Annelida			
Polychaeta.unid			
Polychaete larvae	9	5	6



Zooplankton diversity (individuals in the bo

SPECIES/STATION	LAWA-1D1	LAWA-1D2	LAWA-1D3X
Mollusca			
Bivalvia			
Bivalvia.unid			
Bivalve larvae	3	5	5
Cephalopoda			
Cephalopoda.unid			
Squid larvae			
Gastropoda			
Gastropoda.unid			
Gastropoda sp.	2	4	4
Neotaenioglossa			
Atlantidae			
Atlanta			
<i>Atlanta</i> sp.			
Thecosomata			
Cavoliniidae			
Cavoliniidae.unid			
Cavoliniidae sp.1		3	
Cavoliniidae sp.2			
Creseis			
<i>Creseis acicula</i>			
<i>Creseis virgula</i>			
Diacria			
<i>Diacria</i> sp.1			
Arthropoda			
Malacostraca			
Amphipoda			
Amphipoda.unid			
Amphipoda sp.	2		
Caprellidae			
Caprellidae.unid			
Caprellidae spp.	3	5	5
Dexaminidae			
Dexaminidae.unid			
Dexaminidae spp.		2	
Hyperiidae			
Hyperiidae.unid			
Hyperiidae sp.1	6	11	10
Hyperiidae sp.2	12	15	9
Hyperiidae sp.3	3	4	4
Hyperiidae sp.4	5	8	6
Hyperiidae sp.5	4	3	3
Oxycephalidae			
Rhabdosoma			
<i>Rhabdosoma</i> spp.	5	6	7
Tullbergella			
<i>Tullbergella</i> spp.	1		



Zooplankton diversity (individuals in the bo

SPECIES/STATION	LAWA-1D1	LAWA-1D2	LAWA-1D3X
Decapoda			
Alpheidae			
Alpheidae.unid			
Alpheidae spp.	2	2	
Crangonidae			
Crangonidae.unid			
Crangonidae spp.	2	2	
Decapoda.unid			
Crab zoea			
Dendrobranchiata.unid			
Shrimp larvae sp.C	1	1	
Shrimp larvae sp.J	3	3	3
Shrimp larvae sp.R	4	4	2
Shrimp larvae sp.S	2	1	
Diogenidae			
Diogenidae.unid			
Diogenidae sp.1	1	2	2
Diogenidae sp.2			
Diogenidae sp.3	1	2	2
Hippidae			
Hippidae.unid			
Hippidae spp.			
Hippolytidae			
Hippolytidae.unid			
Hippolytidae spp.	1	2	2
Laomediidae			
Laomediidae.unid			
Laomediidae spp.	2	1	1
Luciferidae			
Lucifer			
Lucifer spp.			2
Paguridae			
Paguridae.unid			
Paguridae spp.	2	2	2
Palaemonidae			
Palaemonidae.unid			
Palaemonidae sp.1			1
Palaemonidae sp.3			2
Parapaguridae			
Parapaguridae.unid			
Parapaguridae spp.		2	3
Pasiphaeidae			
Leptochela			
Leptochela sp.1	2	4	3
Pleocyemata.unid			
Brachyura Larvae	5	10	4
Porcellanidae			
Porcellanidae.unid			
Porcellanidae spp.			



Zooplankton diversity (individuals in the bo

SPECIES/STATION	LAWA-1D1	LAWA-1D2	LAWA-1D3X
Scyllaridae			
Scyllaridae.unid			
Phyllosoma larvae			
Sergestidae			
Sergestidae.unid			
Sergestidae spp.	2	4	1
Solenoceridae			
Solenoceridae.unid			
Solenoceridae spp.	2	5	2
Upogebiidae			
Upogebiidae.unid			
Upogebiidae spp.	4	4	2
Malacostraca.unid			
<i>Mysid sp.</i>	1	1	2
Mysida			
Mysidae			
Siriella			
<i>Siriella sp.</i> 1			
Stomatopoda			
Squillidae			
Squilla			
Alima larvae	2		
Maxillopoda			
Calanoida			
Acartiidae			
Acartiidae.unid			
Acartiidae spp.	60	78	47
Calanidae			
Calanidae.unid			
Calanidae spp.	344	410	410
Centropagidae			
Centropagidae.unid			
Centropagidae spp.	45	63	38
Eucalanidae			
Eucalanidae.unid			
Eucalanidae spp.	78	70	104
Euchaetidae			
Euchaetidae.unid			
Euchaetidae spp.			
Paracalanidae			
Paracalanidae.unid			
Paracalanidae spp.	44	54	40
Pontellidae			
Pontellidae.unid			
Pontellidae spp.	26	39	27
Temoridae			
Temoridae.unid			
Temoridae spp.	37	26	16



Zooplankton diversity (individuals in the bo

SPECIES/STATION	LAWA-1D1	LAWA-1D2	LAWA-1D3X
Tortanidae			
Tortanidae.unid			
Tortanidae spp.	41	44	22
Tortanus			
<i>Tortanus spp.</i>	16	12	15
Copepoda.unid			
Copepod Nauplii	338	205	189
Cyclopoida			
Oithonidae			
Oithona			
<i>Oithona spp.</i>			
Harpacticoida			
Ectinosomatidae			
Microsetella			
<i>Microsetella spp.</i>	178	128	99
Poecilostomatoida			
Corycaeidae			
Corycaeus			
<i>Corycaeus spp.</i>			
Sapphirinidae			
Copilia			
<i>Copilia spp.</i>	3	6	6
Sappharina			
<i>Sappharina spp.</i>	2	8	4
Ostracoda			
Halocyprida			
Halocyprididae			
Euconchoecia			
<i>Euconchoecia sp.1</i>	34	24	55
Myodocopida			
Cypridinidae			
Cypridinidae.unid			
Cypridinidae sp.1	11	11	21
Cypridinidae sp.2	6	6	10
Echinodermata			
Echinodermata.unid			
Echinoderm Larvae	12	16	24
Chaetognatha			
Sagittoidea			
Aphragmophora			
Sagittidae			
Sagitta			
<i>Sagitta spp.</i>	185	230	193



Zooplankton diversity (individuals in the bo

SPECIES/STATION	LAWA-1D1	LAWA-1D2	LAWA-1D3X
Chordata			
Appendicularia			
Copelata			
Oikopleuridae			
Oikopleura			
<i>Oikopleura spp.</i>	35	31	21
Thaliacea			
Doliolida			
Doliolidae			
Dolioletta			
<i>Dolioletta spp.</i>	27	36	18
Doliolum			
<i>Doliolum spp.</i>	12	10	5
Salpida			
Salpidae			
Salpa			
<i>Salpa spp.</i>	21	21	22
Thalia			
<i>Thalia spp.</i>	4		4
Actinopterygii			
Actinopterygii.unid			
Fish Egg			3
Fish larvae	2	3	3
TOTAL	1725	1817	1680



Zooplankton diversity (individuals in the bo

SPECIES/STATION	LAWA-3C1	LAWA-3C2	LAWA-3C3
Protozoa			
Granuloreticulosea			
Foraminiferida			
Foraminiferida.unid			
Foraminiferida			
Ctenophora			
Tenlaculata			
Cydippida			
Pleurobrachiidae			
Pleurobrachiidae.unid			
Pleurobrachiidae spp.	2	2	4
Ciliophora			
Ciliatea			
Oligotrichida			
Rhabdonellidae			
Rhabdonella			
<i>Rhabdonella</i> sp.1	2	2	1
Cnidaria			
Anthozoa			
Anthozoa.unid			
Anthozoa spp.	3	2	3
Hydrozoa			
Anthoathecata			
Corymorphidae			
Euphysa			
<i>Euphysa</i> sp.1	2	2	2
Euphysora			
<i>Euphysora</i> sp.1	2	2	2
<i>Euphysora</i> sp.2			
Corynidae			
Corynidae.unid			
Corynidae sp.1	1	2	2
Proboscoidactylidae			
Proboscoidactylidae.unid			
Proboscoidactylidae spp.	4	3	3
Anthoathecatae			
Bougainvilliidae			
Bougainvilliidae.unid			
Bougainvilliidae sp.1	2	1	2
Bougainvilliidae sp.3	1	2	1
Tubulariidae			
Tubulariidae.unid			
Tubulariidae sp.1	1	1	1
Tubulariidae sp.3	1	2	1
Hydrozoa.unid			
Hydrozoa spp.	2	4	2
Leptothecata			
Eutimidae			
Eutima			
<i>Eutima</i> sp.1	2	3	2



Zooplankton diversity (individuals in the bo

SPECIES/STATION	LAWA-3C1	LAWA-3C2	LAWA-3C3
Leptothecatae			
Eirenidae			
Eirene			
<i>Eirene</i> sp.1	1	1	1
<i>Eirene</i> sp.2			1
Lovenellidae			
Lovenellidae.unid			
Lovenellidae spp.		2	1
Mitrocomidae			
Mitrocomidae.unid			
Mitrocomidae spp.	3	4	4
Siphonophora			
Abylidae			
Abylidae.unid			
Abylidae spp.	7	8	18
Siphonophorae			
Diphyidae			
Diphyidae.unid			
Diphyidae spp.	13	16	26
Trachymedusae			
Geryoniidae			
Liriope			
<i>Liriope</i> sp.1	3	3	3
Rhopalonematidae			
Rhopalonematidae.unid			
Rhopalonematidae spp.	3	4	4
Scyphozoa			
Coronatae			
Nausithoidae			
Nausithoe			
<i>Nausithoe</i> sp.1	2	2	1
<i>Nausithoe</i> sp.3	1	1	1
Rhizostomeae			
Rhizostomatidae			
Rhizostomatidae.unid			
Rhizostomatidae spp.	1	1	
Semaeostomeae			
Pelagiidae			
Pelagiidae.unid			
Pelagiidae sp.1		1	
Platyhelminthes			
Turbellaria			
Turbellaria.unid			
Turbellaria spp.			
Annelida			
Polychaeta.unid			
Polychaete larvae	5	14	8



Zooplankton diversity (individuals in the bo

SPECIES/STATION	LAWA- 3C1	LAWA- 3C2	LAWA- 3C3
Mollusca			
Bivalvia			
Bivalvia.unid			
Bivalve larvae	5	6	3
Cephalopoda			
Cephalopoda.unid			
Squid larvae			
Gastropoda			
Gastropoda.unid			
Gastropoda sp.	3	11	5
Neotaenioglossa			
Atlantidae			
Atlanta			
<i>Atlanta</i> sp.		1	3
Thecosomata			
Cavoliniidae			
Cavoliniidae.unid			
Cavoliniidae sp.1			
Cavoliniidae sp.2			
Creseis			
<i>Creseis acicula</i>			2
<i>Creseis virgula</i>			
Diacria			
<i>Diacria</i> sp.1			2
Arthropoda			
Malacostraca			
Amphipoda			
Amphipoda.unid			
Amphipoda sp.	1	1	
Caprellidae			
Caprellidae.unid			
Caprellidae spp.	3	5	4
Dexaminidae			
Dexaminidae.unid			
Dexaminidae spp.		1	
Hyperiididae			
Hyperiididae.unid			
Hyperiididae sp.1	8	4	2
Hyperiididae sp.2	22	11	4
Hyperiididae sp.3	10	3	2
Hyperiididae sp.4	16	6	2
Hyperiididae sp.5	5	3	
Oxycephalidae			
Rhabdosoma			
<i>Rhabdosoma</i> spp.	4	4	3
Tullbergella			
<i>Tullbergella</i> spp.			



Zooplankton diversity (individuals in the bo

SPECIES/STATION	LAWA-3C1	LAWA-3C2	LAWA-3C3
Decapoda			
Alpheidae			
Alpheidae.unid			
Alpheidae spp.	2	2	
Crangonidae			
Crangonidae.unid			
Crangonidae spp.	1	1	
Decapoda.unid			
Crab zoea			
Dendrobranchiata.unid			
Shrimp larvae sp.C	2	1	
Shrimp larvae sp.J	3	3	1
Shrimp larvae sp.R	3	2	1
Shrimp larvae sp.S	2	1	
Diogenidae			
Diogenidae.unid			
Diogenidae sp.1	2	2	1
Diogenidae sp.2		1	
Diogenidae sp.3	1	1	1
Hippidae			
Hippidae.unid			
Hippidae spp.			
Hippolytidae			
Hippolytidae.unid			
Hippolytidae spp.	2	2	2
Laomediidae			
Laomediidae.unid			
Laomediidae spp.		2	2
Luciferidae			
Lucifer			
Lucifer spp.			3
Paguridae			
Paguridae.unid			
Paguridae spp.	2	2	2
Palaemonidae			
Palaemonidae.unid			
Palaemonidae sp.1		1	1
Palaemonidae sp.3			1
Parapaguridae			
Parapaguridae.unid			
Parapaguridae spp.		1	2
Pasiphaeidae			
Leptochela			
Leptochela sp.1	3	3	3
Pleocyemata.unid			
Brachyura Larvae	8	5	6
Porcellanidae			
Porcellanidae.unid			
Porcellanidae spp.			



Zooplankton diversity (individuals in the bo

SPECIES/STATION	LAWA-3C1	LAWA-3C2	LAWA-3C3
Scyllaridae			
Scyllaridae.unid			
Phyllosoma larvae			
Sergestidae			
Sergestidae.unid			
Sergestidae spp.	2	1	2
Solenoceridae			
Solenoceridae.unid			
Solenoceridae spp.	4	2	2
Upogebiidae			
Upogebiidae.unid			
Upogebiidae spp.	2	3	3
Malacostraca.unid			
<i>Mysid sp.</i>			
Mysida			
Mysidae			
Siriella			
<i>Siriella sp.</i> 1			
Stomatopoda			
Squillidae			
Squilla			
Alima larvae	3	2	
Maxillopoda			
Calanoida			
Acartiidae			
Acartiidae.unid			
Acartiidae spp.	42	43	52
Calanidae			
Calanidae.unid			
Calanidae spp.	281	256	293
Centropagidae			
Centropagidae.unid			
Centropagidae spp.	40	40	64
Eucalanidae			
Eucalanidae.unid			
Eucalanidae spp.	69	85	70
Euchaetidae			
Euchaetidae.unid			
Euchaetidae spp.			
Paracalanidae			
Paracalanidae.unid			
Paracalanidae spp.	32	66	57
Pontellidae			
Pontellidae.unid			
Pontellidae spp.	24	24	48
Temoridae			
Temoridae.unid			
Temoridae spp.	18	31	30



Zooplankton diversity (individuals in the bo

SPECIES/STATION	LAWA-3C1	LAWA-3C2	LAWA-3C3
Tortanidae			
Tortanidae.unid			
Tortanidae spp.	31	28	49
Tortanus			
<i>Tortanus spp.</i>	17	19	28
Copepoda.unid			
Copepod Nauplii	195	370	400
Cyclopoida			
Oithonidae			
Oithona			
<i>Oithona spp.</i>			
Harpacticoida			
Ectinosomatidae			
Microsetella			
<i>Microsetella spp.</i>	93	160	88
Poecilostomatoida			
Corycaeidae			
Corycaeus			
<i>Corycaeus spp.</i>			
Sapphirinidae			
Copilia			
<i>Copilia spp.</i>	6	5	3
Sappharina			
<i>Sapphirina spp.</i>	3	4	3
Ostracoda			
Halocyprida			
Halocyprididae			
Euconchoecia			
<i>Euconchoecia sp.1</i>	140	46	34
Myodocopida			
Cypridinidae			
Cypridinidae.unid			
Cypridinidae sp.1	28	31	25
Cypridinidae sp.2	40	23	11
Echinodermata			
Echinodermata.unid			
Echinoderm Larvae	6	22	12
Chaetognatha			
Sagittoidea			
Aphragmophora			
Sagittidae			
Sagitta			
<i>Sagitta spp.</i>	155	177	211



Zooplankton diversity (individuals in the bo

SPECIES/STATION	LAWA- 3C1	LAWA- 3C2	LAWA- 3C3
Chordata			
Appendicularia			
Copelata			
Oikopleuridae			
Oikopleura			
<i>Oikopleura spp.</i>	15	28	20
Thaliacea			
Doliolida			
Doliolidae			
Dolioletta			
<i>Dolioletta spp.</i>	20	165	30
Doliolum			
<i>Doliolum spp.</i>	12	40	10
Salpida			
Salpidae			
Salpa			
<i>Salpa spp.</i>	8	121	23
Thalia			
<i>Thalia spp.</i>		10	8
Actinopterygii			
Actinopterygii.unid			
Fish Egg	2		
Fish larvae	2		3
TOTAL	1462	1973	1731



Zooplankton diversity (individuals in the bo

SPECIES/STATION	LAWA-3D1X	LAWA-3D2	LAWA-3D3	G4/43REF
Protozoa				
Granuloreticulosea				
Foraminiferida				
Foraminiferida.unid				
Foraminiferida				2
Ctenophora				
Tenlaculata				
Cydippida				
Pleurobrachiidae				
Pleurobrachiidae.unid				
Pleurobrachiidae spp.	1		1	3
Ciliophora				
Ciliatea				
Oligotrichida				
Rhabdonellidae				
Rhabdonella				
<i>Rhabdonella</i> sp.1	1			2
Cnidaria				
Anthozoa				
Anthozoa.unid				
Anthozoa spp.	2	2	1	2
Hydrozoa				
Anthoathecata				
Corymorphidae				
Euphysa				
<i>Euphysa</i> sp.1	1	1	1	2
Euphysora				
<i>Euphysora</i> sp.1	1			1
<i>Euphysora</i> sp.2	1			
Corynidae				
Corynidae.unid				
Corynidae sp.1	1			1
Proboscoidactylidae				
Proboscoidactylidae.unid				
Proboscoidactylidae spp.	3	3	2	3
Anthoathecatae				
Bougainvilliidae				
Bougainvilliidae.unid				
Bougainvilliidae sp.1	1	1	2	2
Bougainvilliidae sp.3	1	1	2	1
Tubulariidae				
Tubulariidae.unid				
Tubulariidae sp.1	1	1	2	1
Tubulariidae sp.3	1	1	1	1
Hydrozoa.unid				
Hydrozoa spp.	2	2	2	3
Leptothecata				
Eutimidae				
Eutima				
<i>Eutima</i> sp.1	1	2	2	2



Zooplankton diversity (individuals in the bo

SPECIES/STATION	LAWA-3D1X	LAWA-3D2	LAWA-3D3	G4/43REF
Leptothecatae				
Eirenidae				
Eirene				
<i>Eirene</i> sp.1	1	2	2	1
<i>Eirene</i> sp.2				
Lovenellidae				
Lovenellidae.unid				
Lovenellidae spp.				
Mitrocomidae				
Mitrocomidae.unid				
Mitrocomidae spp.	4	3	2	4
Siphonophora				
Abylidae				
Abylidae.unid				
Abylidae spp.	8	9	8	11
Siphonophorae				
Diphyidae				
Diphyidae.unid				
Diphyidae spp.	12	12	20	23
Trachymedusae				
Geryoniidae				
Liriope				
<i>Liriope</i> sp.1	2	2	2	2
Rhopalonematidae				
Rhopalonematidae.unid				
Rhopalonematidae spp.	3	3	4	8
Scyphozoa				
Coronatae				
Nausithoidae				
Nausithoe				
<i>Nausithoe</i> sp.1	2	1	2	2
<i>Nausithoe</i> sp.3	2	1	2	2
Rhizostomeae				
Rhizostomatidae				
Rhizostomatidae.unid				
Rhizostomatidae spp.	2		2	1
Semaeostomeae				
Pelagiidae				
Pelagiidae.unid				
Pelagiidae sp.1			1	1
Platyhelminthes				
Turbellaria				
Turbellaria.unid				
Turbellaria spp.		2		
Annelida				
Polychaeta.unid				
Polychaete larvae	3	9	4	18



Zooplankton diversity (individuals in the bo

SPECIES/STATION	LAWA- 3D1X	LAWA- 3D2	LAWA- 3D3	G4/43REF
Mollusca				
Bivalvia				
Bivalvia.unid				
Bivalve larvae	6	4	3	12
Cephalopoda				
Cephalopoda.unid				
Squid larvae			2	1
Gastropoda				
Gastropoda.unid				
Gastropoda sp.	3	3	8	6
Neotaenioglossa				
Atlantidae				
Atlanta				
<i>Atlanta</i> sp.		1		2
Thecosomata				
Cavoliniidae				
Cavoliniidae.unid				
Cavoliniidae sp.1				3
Cavoliniidae sp.2				
Creseis				
<i>Creseis acicula</i>				3
<i>Creseis virgula</i>				
Diacria				
<i>Diacria</i> sp.1				2
Arthropoda				
Malacostraca				
Amphipoda				
Amphipoda.unid				
Amphipoda sp.				
Caprellidae				
Caprellidae.unid				
Caprellidae spp.	3	3	4	4
Dexaminidae				
Dexaminidae.unid				
Dexaminidae spp.				
Hyperiidae				
Hyperiidae.unid				
Hyperiidae sp.1	14	4	6	4
Hyperiidae sp.2	30	10	13	8
Hyperiidae sp.3	9	5	6	3
Hyperiidae sp.4	12	4	8	4
Hyperiidae sp.5	6			
Oxycephalidae				
Rhabdosoma				
<i>Rhabdosoma</i> spp.	2	4	5	5
Tullbergella				
<i>Tullbergella</i> spp.				



Zooplankton diversity (individuals in the bo

SPECIES/STATION	LAWA-3D1X	LAWA-3D2	LAWA-3D3	G4/43REF
Decapoda				
Alpheidae				
Alpheidae.unid				
Alpheidae spp.	2	2	1	1
Crangonidae				
Crangonidae.unid				
Crangonidae spp.	1	1	2	1
Decapoda.unid				
Crab zoea				
Dendrobranchiata.unid				
Shrimp larvae sp.C	1	2		2
Shrimp larvae sp.J	2	2	3	4
Shrimp larvae sp.R	2	3	3	2
Shrimp larvae sp.S	1	1		
Diogenidae				
Diogenidae.unid				
Diogenidae sp.1	1	1	2	1
Diogenidae sp.2				
Diogenidae sp.3			1	2
Hippidae				
Hippidae.unid				
Hippidae spp.				
Hippolytidae				
Hippolytidae.unid				
Hippolytidae spp.	3	1	1	1
Laomediidae				
Laomediidae.unid				
Laomediidae spp.	2	2	2	2
Luciferidae				
Lucifer				
Lucifer spp.		3		8
Paguridae				
Paguridae.unid				
Paguridae spp.	3	2	2	2
Palaemonidae				
Palaemonidae.unid				
Palaemonidae sp.1			2	
Palaemonidae sp.3			2	1
Parapaguridae				
Parapaguridae.unid				
Parapaguridae spp.		2	3	2
Pasiphaeidae				
Leptochela				
Leptochela sp.1	2	3	3	3
Pleocyemata.unid				
Brachyura Larvae	4	6	10	14
Porcellanidae				
Porcellanidae.unid				
Porcellanidae spp.	1			



Zooplankton diversity (individuals in the bo

SPECIES/STATION	LAWA-3D1X	LAWA-3D2	LAWA-3D3	G4/43REF
Scyllaridae				
Scyllaridae.unid				
Phyllosoma larvae	1			1
Sergestidae				
Sergestidae.unid				
Sergestidae spp.	2	2	2	2
Solenoceridae				
Solenoceridae.unid				
Solenoceridae spp.	2	1	3	4
Upogebiidae				
Upogebiidae.unid				
Upogebiidae spp.	3	2	4	8
Malacostraca.unid				
<i>Mysid sp.</i>				
Mysida				
Mysidae				
Siriella				
<i>Siriella sp.</i> 1				
Stomatopoda				
Squillidae				
Squilla				
Alima larvae		2	5	1
Maxillopoda				
Calanoida				
Acartiidae				
Acartiidae.unid				
Acartiidae spp.	57	113	74	87
Calanidae				
Calanidae.unid				
Calanidae spp.	451	524	466	425
Centropagidae				
Centropagidae.unid				
Centropagidae spp.	65	71	80	72
Eucalanidae				
Eucalanidae.unid				
Eucalanidae spp.	82	182	135	93
Euchaetidae				
Euchaetidae.unid				
Euchaetidae spp.				21
Paracalanidae				
Paracalanidae.unid				
Paracalanidae spp.	66	63	62	57
Pontellidae				
Pontellidae.unid				
Pontellidae spp.	34	47	48	46
Temoridae				
Temoridae.unid				
Temoridae spp.	53	38	37	38



Zooplankton diversity (individuals in the bo

SPECIES/STATION	LAWA-3D1X	LAWA-3D2	LAWA-3D3	G4/43REF
Tortanidae				
Tortanidae.unid				
Tortanidae spp.	41	25	21	25
Tortanus				
<i>Tortanus spp.</i>	27	18	25	33
Copepoda.unid				
Copepod Nauplii	270	275	148	510
Cyclopoida				
Oithonidae				
Oithona				
<i>Oithona spp.</i>				12
Harpacticoida				
Ectinosomatidae				
Microsetella				
<i>Microsetella spp.</i>	108	127	88	166
Poecilostomatoida				
Corycaeiidae				
Corycaeus				
<i>Corycaeus spp.</i>				22
Sapphirinidae				
Copilia				
<i>Copilia spp.</i>	3	3	6	7
Sappharina				
<i>Sapphirina spp.</i>	3	2	3	4
Ostracoda				
Halocyprida				
Halocyprididae				
Euconchoecia				
<i>Euconchoecia sp.1</i>	124	65	37	50
Myodocopida				
Cypridinidae				
Cypridinidae.unid				
Cypridinidae sp.1	133	51	14	20
Cypridinidae sp.2	186	44	22	31
Echinodermata				
Echinodermata.unid				
Echinoderm Larvae	24	8	25	18
Chaetognatha				
Sagittoidea				
Aphragmophora				
Sagittidae				
Sagitta				
<i>Sagitta spp.</i>	208	206	249	216



Zooplankton diversity (individuals in the bo

SPECIES/STATION	LAWA- 3D1X	LAWA- 3D2	LAWA- 3D3	G4/43REF
Chordata				
Appendicularia				
Copelata				
Oikopleuridae				
Oikopleura				
<i>Oikopleura spp.</i>	32	19	36	24
Thaliacea				
Doliolida				
Doliolidae				
Dolioletta				
<i>Dolioletta spp.</i>	24	14	21	35
Doliolum				
<i>Doliolum spp.</i>	10	6	13	12
Salpida				
Salpidae				
Salpa				
<i>Salpa spp.</i>	33	22	30	16
Thalia				
<i>Thalia spp.</i>	11		8	
Actinopterygii				
Actinopterygii.unid				
Fish Egg		3		8
Fish larvae	8	3	1	2
TOTAL	2228	2063	1820	2268



APPENDIX D
ANALYTICAL LABORATORY REPORTS:
PHYTOPLANKTON COMMUNITY

Phytoplankton diversity (individuals in the bottle)

SPECIES/STATION	LAWA-1C1	LAWA-1C2	LAWA-1C3X
Charophyta			
Conjugophyceae			
Desmidiaceae			
Desmidiaceae			
Cosmarium			
<i>Cosmarium</i> sp.1			60
Spondylosium			
<i>Spondylosium</i> sp.1	240	180	240
Staurastrum			
<i>Staurastrum</i> sp.1	60	180	120
<i>Staurastrum</i> sp.3	60	120	60
Chlorophyta			
Chlorophyceae			
Chlamydomonadales			
Micractiniaceae			
Golenkinia			
<i>Golenkinia radiata</i>			120
Tetrasporales			
Palmellopsidaceae			
Sphaerocystis			
<i>Sphaerocystis</i> sp.1	4020	3240	2040
Trebouxiophyceae			
Oocystales			
Oocystaceae			
Ankistrodesmus			
<i>Ankistrodesmus</i> sp.1	60	120	120
Chrysophyta			
Chrysophyceae			
Dictyochaetes			
Dictyochaceae			
Dictyocha			
<i>Dictyocha fibula</i>	420	300	300
<i>Dictyocha</i> sp.1			
<i>Dictyocha speculum</i> var. <i>octonaris</i>	120	180	120
Cyanobacteria			
Cyanophyceae			
Chroococcales			
Chroococcaceae			
Gloeocapsa			
<i>Gloeocapsa</i> sp.1	960	840	960
Nostocales			
Oscillatoriaceae			
Oscillatoria			
<i>Oscillatoria erythraea</i>	82440	81720	77940
<i>Oscillatoria</i> sp.1	32040	41640	38940
<i>Oscillatoria</i> sp.2	660	1020	1260
<i>Oscillatoria thiebautii</i>			
Rivulariaceae			
Calothrix			
<i>Calothrix crustacea</i>			1260
Euglenophycota			



Sakamon Phothong

SPECIES/STATION	LAWA- 1C1	LAWA- 1C2	LAWA- 1C3X
Charophyta			
Euglenophyceae			
Euglenales			
Euglenaceae			
Phacus			
<i>Phacus sp.1</i>			180
<i>Phacus sp.2</i>			
Ochrophyta			
Bacillariophyceae			
Asterolamprales			
Asterolampraceae			
Asterolampra			
<i>Asterolampra marylandica</i>	300	480	180
Asteromphalus			
<i>Asteromphalus cleveanus</i>	420	480	300
<i>Asteromphalus elegans</i>	240	180	180
<i>Asteromphalus flabellatus</i>	60	180	120
<i>Asteromphalus sp.1</i>	120	300	60
Bacillariales			
Bacillariaceae			
Bacillaria			
<i>Bacillaria paxillifer</i>	4620	5820	3600
Cylindrotheca			
<i>Cylindrotheca sp.1</i>			
Nitzschia			
<i>Nitzschia longissima</i>	120	60	120
<i>Nitzschia lorenziana</i>	180	120	120
<i>Nitzschia sp.10</i>	240	180	300
<i>Nitzschia sp.11</i>	240	300	240
<i>Nitzschia sp.3</i>	240	180	360
<i>Nitzschia sp.5</i>	300	240	240
Pseudo-nitzschia			
<i>Pseudo-nitzschia sp.1</i>			1020
Centrales			
Eupodiscaceae			
Odontella			
<i>Odontella aurita</i>			
<i>Odontella mobiliensis</i>	60	180	180
<i>Odontella sinensis</i>	180	240	240



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SPECIES/STATION	LAWA-1C1	LAWA-1C2	LAWA-1C3X
Charophyta			
Chaetocerotales			
Chaetocerotaceae			
Bacteriastrum			
<i>Bacteriastrum comosum</i>	1860	3420	1140
<i>Bacteriastrum furcatum</i>	2160	3180	1260
<i>Bacteriastrum hyalinum</i>	1680	1680	1320
<i>Bacteriastrum minus</i>	480		960
Chaetoceros			
<i>Chaetoceros aequatorialis</i>	300	300	300
<i>Chaetoceros affinis</i>	2220	1740	780
<i>Chaetoceros atlanticus</i>	1320	2400	900
<i>Chaetoceros coarctatus</i>	5340	3660	3300
<i>Chaetoceros compressus</i>	2280	2100	1500
<i>Chaetoceros costatus</i>	1260	2520	2160
<i>Chaetoceros didymus</i>	2700	2700	1440
<i>Chaetoceros diversus</i>	3660	3660	3360
<i>Chaetoceros lorenzianus</i>	2040	1560	900
<i>Chaetoceros messanensis</i>	1620	1440	2460
<i>Chaetoceros peruvianus</i>	360	300	240
<i>Chaetoceros pseudocurvisetus</i>	2160	1560	2160
<i>Chaetoceros sp.3</i>			
Corethrales			
Corethraceae			
Corethron			
<i>Corethron criophilum</i>	120		180
Coscinodisciales			
Coscinodiscaceae			
Coscinodiscus			
<i>Coscinodiscus gigas</i>	60	180	120
<i>Coscinodiscus sp.1</i>	420	240	360
<i>Coscinodiscus sp.10</i>	420	300	420
<i>Coscinodiscus sp.11</i>	480	300	300
<i>Coscinodiscus sp.2</i>	240	300	120
<i>Coscinodiscus sp.4</i>	60	120	
<i>Coscinodiscus sp.5</i>	360	480	300
<i>Coscinodiscus sp.6</i>	300	420	240
<i>Coscinodiscus sp.8</i>	420	300	180
<i>Coscinodiscus sp.9</i>			
Gossleriella			
<i>Gossleriella tropica</i>	840	540	840
Palmeria			
<i>Palmeria hardmaniana</i>	120		60
Heliopeltaceae			
Actinoptychus			
<i>Actinoptychus sp.1</i>	180	180	240
Hemidiscaceae			
Pseudoguinaridia			
<i>Pseudoguinaridia recta</i>	360	420	240



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SPECIES/STATION	LAWA- 1C1	LAWA- 1C2	LAWA- 1C3X
Charophyta			
Eunotiales			
Eunotiaceae			
Eunotia			
<i>Eunotia</i> sp.1	180		180
Fragilariales			
Fragilariaceae			
Asterionella			
<i>Asterionella formosa</i>	240	420	120
Fragilaria			
<i>Fragilaria</i> sp.1	960	720	600
Hemiaulales			
Hemiaulaceae			
Cerataulina			
<i>Cerataulina</i> sp.1	420		
Climacodium			
<i>Climacodium biconcavum</i>	780	840	960
<i>Climacodium frauenfeldianum</i>	3240	3720	3180
Hemiaulus			
<i>Hemiaulus hauckii</i>	540	420	540
<i>Hemiaulus indicus</i>	660	480	360
<i>Hemiaulus membranaceus</i>	2340	1080	3240
<i>Hemiaulus sinensis</i>	960	540	900
Leptocylindrales			
Leptocylindraceae			
Leptocylindrus			
<i>Leptocylindrus danicus</i>			
Lithodesmiales			
Lithodesmaceae			
Ditylum			
<i>Ditylum brightwellii</i>	120	120	60
<i>Ditylum sol</i>	300	300	300
Lithodesmium			
<i>Lithodesmium</i> sp.1	720		



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SPECIES/STATION	LAWA-1C1	LAWA-1C2	LAWA-1C3X
Charophyta			
Naviculales			
Diploneidaceae			
Diploneis			
<i>Diploneis</i> sp.1	420	420	300
Naviculaceae			
Anomoeneis			
<i>Anomoeneis</i> sp.1			480
Haslea			
<i>Haslea</i> sp.1	240	300	480
<i>Haslea wawriake</i>	120	60	60
Meuniera			
<i>Meuniera</i> sp.1	480	360	420
Navicula			
<i>Navicula</i> sp.1	480	360	420
<i>Navicula</i> sp.3	360	300	240
<i>Navicula</i> sp.5	120	300	240
<i>Navicula</i> sp.6	300	180	300
<i>Navicula</i> sp.7	300	420	300
<i>Navicula</i> sp.8	300	360	300
Trachyneis			
<i>Trachyneis</i> sp.1	360	300	420
Pinnulariaceae			
Pinnularia			
<i>Pinnularia</i> sp.2	180		180
Pleurosigmataceae			
Gyrosigma			
<i>Gyrosigma balticum</i>	120		60
<i>Gyrosigma</i> sp.1	420	300	420
<i>Gyrosigma</i> sp.2	300	360	300
<i>Gyrosigma</i> sp.3	300	240	300
Pleurosigma			
<i>Pleurosigma</i> sp.1	240	300	420
<i>Pleurosigma</i> sp.2	300	420	300
<i>Pleurosigma</i> sp.3	480	300	420
<i>Pleurosigma</i> sp.5	120	240	240
<i>Pleurosigma</i> sp.6	480	360	420
Rhizosoleniales			
Rhizosoleniaceae			
Dactyliosolen			
<i>Dactyliosolen fragilissimus</i>			
<i>Dactyliosolen phuketensis</i>	600	600	780
Guinardia			
<i>Guinardia cylindrus</i>			240
<i>Guinardia flaccida</i>	240		240
<i>Guinardia striata</i>	900	480	720
Proboscia			
<i>Proboscia alata</i>	780	540	660
Pseudosolenia			
<i>Pseudosolenia calcar avis</i>	540	480	480



Sakamon Petchong

SPECIES/STATION	LAWA-1C1	LAWA-1C2	LAWA-1C3X
Charophyta			
Rhizosolenia			
<i>Rhizosolenia acuminata</i>			
<i>Rhizosolenia bergonii</i>	600	660	600
<i>Rhizosolenia clevei</i> var. <i>clevei</i>	300	360	480
<i>Rhizosolenia formosa</i>	180	120	240
<i>Rhizosolenia hyalina</i>	420	660	540
<i>Rhizosolenia imbricata</i>	120	60	120
<i>Rhizosolenia pungens</i>	720	840	660
<i>Rhizosolenia robusta</i>	240	300	180
<i>Rhizosolenia</i> sp. 1	240	180	180
<i>Rhizosolenia</i> sp. 3	60	120	60
<i>Rhizosolenia striata</i>	240	300	300
<i>Rhizosolenia styliformis</i>	180	240	240
Surirellales			
Entomoneidaceae			
Entomoneis			
<i>Entomoneis</i> sp. 1	300	420	180
<i>Entomoneis</i> sp. 2	60		
Surirellaceae			
Campylodiscus			
<i>Campylodiscus</i> sp. 1	120		120
Surirella			
<i>Surirella</i> sp. 1			
Thalassionematales			
Thalassionemataceae			
Thalassionema			
<i>Thalassionema nitzschioides</i>	1740		1680
<i>Thalassionema</i> sp. 1	2700	2160	1740
Thalassiothrix			
<i>Thalassiothrix</i> sp. 1			720
<i>Thalassiothrix</i> sp. 2	1080	600	1020
Thalassiophysales			
Catenulaceae			
Amphora			
<i>Amphora</i> sp. 1	60		120
<i>Amphora</i> sp. 3	180		60
Thalassiosirales			
Stephanodiscaceae			
Cyclotella			
<i>Cyclotella</i> sp. 1	960	720	660
Thalassiosiraceae			
Planktoniella			
<i>Planktoniella blanda</i>	840	660	720
<i>Planktoniella sol</i>	420	660	960
Thalassiosira			
<i>Thalassiosira</i> sp. 5	840	660	660
<i>Thalassiosira</i> sp. 6	600	780	540
<i>Thalassiosira subtilis</i>			240



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SPECIES/STATION	LAWA- 1C1	LAWA- 1C2	LAWA- 1C3X
Charophyta			
Pyrrophytophyta			
Dinophyceae			
Dinophysiales			
Amphisoleniaceae			
Amphisolenia			
<i>Amphisolenia bidentata</i>	660	480	300
Dinophysiaceae			
Dinophysis			
<i>Dinophysis caudata</i>	180	180	60
<i>Dinophysis hastata</i>	120	180	
<i>Dinophysis schuettii</i>	180	120	
Histioneis			
<i>Histioneis hyalina</i>	60		
<i>Histioneis sp. 1</i>			
Ornithocercus			
<i>Ornithocercus sp. 1</i>	180		
<i>Ornithocercus thumii</i>	60	180	
Phalacroma			
<i>Phalacroma argus</i>	60		
<i>Phalacroma doryphorum</i>			
<i>Phalacroma mitra</i>	120		
Gonyaulacales			
Ceratiaceae			
Ceratium			
<i>Ceratium breve</i>	420		
<i>Ceratium claviger</i>	240		120
<i>Ceratium contortum</i>	300	240	300
<i>Ceratium deflexum</i>	240	180	180
<i>Ceratium dens</i>	600	420	420
<i>Ceratium extensum</i>	240	180	120
<i>Ceratium falcatum</i>	120	60	180
<i>Ceratium furca</i>	300	240	300
<i>Ceratium fusus</i>	240	180	240
<i>Ceratium horridum</i>	300	180	
<i>Ceratium kofoidii</i>	660	780	480
<i>Ceratium massiliense</i>			
<i>Ceratium porrectum</i>	240	600	480
<i>Ceratium schmidtii</i>	60		
<i>Ceratium teres</i>	240	240	60
<i>Ceratium trichoceros</i>	300	360	300
<i>Ceratium tripos</i>	420	480	540
Ceratocoryaceae			
Ceratocorys			
<i>Ceratocorys armata</i>	240	300	240
<i>Ceratocorys horrida</i>	240		300
Goniodomataceae			
Alexandrium			
<i>Alexandrium sp. 1</i>	1200	240	
Goniodoma			
<i>Goniodoma sp. 1</i>	180	300	240



Sakamon Petchong

SPECIES/STATION	LAWA- 1C1	LAWA- 1C2	LAWA- 1C3X
Charophyta			
Gonyaulacaceae			
Gonyaulax			
<i>Gonyaulax</i> sp.1	120	60	
Lingulodinium			
<i>Lingulodinium</i> sp. 1	300	360	180
Oxytoxaceae			
Oxytoxum			
<i>Oxytoxum</i> sp.1	60		
<i>Oxytoxum</i> sp.3	300	300	180
Pyrocystaceae			
Pyrocystis			
<i>Pyrocystis lunula</i>			180
Pyrophacaceae			
Pyrophacus			
<i>Pyrophacus steinii</i>			60
Gymnodiniales			
Gymnodiniaceae			
Gymnodinium			
<i>Gymnodinium</i> sp.2	240	300	360
<i>Gymnodinium</i> sp.6	240	300	120
Gyrodinium			
<i>Gyrodinium falcatum</i>	240	300	
Peridinales			
Podolampadaceae			
Podolampas			
<i>Podolampas bipes</i>	240	180	120
<i>Podolampas elegans</i>	120	60	60
<i>Podolampas palmipes</i>	480	420	180
<i>Podolampas spinifera</i>	180	180	120
Protopteridiniaceae			
Protopteridinium			
<i>Protopteridinium abei</i>	240	300	180
<i>Protopteridinium asymmetricum</i>	120	360	120
<i>Protopteridinium conicum</i>	120	180	60
<i>Protopteridinium depressum</i>	480	420	480
<i>Protopteridinium diabolum</i>	60	180	300
<i>Protopteridinium divergens</i>	360	480	360
<i>Protopteridinium elegans</i>	60	120	240
<i>Protopteridinium globulum</i>	120	180	120
<i>Protopteridinium latispinum</i>	180	240	240
<i>Protopteridinium oceanicum</i>	120	60	
<i>Protopteridinium pallidum</i>			
<i>Protopteridinium pentagonum</i>			
<i>Protopteridinium</i> sp.1			
<i>Protopteridinium</i> sp.17			120
<i>Protopteridinium</i> sp.22			120



Sakamon Petchong

SPECIES/STATION	LAWA- 1C1	LAWA- 1C2	LAWA- 1C3X
Charophyta			
Prorocentrales			
Prorocentraceae			
Prorocentrum			
<i>Prorocentrum compressum</i>			
<i>Prorocentrum micans</i>			
<i>Prorocentrum</i> sp.2			
TOTAL	211140	212700	201120



Sakamon Petchong

Phytoplankton diversity (individuals in the bottl

SPECIES/STATION	LAWA-1D1	LAWA-1D2	LAWA-1D3X
Charophyta			
Conjugophyceae			
Desmidiaceae			
Desmidiaceae			
Cosmarium			
<i>Cosmarium</i> sp.1			
Spondylosium			
<i>Spondylosium</i> sp.1	300		300
Staurostrum			
<i>Staurostrum</i> sp.1	120	180	180
<i>Staurostrum</i> sp.3		60	60
Chlorophyta			
Chlorophyceae			
Chlamydomonadales			
Micractiniaceae			
Golenkinia			
<i>Golenkinia radiata</i>		60	60
Tetrasporales			
Palmellopsidaceae			
Sphaerocystis			
<i>Sphaerocystis</i> sp.1			3180
Trebouxiophyceae			
Oocystales			
Oocystaceae			
Ankistrodesmus			
<i>Ankistrodesmus</i> sp.1			180
Chrysophyta			
Chrysophyceae			
Dictyochaetes			
Dictyochaceae			
Dictyocha			
<i>Dictyocha fibula</i>	300	360	420
<i>Dictyocha</i> sp.1			
<i>Dictyocha speculum</i> var. <i>octonaris</i>	120	180	120
Cyanobacteria			
Cyanophyceae			
Chroococcales			
Chroococcaceae			
Gloeocapsa			
<i>Gloeocapsa</i> sp.1		600	
Nostocales			
Oscillatoriaceae			
Oscillatoria			
<i>Oscillatoria erythraea</i>	77280	83340	82260
<i>Oscillatoria</i> sp.1	39300	35640	38700
<i>Oscillatoria</i> sp.2	900	1440	1500
<i>Oscillatoria thiebautii</i>		180	240
Rivulariaceae			
Calothrix			
<i>Calothrix crustacea</i>	1380	1920	1260
Euglenophycota			



Sakamito P. Hing

SPECIES/STATION	LAWA-1D1	LAWA-1D2	LAWA-1D3X
Charophyta			
Euglenophyceae			
Euglenales			
Euglenaceae			
Phacus			
<i>Phacus sp.1</i>		300	240
<i>Phacus sp.2</i>			
Ochrophyta			
Bacillariophyceae			
Asterolamprales			
Asterolampraceae			
Asterolampra			
<i>Asterolampra marylandica</i>	300	300	360
Asteromphalus			
<i>Asteromphalus cleveanus</i>	240	360	420
<i>Asteromphalus elegans</i>	120	180	240
<i>Asteromphalus flabellatus</i>	60	60	60
<i>Asteromphalus sp.1</i>	120	120	120
Bacillariales			
Bacillariaceae			
Bacillaria			
<i>Bacillaria paxillifer</i>	3780	3600	4740
Cylindrotheca			
<i>Cylindrotheca sp.1</i>			
Nitzschia			
<i>Nitzschia longissima</i>	240	120	120
<i>Nitzschia lorenziana</i>	180	180	180
<i>Nitzschia sp.10</i>	240	300	240
<i>Nitzschia sp.11</i>	240	240	240
<i>Nitzschia sp.3</i>	300	300	300
<i>Nitzschia sp.5</i>	240	240	300
Pseudo-nitzschia			
<i>Pseudo-nitzschia sp.1</i>		420	
Centrales			
Eupodiscaceae			
Odontella			
<i>Odontella aurita</i>			
<i>Odontella mobiliensis</i>			
<i>Odontella sinensis</i>	180	180	300



Sakamon Petchong

SPECIES/STATION	LAWA-1D1	LAWA-1D2	LAWA-1D3X
Charophyta			
Chaetocerotales			
Chaetocerotaceae			
Bacteriastrum			
<i>Bacteriastrum comosum</i>	1860	1800	1860
<i>Bacteriastrum furcatum</i>	2940	2880	2160
<i>Bacteriastrum hyalinum</i>	1620	2220	2040
<i>Bacteriastrum minus</i>			
Chaetoceros			
<i>Chaetoceros aequatorialis</i>	540	420	360
<i>Chaetoceros affinis</i>	1140	1080	1020
<i>Chaetoceros atlanticus</i>	1440	1380	1500
<i>Chaetoceros coarctatus</i>	3600	3900	3960
<i>Chaetoceros compressus</i>	2340	2220	1620
<i>Chaetoceros costatus</i>	1560	1980	1440
<i>Chaetoceros didymus</i>	2460	1620	2400
<i>Chaetoceros diversus</i>	3360	2160	3360
<i>Chaetoceros lorenzianus</i>	1380	1320	2220
<i>Chaetoceros messanensis</i>	1560	1380	1620
<i>Chaetoceros peruvianus</i>	120	180	180
<i>Chaetoceros pseudocurvisetus</i>	2820	2580	1860
<i>Chaetoceros sp.3</i>			
Corethrales			
Corethraceae			
Corethron			
<i>Corethron criophilum</i>	240	60	120
Coscinodisciales			
Coscinodiscaceae			
Coscinodiscus			
<i>Coscinodiscus gigas</i>	60	60	120
<i>Coscinodiscus sp.1</i>	300	240	360
<i>Coscinodiscus sp.10</i>	300	300	300
<i>Coscinodiscus sp.11</i>	240	240	240
<i>Coscinodiscus sp.2</i>	120	120	120
<i>Coscinodiscus sp.4</i>			
<i>Coscinodiscus sp.5</i>	300	420	480
<i>Coscinodiscus sp.6</i>	120	240	240
<i>Coscinodiscus sp.8</i>	60	180	180
<i>Coscinodiscus sp.9</i>		120	
Gossleriella			
<i>Gossleriella tropica</i>	600	720	600
Palmeria			
<i>Palmeria hardmaniana</i>	300	120	
Heliopeltaceae			
Actinoptychus			
<i>Actinoptychus sp.1</i>	180	240	300
Hemidiscaceae			
Pseudoguinaridia			
<i>Pseudoguinaridia recta</i>			



Sakamon Petchong

SPECIES/STATION	LAWA- 1D1	LAWA- 1D2	LAWA- 1D3X
Charophyta			
Eunotiales			
Eunotiaceae			
Eunotia			
<i>Eunotia</i> sp.1			
Fragilariales			
Fragilariaceae			
Asterionella			
<i>Asterionella formosa</i>	60	180	240
Fragilaria			
<i>Fragilaria</i> sp.1	240	480	720
Hemiaulales			
Hemiaulaceae			
Cerataulina			
<i>Cerataulina</i> sp.1			
Climacodium			
<i>Climacodium biconcavum</i>	1080	840	1380
<i>Climacodium frauenfeldianum</i>	5040	3180	5580
Hemiaulus			
<i>Hemiaulus hauckii</i>	540	420	420
<i>Hemiaulus indicus</i>			
<i>Hemiaulus membranaceus</i>	3180	1980	3840
<i>Hemiaulus sinensis</i>	600	720	660
Leptocylindrales			
Leptocylindraceae			
Leptocylindrus			
<i>Leptocylindrus danicus</i>			
Lithodesmiales			
Lithodesmaceae			
Ditylum			
<i>Ditylum brightwellii</i>			60
<i>Ditylum sol</i>	120	300	420
Lithodesmium			
<i>Lithodesmium</i> sp.1			



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SPECIES/STATION	LAWA-1D1	LAWA-1D2	LAWA-1D3X
Charophyta			
Naviculales			
Diploneidaceae			
Diploneis			
<i>Diploneis</i> sp.1	240	240	300
Naviculaceae			
Anomoeneis			
<i>Anomoeneis</i> sp.1		180	180
Haslea			
<i>Haslea</i> sp.1	300	480	360
<i>Haslea wawriake</i>	60	180	240
Meuniera			
<i>Meuniera</i> sp.1	300	240	360
Navicula			
<i>Navicula</i> sp.1	540	480	480
<i>Navicula</i> sp.3	360	480	540
<i>Navicula</i> sp.5		60	300
<i>Navicula</i> sp.6	240	300	240
<i>Navicula</i> sp.7	300	300	300
<i>Navicula</i> sp.8	240	300	240
Trachyneis			
<i>Trachyneis</i> sp.1	360	360	240
Pinnulariaceae			
Pinnularia			
<i>Pinnularia</i> sp.2	300	300	300
Pleurosigmataceae			
Gyrosigma			
<i>Gyrosigma balticum</i>		120	120
<i>Gyrosigma</i> sp.1	240	360	420
<i>Gyrosigma</i> sp.2	240	240	300
<i>Gyrosigma</i> sp.3	360	300	360
Pleurosigma			
<i>Pleurosigma</i> sp.1	240	300	300
<i>Pleurosigma</i> sp.2	300	240	300
<i>Pleurosigma</i> sp.3	240	420	360
<i>Pleurosigma</i> sp.5	120	240	240
<i>Pleurosigma</i> sp.6	360	300	300
Rhizosoleniales			
Rhizosoleniaceae			
Dactyliosolen			
<i>Dactyliosolen fragilissimus</i>			
<i>Dactyliosolen phuketensis</i>	360	840	900
Guinardia			
<i>Guinardia cylindrus</i>			
<i>Guinardia flaccida</i>			
<i>Guinardia striata</i>	480	780	600
Proboscia			
<i>Proboscia alata</i>	420	540	480
Pseudosolenia			
<i>Pseudosolenia calcar avis</i>	540	600	540



Sakorn Petchong

SPECIES/STATION	LAWA-1D1	LAWA-1D2	LAWA-1D3X
Charophyta			
Rhizosolenia			
<i>Rhizosolenia acuminata</i>	60		
<i>Rhizosolenia bergonii</i>	480	660	600
<i>Rhizosolenia clevei</i> var. <i>clevei</i>	360	420	300
<i>Rhizosolenia formosa</i>	120	240	240
<i>Rhizosolenia hyalina</i>	420	540	540
<i>Rhizosolenia imbricata</i>	120	120	120
<i>Rhizosolenia pungens</i>	660	600	480
<i>Rhizosolenia robusta</i>	180	180	240
<i>Rhizosolenia</i> sp. 1	180	240	240
<i>Rhizosolenia</i> sp. 3	120	120	120
<i>Rhizosolenia striata</i>	120	240	240
<i>Rhizosolenia styliformis</i>	120	240	240
Surirellales			
Entomoneidaceae			
Entomoneis			
<i>Entomoneis</i> sp. 1	180	300	300
<i>Entomoneis</i> sp. 2		60	
Surirellaceae			
Campylodiscus			
<i>Campylodiscus</i> sp. 1			180
Surirella			
<i>Surirella</i> sp. 1			120
Thalassionematales			
Thalassionemataceae			
Thalassionema			
<i>Thalassionema nitzschioides</i>	1560		1440
<i>Thalassionema</i> sp. 1	960	1920	960
Thalassiothrix			
<i>Thalassiothrix</i> sp. 1			600
<i>Thalassiothrix</i> sp. 2	600	1020	600
Thalassiophysales			
Catenulaceae			
Amphora			
<i>Amphora</i> sp. 1		60	240
<i>Amphora</i> sp. 3			120
Thalassiosirales			
Stephanodiscaceae			
Cyclotella			
<i>Cyclotella</i> sp. 1	480	600	780
Thalassiosiraceae			
Planktoniella			
<i>Planktoniella blanda</i>	660	840	660
<i>Planktoniella sol</i>	660	900	840
Thalassiosira			
<i>Thalassiosira</i> sp. 5	660	840	720
<i>Thalassiosira</i> sp. 6	540	480	660
<i>Thalassiosira subtilis</i>			



Sakorn Petchong

SPECIES/STATION	LAWA- 1D1	LAWA- 1D2	LAWA- 1D3X
Charophyta			
Pyrrophytophyta			
Dinophyceae			
Dinophysiales			
Amphisoleniaceae			
Amphisolenia			
<i>Amphisolenia bidentata</i>	480	360	480
Dinophysiaceae			
Dinophysis			
<i>Dinophysis caudata</i>	120	180	240
<i>Dinophysis hastata</i>	120	300	240
<i>Dinophysis schuettii</i>		180	240
Histioneis			
<i>Histioneis hyalina</i>		60	
<i>Histioneis sp. 1</i>		120	180
Ornithocercus			
<i>Ornithocercus sp. 1</i>			
<i>Ornithocercus thumii</i>		120	120
Phalacroma			
<i>Phalacroma argus</i>			
<i>Phalacroma doryphorum</i>			60
<i>Phalacroma mitra</i>			
Gonyaulacales			
Ceratiaceae			
Ceratium			
<i>Ceratium breve</i>			420
<i>Ceratium claviger</i>			240
<i>Ceratium contortum</i>	420	300	300
<i>Ceratium deflexum</i>	240	180	240
<i>Ceratium dens</i>	720	900	600
<i>Ceratium extensum</i>	120	240	120
<i>Ceratium falcatum</i>	120		
<i>Ceratium furca</i>	300	420	360
<i>Ceratium fusus</i>	240	240	240
<i>Ceratium horridum</i>	300	240	300
<i>Ceratium kofoidii</i>	480	480	600
<i>Ceratium massiliense</i>			
<i>Ceratium porrectum</i>	300	420	
<i>Ceratium schmidtii</i>			
<i>Ceratium teres</i>	60	180	
<i>Ceratium trichoceros</i>	420	420	360
<i>Ceratium tripos</i>	480	300	360
Ceratocoryaceae			
Ceratocorys			
<i>Ceratocorys armata</i>	120	120	60
<i>Ceratocorys horrida</i>			
Goniodomataceae			
Alexandrium			
<i>Alexandrium sp. 1</i>			1020
Goniodoma			
<i>Goniodoma sp. 1</i>	180	180	180



Sakamon Petchong

SPECIES/STATION	LAWA-1D1	LAWA-1D2	LAWA-1D3X
Charophyta			
Gonyaulacaceae			
Gonyaulax			
<i>Gonyaulax</i> sp.1			
Lingulodinium			
<i>Lingulodinium</i> sp. 1	240	240	180
Oxytoxaceae			
Oxytoxum			
<i>Oxytoxum</i> sp.1		120	120
<i>Oxytoxum</i> sp.3	300	240	420
Pyrocystaceae			
Pyrocystis			
<i>Pyrocystis lunula</i>	300	240	180
Pyrophacaceae			
Pyrophacus			
<i>Pyrophacus steinii</i>	60		60
Gymnodiniales			
Gymnodiniaceae			
Gymnodinium			
<i>Gymnodinium</i> sp.2	180		240
<i>Gymnodinium</i> sp.6	240	240	240
Gyrodinium			
<i>Gyrodinium falcatum</i>	240	240	300
Peridinales			
Podolampadaceae			
Podolampas			
<i>Podolampas bipes</i>	240	180	300
<i>Podolampas elegans</i>	180	60	
<i>Podolampas palmipes</i>	360	420	420
<i>Podolampas spinifera</i>	60	60	60
Protopteridiniaceae			
Protopteridinium			
<i>Protopteridinium abei</i>	120		120
<i>Protopteridinium asymmetricum</i>	120		240
<i>Protopteridinium conicum</i>		60	60
<i>Protopteridinium depressum</i>	420	420	600
<i>Protopteridinium diabolum</i>		240	
<i>Protopteridinium divergens</i>	480	540	300
<i>Protopteridinium elegans</i>	180	240	120
<i>Protopteridinium globulum</i>		60	60
<i>Protopteridinium latispinum</i>	240	300	300
<i>Protopteridinium oceanicum</i>		60	
<i>Protopteridinium pallidum</i>	60	180	
<i>Protopteridinium pentagonum</i>		60	
<i>Protopteridinium</i> sp.1	120		120
<i>Protopteridinium</i> sp.17			120
<i>Protopteridinium</i> sp.22			



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SPECIES/STATION	LAWA- 1D1	LAWA- 1D2	LAWA- 1D3X
Charophyta			
Prorocentrales			
Prorocentraceae			
Prorocentrum			
<i>Prorocentrum compressum</i>	120		
<i>Prorocentrum micans</i>	180		
<i>Prorocentrum</i> sp.2			
TOTAL	194400	199080	212700



Sakamon Phothong

Phytoplankton diversity (individuals in the bottl

SPECIES/STATION	LAWA-3C1	LAWA-3C2	LAWA-3C3
Charophyta			
Conjugophyceae			
Desmidiaceae			
Desmidiaceae			
Cosmarium			
<i>Cosmarium</i> sp.1			
Spondylosium			
<i>Spondylosium</i> sp.1	300	180	360
Staurostrum			
<i>Staurostrum</i> sp.1	240	300	
<i>Staurostrum</i> sp.3			
Chlorophyta			
Chlorophyceae			
Chlamydomonadales			
Micractiniaceae			
Golenkinia			
<i>Golenkinia radiata</i>	120	120	120
Tetrasporales			
Palmellopsidaceae			
Sphaerocystis			
<i>Sphaerocystis</i> sp.1			
Trebouxiophyceae			
Oocystales			
Oocystaceae			
Ankistrodesmus			
<i>Ankistrodesmus</i> sp.1			
Chrysophyta			
Chrysophyceae			
Dictyochales			
Dictyochaceae			
Dictyocha			
<i>Dictyocha fibula</i>	420	480	420
<i>Dictyocha</i> sp.1	60		
<i>Dictyocha speculum</i> var. <i>octonaris</i>			
Cyanobacteria			
Cyanophyceae			
Chroococcales			
Chroococcaceae			
Gloeocapsa			
<i>Gloeocapsa</i> sp.1	960		240
Nostocales			
Oscillatoriaceae			
Oscillatoria			
<i>Oscillatoria erythraea</i>	67800	75180	69660
<i>Oscillatoria</i> sp.1	34380	37740	30300
<i>Oscillatoria</i> sp.2	840	720	600
<i>Oscillatoria thiebautii</i>	60		
Rivulariaceae			
Calothrix			
<i>Calothrix crustacea</i>	1860	1740	1320
Euglenophycota			



Sakamon P. Thong

SPECIES/STATION	LAWA- 3C1	LAWA- 3C2	LAWA- 3C3
Charophyta			
Euglenophyceae			
Euglenales			
Euglenaceae			
Phacus			
<i>Phacus sp.1</i>			
<i>Phacus sp.2</i>	120		
Ochrophyta			
Bacillariophyceae			
Asterolamprales			
Asterolampraceae			
Asterolampra			
<i>Asterolampra marylandica</i>	240	240	300
Asteromphalus			
<i>Asteromphalus cleveanus</i>	480	300	420
<i>Asteromphalus elegans</i>	240	180	180
<i>Asteromphalus flabellatus</i>	180	180	240
<i>Asteromphalus sp.1</i>	180	120	120
Bacillariales			
Bacillariaceae			
Bacillaria			
<i>Bacillaria paxillifer</i>			
Cylindrotheca			
<i>Cylindrotheca sp.1</i>			600
Nitzschia			
<i>Nitzschia longissima</i>	240	240	180
<i>Nitzschia lorenziana</i>			
<i>Nitzschia sp.10</i>	180	180	240
<i>Nitzschia sp.11</i>			
<i>Nitzschia sp.3</i>	360	360	240
<i>Nitzschia sp.5</i>			
Pseudo-nitzschia			
<i>Pseudo-nitzschia sp.1</i>			
Centrales			
Eupodiscaceae			
Odontella			
<i>Odontella aurita</i>			
<i>Odontella mobiliensis</i>	60	180	60
<i>Odontella sinensis</i>	360	300	420



Sakamon Petchong

SPECIES/STATION	LAWA- 3C1	LAWA- 3C2	LAWA- 3C3
Charophyta			
Chaetocerotales			
Chaetocerotaceae			
Bacteriastrum			
<i>Bacteriastrum comosum</i>	1980	1740	1440
<i>Bacteriastrum furcatum</i>	1860	1980	1560
<i>Bacteriastrum hyalinum</i>	1620	1920	1620
<i>Bacteriastrum minus</i>			
Chaetoceros			
<i>Chaetoceros aequatorialis</i>	300	420	360
<i>Chaetoceros affinis</i>			
<i>Chaetoceros atlanticus</i>	1020	1200	1200
<i>Chaetoceros coarctatus</i>	3180	3660	4200
<i>Chaetoceros compressus</i>	1980	2040	1680
<i>Chaetoceros costatus</i>	2100	1980	1740
<i>Chaetoceros didymus</i>	2160	2280	2220
<i>Chaetoceros diversus</i>	1020	2340	3420
<i>Chaetoceros lorenzianus</i>	1440	1560	1080
<i>Chaetoceros messanensis</i>	1620		
<i>Chaetoceros peruvianus</i>			
<i>Chaetoceros pseudocurvisetus</i>			
<i>Chaetoceros sp.3</i>	600		
Corethrales			
Corethraceae			
Corethron			
<i>Corethron criophilum</i>	180	120	
Coscinodisciales			
Coscinodiscaceae			
Coscinodiscus			
<i>Coscinodiscus gigas</i>			
<i>Coscinodiscus sp.1</i>	180	480	480
<i>Coscinodiscus sp.10</i>			
<i>Coscinodiscus sp.11</i>	360	600	300
<i>Coscinodiscus sp.2</i>	240	300	300
<i>Coscinodiscus sp.4</i>			
<i>Coscinodiscus sp.5</i>			
<i>Coscinodiscus sp.6</i>	420	660	420
<i>Coscinodiscus sp.8</i>	360	480	240
<i>Coscinodiscus sp.9</i>			
Gossleriella			
<i>Gossleriella tropica</i>	480	660	660
Palmeria			
<i>Palmeria hardmaniana</i>			
Heliopeltaceae			
Actinoptychus			
<i>Actinoptychus sp.1</i>	420	300	300
Hemidiscaceae			
Pseudoguinaridia			
<i>Pseudoguinaridia recta</i>		120	



Sakamon Petchong

SPECIES/STATION	LAWA- 3C1	LAWA- 3C2	LAWA- 3C3
Charophyta			
Eunotiales			
Eunotiaceae			
Eunotia			
<i>Eunotia</i> sp.1			
Fragilariales			
Fragilariaceae			
Asterionella			
<i>Asterionella formosa</i>			
Fragilaria			
<i>Fragilaria</i> sp.1	840	720	960
Hemiaulales			
Hemiaulaceae			
Cerataulina			
<i>Cerataulina</i> sp.1			
Climacodium			
<i>Climacodium biconcavum</i>	1560	1800	960
<i>Climacodium frauenfeldianum</i>	3360	4680	3660
Hemiaulus			
<i>Hemiaulus hauckii</i>	540	780	540
<i>Hemiaulus indicus</i>			
<i>Hemiaulus membranaceus</i>	1860	1380	1500
<i>Hemiaulus sinensis</i>			
Leptocylindrales			
Leptocylindraceae			
Leptocylindrus			
<i>Leptocylindrus danicus</i>	600		
Lithodesmiales			
Lithodesmaceae			
Ditylum			
<i>Ditylum brightwellii</i>			
<i>Ditylum sol</i>	300	300	300
Lithodesmium			
<i>Lithodesmium</i> sp.1			



Sakamon Petchong

SPECIES/STATION	LAWA-3C1	LAWA-3C2	LAWA-3C3
Charophyta			
Naviculales			
Diploneidaceae			
Diploneis			
<i>Diploneis</i> sp.1	420	300	240
Naviculaceae			
Anomoeneis			
<i>Anomoeneis</i> sp.1	300		
Haslea			
<i>Haslea</i> sp.1	480	660	600
<i>Haslea wawriake</i>			
Meuniera			
<i>Meuniera</i> sp.1	420	660	420
Navicula			
<i>Navicula</i> sp.1	300	360	300
<i>Navicula</i> sp.3	300	420	420
<i>Navicula</i> sp.5			
<i>Navicula</i> sp.6			
<i>Navicula</i> sp.7			
<i>Navicula</i> sp.8	300	420	300
Trachyneis			
<i>Trachyneis</i> sp.1	420	300	420
Pinnulariaceae			
Pinnularia			
<i>Pinnularia</i> sp.2	240	180	
Pleurosigmataceae			
Gyrosigma			
<i>Gyrosigma balticum</i>			
<i>Gyrosigma</i> sp.1	300	480	660
<i>Gyrosigma</i> sp.2	240	420	480
<i>Gyrosigma</i> sp.3			
Pleurosigma			
<i>Pleurosigma</i> sp.1	480	420	420
<i>Pleurosigma</i> sp.2	240	300	420
<i>Pleurosigma</i> sp.3	420	240	300
<i>Pleurosigma</i> sp.5			
<i>Pleurosigma</i> sp.6	480	300	300
Rhizosoleniales			
Rhizosoleniaceae			
Dactyliosolen			
<i>Dactyliosolen fragilissimus</i>	720		
<i>Dactyliosolen phuketensis</i>			
Guinardia			
<i>Guinardia cylindrus</i>			
<i>Guinardia flaccida</i>		420	
<i>Guinardia striata</i>	1080	960	960
Proboscia			
<i>Proboscia alata</i>	660	660	480
Pseudosolenia			
<i>Pseudosolenia calcar avis</i>	420	540	480



Sakamon Petchong

SPECIES/STATION	LAWA-3C1	LAWA-3C2	LAWA-3C3
Charophyta			
Rhizosolenia			
<i>Rhizosolenia acuminata</i>			
<i>Rhizosolenia bergonii</i>			
<i>Rhizosolenia clevei</i> var. <i>clevei</i>			
<i>Rhizosolenia formosa</i>	60	180	180
<i>Rhizosolenia hyalina</i>	480	420	420
<i>Rhizosolenia imbricata</i>			
<i>Rhizosolenia pungens</i>	480	540	660
<i>Rhizosolenia robusta</i>			
<i>Rhizosolenia</i> sp. 1	240	180	240
<i>Rhizosolenia</i> sp.3			
<i>Rhizosolenia striata</i>	180	240	240
<i>Rhizosolenia styliformis</i>	360	300	240
Surirellales			
Entomoneidaceae			
Entomoneis			
<i>Entomoneis</i> sp.1	120		300
<i>Entomoneis</i> sp.2			
Surirellaceae			
Campylodiscus			
<i>Campylodiscus</i> sp.1	120		
Surirella			
<i>Surirella</i> sp.1	60	120	
Thalassionematales			
Thalassionemataceae			
Thalassionema			
<i>Thalassionema nitzschioides</i>	1680	1620	1620
<i>Thalassionema</i> sp.1	1560	1620	660
Thalassiothrix			
<i>Thalassiothrix</i> sp.1		840	1080
<i>Thalassiothrix</i> sp.2	600	1080	840
Thalassiophysales			
Catenulaceae			
Amphora			
<i>Amphora</i> sp.1			
<i>Amphora</i> sp.3			
Thalassiosirales			
Stephanodiscaceae			
Cyclotella			
<i>Cyclotella</i> sp.1	420	660	600
Thalassiosiraceae			
Planktoniella			
<i>Planktoniella blanda</i>	720	720	780
<i>Planktoniella sol</i>	660	840	660
Thalassiosira			
<i>Thalassiosira</i> sp.5	720	780	720
<i>Thalassiosira</i> sp.6	960	780	720
<i>Thalassiosira subtilis</i>			



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SPECIES/STATION	LAWA- 3C1	LAWA- 3C2	LAWA- 3C3
Charophyta			
Pyrrophytophyta			
Dinophyceae			
Dinophysiales			
Amphisoleniaceae			
Amphisolenia			
<i>Amphisolenia bidentata</i>	600	420	480
Dinophysiaceae			
Dinophysis			
<i>Dinophysis caudata</i>			
<i>Dinophysis hastata</i>	240	120	120
<i>Dinophysis schuettii</i>			
Histioneis			
<i>Histioneis hyalina</i>			
<i>Histioneis sp.1</i>			
Ornithocercus			
<i>Ornithocercus sp.1</i>			
<i>Ornithocercus thumii</i>			
Phalacroma			
<i>Phalacroma argus</i>			
<i>Phalacroma doryphorum</i>	300	120	60
<i>Phalacroma mitra</i>			
Gonyaulacales			
Ceratiaceae			
Ceratium			
<i>Ceratium breve</i>			
<i>Ceratium claviger</i>	120	180	240
<i>Ceratium contortum</i>	360	180	
<i>Ceratium deflexum</i>	240	180	240
<i>Ceratium dens</i>	300	780	
<i>Ceratium extensum</i>			
<i>Ceratium falcatum</i>			
<i>Ceratium furca</i>	240	300	300
<i>Ceratium fusus</i>	240	420	240
<i>Ceratium horridum</i>	300	300	240
<i>Ceratium kofoidii</i>	600	660	600
<i>Ceratium massiliense</i>		180	300
<i>Ceratium porrectum</i>	420	480	420
<i>Ceratium schmidtii</i>			
<i>Ceratium teres</i>			
<i>Ceratium trichoceros</i>	420	480	300
<i>Ceratium tripos</i>	420	600	420
Ceratocoryaceae			
Ceratocorys			
<i>Ceratocorys armata</i>	240	300	240
<i>Ceratocorys horrida</i>			
Goniodomataceae			
Alexandrium			
<i>Alexandrium sp.1</i>	600		
Goniodoma			
<i>Goniodoma sp.1</i>	60	240	120



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SPECIES/STATION	LAWA- 3C1	LAWA- 3C2	LAWA- 3C3
Charophyta			
Gonyaulacaceae			
Gonyaulax			
<i>Gonyaulax</i> sp.1			
Lingulodinium			
<i>Lingulodinium</i> sp. 1	420	300	300
Oxytoxaceae			
Oxytoxum			
<i>Oxytoxum</i> sp.1	120	60	
<i>Oxytoxum</i> sp.3	360	300	240
Pyrocystaceae			
Pyrocystis			
<i>Pyrocystis</i> lunula	240	180	240
Pyrophacaceae			
Pyrophacus			
<i>Pyrophacus</i> steinii	60	120	120
Gymnodiniales			
Gymnodiniaceae			
Gymnodinium			
<i>Gymnodinium</i> sp.2	240	240	300
<i>Gymnodinium</i> sp.6	120	180	180
Gyrodinium			
<i>Gyrodinium</i> falcatum	300	180	240
Peridinales			
Podolampadaceae			
Podolampas			
<i>Podolampas</i> bipes	240	300	300
<i>Podolampas</i> elegans			
<i>Podolampas</i> palmipes	420	420	420
<i>Podolampas</i> spinifera	360		180
Protopteridiniaceae			
Protopteridinium			
<i>Protopteridinium</i> abei			
<i>Protopteridinium</i> asymmetricum	120	120	240
<i>Protopteridinium</i> conicum			
<i>Protopteridinium</i> depressum	480	60	540
<i>Protopteridinium</i> diabolum			
<i>Protopteridinium</i> divergens	420	420	600
<i>Protopteridinium</i> elegans			
<i>Protopteridinium</i> globulum	120	180	240
<i>Protopteridinium</i> latispinum	240	180	240
<i>Protopteridinium</i> oceanicum			
<i>Protopteridinium</i> pallidum			
<i>Protopteridinium</i> pentagonum			
<i>Protopteridinium</i> sp.1			
<i>Protopteridinium</i> sp.17	180	240	240
<i>Protopteridinium</i> sp.22			



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SPECIES/STATION	LAWA- 3C1	LAWA- 3C2	LAWA- 3C3
Charophyta			
Prorocentrales			
Prorocentraceae			
Prorocentrum			
<i>Prorocentrum compressum</i>			
<i>Prorocentrum micans</i>			
<i>Prorocentrum</i> sp.2	180	60	60
TOTAL	170220	181680	163320



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Phytoplankton diversity (individuals in the bottl

SPECIES/STATION	LAWA-3D1X	LAWA-3D2	LAWA-3D3	G4/43REF
Charophyta				
Conjugophyceae				
Desmidiaceae				
Desmidiaceae				
Cosmarium				
<i>Cosmarium</i> sp.1				
Spondylosium				
<i>Spondylosium</i> sp.1	420	240	180	120
Staurostrum				
<i>Staurostrum</i> sp.1	60		120	120
<i>Staurostrum</i> sp.3	60			120
Chlorophyta				
Chlorophyceae				
Chlamydomonadales				
Micractiniaceae				
Golenkinia				
<i>Golenkinia radiata</i>	300	120	60	60
Tetrasporales				
Palmellopsidaceae				
Sphaerocystis				
<i>Sphaerocystis</i> sp.1	3960	4740	2760	2400
Trebouxiophyceae				
Oocystales				
Oocystaceae				
Ankistrodesmus				
<i>Ankistrodesmus</i> sp.1				60
Chrysophyta				
Chrysophyceae				
Dictyochaetes				
Dictyochaceae				
Dictyocha				
<i>Dictyocha fibula</i>	360	360	300	300
<i>Dictyocha</i> sp.1				
<i>Dictyocha speculum</i> var. <i>octonaris</i>	240	240	180	180
Cyanobacteria				
Cyanophyceae				
Chroococcales				
Chroococcaceae				
Gloeocapsa				
<i>Gloeocapsa</i> sp.1	960	240	600	240
Nostocales				
Oscillatoriaceae				
Oscillatoria				
<i>Oscillatoria erythraea</i>	95100	74160	72960	48480
<i>Oscillatoria</i> sp.1	30720	29760	28380	18180
<i>Oscillatoria</i> sp.2	540	600	600	300
<i>Oscillatoria thiebautii</i>	60	240		
Rivulariaceae				
Calothrix				
<i>Calothrix crustacea</i>	1380	1920	2040	1500
Euglenophycota				



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SPECIES/STATION	LAWA-3D1X	LAWA-3D2	LAWA-3D3	G4/43REF
Charophyta				
Euglenophyceae				
Euglenales				
Euglenaceae				
Phacus				
<i>Phacus</i> sp.1	120			120
<i>Phacus</i> sp.2				
Ochrophyta				
Bacillariophyceae				
Asterolamprales				
Asterolampraceae				
Asterolampra				
<i>Asterolampra marylandica</i>	300	300	480	240
Asteromphalus				
<i>Asteromphalus cleveanus</i>	480	360	420	420
<i>Asteromphalus elegans</i>	180	300	180	120
<i>Asteromphalus flabellatus</i>		120	120	60
<i>Asteromphalus</i> sp.1	120	60	120	
Bacillariales				
Bacillariaceae				
Bacillaria				
<i>Bacillaria paxillifer</i>	4260	4260		4800
Cylindrotheca				
<i>Cylindrotheca</i> sp.1	960			180
Nitzschia				
<i>Nitzschia longissima</i>	240	240	240	240
<i>Nitzschia lorenziana</i>	240	240	240	180
<i>Nitzschia</i> sp.10	360	300	300	300
<i>Nitzschia</i> sp.11				180
<i>Nitzschia</i> sp.3	120	300	240	240
<i>Nitzschia</i> sp.5				240
Pseudo-nitzschia				
<i>Pseudo-nitzschia</i> sp.1				
Centrales				
Eupodiscaceae				
Odontella				
<i>Odontella aurita</i>				180
<i>Odontella mobiliensis</i>	120	180		120
<i>Odontella sinensis</i>				300



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SPECIES/STATION	LAWA-3D1X	LAWA-3D2	LAWA-3D3	G4/43REF
Charophyta				
Chaetocerotales				
Chaetocerotaceae				
Bacteriastrum				
<i>Bacteriastrum comosum</i>	2040	1620	1500	1200
<i>Bacteriastrum furcatum</i>	3180	2040	1620	1620
<i>Bacteriastrum hyalinum</i>	2280	1740	1680	1320
<i>Bacteriastrum minus</i>				
Chaetoceros				
<i>Chaetoceros aequatorialis</i>	420	420	300	300
<i>Chaetoceros affinis</i>	2340	1140	1200	1620
<i>Chaetoceros atlanticus</i>	960	900	1500	1080
<i>Chaetoceros coarctatus</i>	3600	5040	4980	5100
<i>Chaetoceros compressus</i>	2160	3420	3180	2220
<i>Chaetoceros costatus</i>	1680	1500		960
<i>Chaetoceros didymus</i>	2580	2880	1620	2040
<i>Chaetoceros diversus</i>	4200	3840	3180	5160
<i>Chaetoceros lorenzianus</i>	2940	1740	1980	2580
<i>Chaetoceros messanensis</i>	3060	780	1980	2760
<i>Chaetoceros peruvianus</i>	180		240	120
<i>Chaetoceros pseudocurvisetus</i>	1500	1200		1680
<i>Chaetoceros sp.3</i>				
Corethrales				
Corethraceae				
Corethron				
<i>Corethron criophilum</i>	420	240	240	240
Coscinodiscales				
Coscinodiscaceae				
Coscinodiscus				
<i>Coscinodiscus gigas</i>	120			60
<i>Coscinodiscus sp.1</i>	300	360	360	300
<i>Coscinodiscus sp.10</i>	120	300	240	180
<i>Coscinodiscus sp.11</i>	180	300	240	240
<i>Coscinodiscus sp.2</i>	480	300	480	120
<i>Coscinodiscus sp.4</i>				
<i>Coscinodiscus sp.5</i>	600	420	480	480
<i>Coscinodiscus sp.6</i>	300	300	300	360
<i>Coscinodiscus sp.8</i>	240	180	240	300
<i>Coscinodiscus sp.9</i>				
Gossleriella				
<i>Gossleriella tropica</i>	420	780	780	780
Palmeria				
<i>Palmeria hardmaniana</i>				60
Heliopeltaceae				
Actinoptychus				
<i>Actinoptychus sp.1</i>	240	240	120	120
Hemidiscaceae				
Pseudoguinaridia				
<i>Pseudoguinaridia recta</i>	420	420		180



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SPECIES/STATION	LAWA- 3D1X	LAWA- 3D2	LAWA- 3D3	G4/43REF
Charophyta				
Eunotiales				
Eunotiaceae				
Eunotia				
<i>Eunotia</i> sp.1				300
Fragilariales				
Fragilariaceae				
Asterionella				
<i>Asterionella formosa</i>			120	
Fragilaria				
<i>Fragilaria</i> sp.1	720	480	240	360
Hemiaulales				
Hemiaulaceae				
Cerataulina				
<i>Cerataulina</i> sp.1				
Climacodium				
<i>Climacodium biconcavum</i>	960	1080	1200	1020
<i>Climacodium frauenfeldianum</i>	5040	6360	4800	4380
Hemiaulus				
<i>Hemiaulus hauckii</i>				420
<i>Hemiaulus indicus</i>				840
<i>Hemiaulus membranaceus</i>	2280	2460	3480	3840
<i>Hemiaulus sinensis</i>	660	780	1200	540
Leptocylindrales				
Leptocylindraceae				
Leptocylindrus				
<i>Leptocylindrus danicus</i>				
Lithodesmiales				
Lithodesmaceae				
Ditylum				
<i>Ditylum brightwellii</i>				
<i>Ditylum sol</i>	240	180	300	360
Lithodesmium				
<i>Lithodesmium</i> sp.1				



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SPECIES/STATION	LAWA-3D1X	LAWA-3D2	LAWA-3D3	G4/43REF
Charophyta				
Naviculales				
Diploneidaceae				
Diploneis				
<i>Diploneis</i> sp.1	600	300	420	240
Naviculaceae				
Anomoeneis				
<i>Anomoeneis</i> sp.1				
Haslea				
<i>Haslea</i> sp.1	780	960	300	480
<i>Haslea wawriake</i>	180	240	60	120
Meuniera				
<i>Meuniera</i> sp.1				420
Navicula				
<i>Navicula</i> sp.1	840	480	420	420
<i>Navicula</i> sp.3	300	420	360	360
<i>Navicula</i> sp.5				60
<i>Navicula</i> sp.6				180
<i>Navicula</i> sp.7	240	300	240	300
<i>Navicula</i> sp.8	180	180	180	240
Trachyneis				
<i>Trachyneis</i> sp.1	480	360	300	420
Pinnulariaceae				
Pinnularia				
<i>Pinnularia</i> sp.2				240
Pleurosigmataceae				
Gyrosigma				
<i>Gyrosigma balticum</i>				60
<i>Gyrosigma</i> sp.1	420	660	480	240
<i>Gyrosigma</i> sp.2	240	480	300	300
<i>Gyrosigma</i> sp.3	360	660	420	300
Pleurosigma				
<i>Pleurosigma</i> sp.1	480	660	300	240
<i>Pleurosigma</i> sp.2	480	540	300	240
<i>Pleurosigma</i> sp.3	300	420	240	300
<i>Pleurosigma</i> sp.5	240	180	120	240
<i>Pleurosigma</i> sp.6	300	480	420	300
Rhizosoleniales				
Rhizosoleniaceae				
Dactyliosolen				
<i>Dactyliosolen fragilissimus</i>	480			
<i>Dactyliosolen phuketensis</i>				360
Guinardia				
<i>Guinardia cylindrus</i>				240
<i>Guinardia flaccida</i>	720	300		240
<i>Guinardia striata</i>	780	960	840	420
Proboscia				
<i>Proboscia alata</i>	600	600	420	420
Pseudosolenia				
<i>Pseudosolenia calcar avis</i>	540	540	420	660



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SPECIES/STATION	LAWA-3D1X	LAWA-3D2	LAWA-3D3	G4/43REF
Charophyta				
Rhizosolenia				
<i>Rhizosolenia acuminata</i>				
<i>Rhizosolenia bergonii</i>	540	540	480	660
<i>Rhizosolenia clevei</i> var. <i>clevei</i>				360
<i>Rhizosolenia formosa</i>	120	60	240	60
<i>Rhizosolenia hyalina</i>	480	540	360	540
<i>Rhizosolenia imbricata</i>				120
<i>Rhizosolenia pungens</i>	660	600	480	660
<i>Rhizosolenia robusta</i>	120	180	120	240
<i>Rhizosolenia</i> sp. 1	240	240	120	240
<i>Rhizosolenia</i> sp. 3				120
<i>Rhizosolenia striata</i>	300	300	240	60
<i>Rhizosolenia styliformis</i>	300	300	180	120
Surirellales				
Entomoneidaceae				
Entomoneis				
<i>Entomoneis</i> sp. 1	480	240	240	180
<i>Entomoneis</i> sp. 2				180
Surirellaceae				
Campylodiscus				
<i>Campylodiscus</i> sp. 1				
Surirella				
<i>Surirella</i> sp. 1	120			
Thalassionematales				
Thalassionemataceae				
Thalassionema				
<i>Thalassionema nitzschioides</i>	1680	1740	1380	900
<i>Thalassionema</i> sp. 1	1560	1320	1020	1020
Thalassiothrix				
<i>Thalassiothrix</i> sp. 1	900	960		
<i>Thalassiothrix</i> sp. 2	2040	900	600	840
Thalassiophysales				
Catenulaceae				
Amphora				
<i>Amphora</i> sp. 1				
<i>Amphora</i> sp. 3				
Thalassiosirales				
Stephanodiscaceae				
Cyclotella				
<i>Cyclotella</i> sp. 1	840	780	780	480
Thalassiosiraceae				
Planktoniella				
<i>Planktoniella blanda</i>	660	840	600	1080
<i>Planktoniella sol</i>	840	900	840	960
Thalassiosira				
<i>Thalassiosira</i> sp. 5	1200	960	600	480
<i>Thalassiosira</i> sp. 6	1020	600	300	840
<i>Thalassiosira subtilis</i>				



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SPECIES/STATION	LAWA- 3D1X	LAWA- 3D2	LAWA- 3D3	G4/43REF
Charophyta				
Pyrrophytophyta				
Dinophyceae				
Dinophysiales				
Amphisoleniaceae				
Amphisolenia				
<i>Amphisolenia bidentata</i>	480	480	300	180
Dinophysiaceae				
Dinophysis				
<i>Dinophysis caudata</i>				
<i>Dinophysis hastata</i>	60	240	120	120
<i>Dinophysis schuettii</i>	120		120	120
Histioneis				
<i>Histioneis hyalina</i>				
<i>Histioneis sp.1</i>	120	120	60	
Ornithocercus				
<i>Ornithocercus sp.1</i>	120		120	
<i>Ornithocercus thumii</i>				
Phalacroma				
<i>Phalacroma argus</i>				
<i>Phalacroma doryphorum</i>				
<i>Phalacroma mitra</i>				
Gonyaulacales				
Ceratiaceae				
Ceratium				
<i>Ceratium breve</i>				
<i>Ceratium claviger</i>	240	300	60	240
<i>Ceratium contortum</i>	300	420	180	120
<i>Ceratium deflexum</i>	180	180	180	120
<i>Ceratium dens</i>				240
<i>Ceratium extensum</i>				120
<i>Ceratium falcatum</i>				
<i>Ceratium furca</i>	360	240	300	240
<i>Ceratium fusus</i>	180	240	180	240
<i>Ceratium horridum</i>	300	180	240	
<i>Ceratium kofoidii</i>	600	480	540	240
<i>Ceratium massiliense</i>	120	120	240	
<i>Ceratium porrectum</i>	300	300	240	180
<i>Ceratium schmidtii</i>				
<i>Ceratium teres</i>	120	120		60
<i>Ceratium trichoceros</i>	300	360	420	240
<i>Ceratium tripos</i>	360	660	420	240
Ceratocoryaceae				
Ceratocorys				
<i>Ceratocorys armata</i>	180	120	60	60
<i>Ceratocorys horrida</i>	60			
Goniodomataceae				
Alexandrium				
<i>Alexandrium sp.1</i>	840			
Goniodoma				
<i>Goniodoma sp.1</i>	240	180	240	180



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SPECIES/STATION	LAWA-3D1X	LAWA-3D2	LAWA-3D3	G4/43REF
Charophyta				
Gonyaulacaceae				
Gonyaulax				
<i>Gonyaulax</i> sp.1				
Lingulodinium				
<i>Lingulodinium</i> sp. 1	300	240	300	180
Oxytoxaceae				
Oxytoxum				
<i>Oxytoxum</i> sp.1			180	
<i>Oxytoxum</i> sp.3	120	240	300	180
Pyrocystaceae				
Pyrocystis				
<i>Pyrocystis lunula</i>	240	180	120	240
Pyrophacaceae				
Pyrophacus				
<i>Pyrophacus steinii</i>				60
Gymnodiniales				
Gymnodiniaceae				
Gymnodinium				
<i>Gymnodinium</i> sp.2	300	300	300	180
<i>Gymnodinium</i> sp.6	240	420	240	120
Gyrodinium				
<i>Gyrodinium falcatum</i>	180	180	120	180
Peridinales				
Podolampadaceae				
Podolampas				
<i>Podolampas bipes</i>	60	300	360	120
<i>Podolampas elegans</i>				
<i>Podolampas palmipes</i>	420	300	480	180
<i>Podolampas spinifera</i>				
Protopteridiniaceae				
Protopteridinium				
<i>Protopteridinium abei</i>				60
<i>Protopteridinium asymmetricum</i>	60	360	240	180
<i>Protopteridinium conicum</i>				
<i>Protopteridinium depressum</i>	420	480	420	360
<i>Protopteridinium diabolum</i>				
<i>Protopteridinium divergens</i>	300	360	420	300
<i>Protopteridinium elegans</i>				120
<i>Protopteridinium globulum</i>				60
<i>Protopteridinium latispinum</i>	240	360	240	120
<i>Protopteridinium oceanicum</i>				
<i>Protopteridinium pallidum</i>				120
<i>Protopteridinium pentagonum</i>				
<i>Protopteridinium</i> sp.1	60	120	120	60
<i>Protopteridinium</i> sp.17	120	300	120	180
<i>Protopteridinium</i> sp.22				



Sakamon Petchong

SPECIES/STATION	LAWA- 3D1X	LAWA- 3D2	LAWA- 3D3	G4/43REF
Charophyta				
Prorocentrales				
Prorocentraceae				
Prorocentrum				
<i>Prorocentrum compressum</i>				
<i>Prorocentrum micans</i>	120		60	
<i>Prorocentrum sp.2</i>				
TOTAL	220920	193320	173460	149340



Sakamon Phothong

APPENDIX C
ANALYTICAL LABORATORY REPORTS:
BENTHIC COMMUNITY

Appendix E1
Benthic Community

Benthos density (individuals per 0.04 square meter)

TAXA	LAWA-1C1	LAWA-1C2	LAWA-1C3X	LAWA-1D1	LAWA-1D2	LAWA-1D3X
Nemertea						
Anopla						
Palaeonemertea						
Tubulanidae						
<i>Callinera</i> sp.1						
Sipuncula						
Phascolosomatidea						
Phascolosomatiformes						
Phascolosomatidae						
<i>Apionsoma</i> sp.2	1					2
Annelida						
Polychaeta						
Aciculata						
Amphinomidae						
<i>Linopherus</i> sp.1						
Glyceridae						
<i>Glycera lapidum</i>						
<i>Glycera</i> sp.						
Goniadidae						
<i>Glycinde cf. oligodon</i>						
Hartmaniellidae						
<i>Hartmaniella</i> sp.1	1					
Lumbrineridae						
<i>Lumbrinerides</i> sp.1						
Nephtyidae						
<i>Aglaophamus cf. dicirroides</i>						1
<i>Aglaophamus orientalis</i>	1					2
<i>Aglaophamus tepens</i>		1				
Nereididae						
<i>Tambalagama fauveli</i>						
Onuphidae						
<i>Onuphis</i> sp.1	1			1		1
Paralacydoniidae						
<i>Paralacydonia</i> sp.1	1			1		
Pilargidae						
<i>Litocorsa nr. antennata</i>						1
<i>Sigambra</i> sp.1						
<i>Synelmis albin</i>					1	
<i>Synelmis rigida</i>	2			2		
Polynoidae						
<i>Harmothoe</i> sp.						1
Sigalionidae						
<i>Sthenolepis japonica</i>				1		1
Syllidae						
<i>Exogone (Exogone)</i> sp.1			1			
<i>Syllis</i> sp.1						
Canalipalpata						
Ampharetidae						
<i>Anobothrus</i> sp.1						
<i>Eusamythella</i> sp.1						
<i>Lysippe labiata</i>						
<i>Samytha</i> sp.						
<i>Sosane</i> sp.2						
Chaetopteridae						
<i>Spiochaetopterus</i> sp.1						



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 square meter)

TAXA	LAWA- 1C1	LAWA- 1C2	LAWA- 1C3X	LAWA- 1D1	LAWA- 1D2	LAWA- 1D3X
Cirratulidae						
<i>Aphelocheata</i> sp.1						
<i>Kirkegaardia</i> sp.1			1			
<i>Kirkegaardia</i> sp.3						
<i>Kirkegaardia</i> sp.5						
Fabriciidae						
<i>Pseudofabriciola</i> sp.1						
Flabelligeridae						
<i>Diplocirrus</i> sp.1	1					
Magelonidae						
<i>Magelona</i> sp.13						
Oweniidae						
<i>Galathowenia</i> sp.1						1
<i>Galathowenia</i> sp.2						
Poecilochaetidae						
<i>Poecilochaetus</i> sp.3						
Sabellidae						
<i>Laonome</i> sp.1		1				
Spionidae						
<i>Laonice</i> sp.3						
<i>Prionospio ehlersi</i>	1					2
<i>Prionospio elegantula</i>						
<i>Prionospio</i> sp.				1		
<i>Spiophanes malayensis</i>	1				1	1
<i>Spiophanes</i> sp.3		1	1			
<i>Spiophanes</i> sp.4						
Sternaspidae						
<i>Sternaspis cf. spinosa</i>		1				
Terebellidae						
<i>Pista</i> sp.4				1		
Trichobranchidae						
<i>Terebellides</i> sp.1						
<i>Terebellides</i> sp.2						1
Capitellidae						
<i>Capitellethus</i> sp.1						
<i>Mediomastus</i> sp.1						
<i>Mediomastus</i> sp.2						
<i>Neomediomastus</i> sp.1					1	
<i>Promastobranchnus huloti</i>						
Cossuridae						
<i>Cossura</i> sp.						
<i>Cossura</i> sp.2		1				
Maldanidae						
<i>Clymenella</i> sp.1		1				
<i>Euclymene</i> sp.1						
<i>Praxillella nr. gracilis</i>				1		
Orbiniidae						
<i>Leodamas</i> sp.1						



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 square meter)

TAXA	LAWA-1C1	LAWA-1C2	LAWA-1C3X	LAWA-1D1	LAWA-1D2	LAWA-1D3X
Paraonidae						
<i>Aricidea (Strelzovia)</i> sp.1						
<i>Cirrophorus</i> sp.7						
<i>Levinsenia</i> sp.						
<i>Levinsenia</i> sp.1						
<i>Levinsenia</i> sp.2						
<i>Levinsenia</i> sp.5				1		
<i>Levinsenia</i> sp.9						
Arthropoda						
Crustacea						
Amphipoda						
Ampeliscidae						
<i>Ampelisca bocki</i>						
<i>Ampelisca chinensis</i>						
<i>Ampelisca cyclops</i>		1			1	1
<i>Ampelisca maia</i>						1
<i>Byblis febris</i>					1	1
<i>Byblis</i> sp.					1	
Aoridae						
<i>Grandidierella gilesi</i>						
Caprellidae						
<i>Caprella</i> sp.1		1				
Oedicerotidae						
<i>Eochelidium nonmiraculum</i>						
Cumacea						
Bodotriidae						
<i>Eocuma cf. latum</i>						
Leuconidae						
<i>Eudorella</i> sp.1						
Nannastacidae						
<i>Campylaspis</i> sp.2						
<i>Campylaspis</i> sp.5						
Decapoda						
Alpheidae						
<i>Alpheidae</i> sp.4		1				
<i>Alpheus acutocarinatus</i>		1			1	
<i>Alpheus</i> sp.						
<i>Bermudacaris</i> sp.						
<i>Bermudacaris</i> sp.1						
<i>Bermudacaris</i> sp.2						
Axiidae						
<i>Calocaris</i> sp.1						
Callianassidae						
<i>Callianassidae</i>	1					
<i>Jocullianassa matzi</i>						
<i>Lipkecallianassa</i> sp.1		2	1	2		2
Crangonidae						
<i>Philocheas</i> sp.2						
Palaemonidae						
<i>Palaemon</i> sp.						
<i>Palaemon</i> sp.1						
<i>Periclimenes</i> sp.						
<i>Periclimenes</i> sp.2	1					
Parthenopidae						
<i>Parthenopidae</i> sp.1						



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 square meter)

TAXA	LAWA- 1C1	LAWA- 1C2	LAWA- 1C3X	LAWA- 1D1	LAWA- 1D2	LAWA- 1D3X
Penaeidae						
<i>Atypopenaeus</i> sp.1						
Portunidae						
<i>Alionectes pulchricristatus</i>			1			1
Upogebiidae						
<i>Gebiakantha laurentae</i>						
<i>Gebicula</i> sp.4						
Isopoda						
Anthuridae						
<i>Amakusanthura</i> sp.1						
Gnathiidae						
<i>Caecognathia andamanensis</i>				1		
<i>Gnathia</i> sp.						1
Hyssuridae						
Hyssuridae sp.1						
Leptostraca						
Nebaliidae						
<i>Nebalia</i> sp.1						1
Mysidacea						
Mysidae						
<i>Anchialina</i> sp.1			1			
Mysidae	1					
<i>Siriella</i> sp.2			1			
<i>Siriella</i> sp.4						
Tanaidacea						
Apseudidae						
Apseudidae sp.4						
Pagurapseudidae						
Pagurapseudidae sp.1						
Pagurapseudidae sp.2		1	1			
Echinodermata						
Echinoidea						
Diadematoidea						
Diadematidae						
Diadematidae						
Spatangoida						
Brissidae						
Brissidae						
Ophiuroidea						
Ophiurida						
Amphiuridae						
<i>Amphioplus (Lymanella) andreae</i>						
<i>Amphioplus</i> sp.1					1	
<i>Amphiura</i> sp.2						1
Amphiuridae sp.1						
Amphiuridae sp.3					1	



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 square meter)

TAXA	LAWA- 1C1	LAWA- 1C2	LAWA- 1C3X	LAWA- 1D1	LAWA- 1D2	LAWA- 1D3X
Mollusca						
Aplacophora						
Cavibelonia						
Simrothiellidae						
<i>Helicoradomenia</i> sp.1				1		
Bivalvia						
Nuculoida						
Nuculidae						
<i>Ennucula niponica</i>	1					1
Gastropoda						
Neotaenioglossa						
Naticidae						
<i>Natica</i> sp.						
Total	14	13	8	13	9	24



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 square meter)

TAXA	LAWA-3C1	LAWA-3C2	LAWA-3C3	LAWA-3D1X	LAWA-3D2	LAWA-3D3
Nemertea						
Anopla						
Palaeonemertea						
Tubulanidae						
<i>Callinera</i> sp.1		1				2
Sipuncula						
Phascolosomatidea						
Phascolosomatiformes						
Phascolosomatidae						
<i>Apionsoma</i> sp.2	1				1	
Annelida						
Polychaeta						
Aciculata						
Amphinomidae						
<i>Linopherus</i> sp.1				1		
Glyceridae						
<i>Glycera lapidum</i>					1	
<i>Glycera</i> sp.						
Goniadidae						
<i>Glycinde cf. oligodon</i>	1					
Hartmaniellidae						
<i>Hartmaniella</i> sp.1						
Lumbrineridae						
<i>Lumbrinerides</i> sp.1						
Nephtyidae						
<i>Aglaophamus cf. dicirroides</i>	1	1	1			
<i>Aglaophamus orientalis</i>		1		1	1	1
<i>Aglaophamus tepens</i>						1
Nereididae						
<i>Tambalagama fauveli</i>						
Onuphidae						
<i>Onuphis</i> sp.1		1	1	3	2	1
Paralacydoniidae						
<i>Paralacydonia</i> sp.1				1		
Pilargidae						
<i>Litocorsa nr. antennata</i>						
<i>Sigambra</i> sp.1			1			
<i>Synelmis albin</i>		4	2		1	
<i>Synelmis rigida</i>	1	1		5	1	1
Polynoidae						
<i>Harmothoe</i> sp.						
Sigalionidae						
<i>Sthenolepis japonica</i>				1		
Syllidae						
<i>Exogone (Exogone)</i> sp.1						
<i>Syllis</i> sp.1					1	
Canalipalpata						
Ampharetidae						
<i>Anobothrus</i> sp.1			1			
<i>Eusamythella</i> sp.1						
<i>Lysippe labiata</i>						
<i>Samytha</i> sp.						
<i>Sosane</i> sp.2						1
Chaetopteridae						
<i>Spiochaetopterus</i> sp.1		1		2	1	



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 square meter)

TAXA	LAWA- 3C1	LAWA- 3C2	LAWA- 3C3	LAWA- 3D1X	LAWA- 3D2	LAWA- 3D3
Cirratulidae						
<i>Aphelocheata</i> sp.1			1			
<i>Kirkegaardia</i> sp.1						
<i>Kirkegaardia</i> sp.3						
<i>Kirkegaardia</i> sp.5						
Fabriciidae						
<i>Pseudofabriciella</i> sp.1						1
Flabelligeridae						
<i>Diplocirrus</i> sp.1				1		
Magelonidae						
<i>Magelona</i> sp.13						
Oweniidae						
<i>Galathowenia</i> sp.1						
<i>Galathowenia</i> sp.2						
Poecilochaetidae						
<i>Poecilochaetus</i> sp.3				1		
Sabellidae						
<i>Laonome</i> sp.1						
Spionidae						
<i>Laonice</i> sp.3						1
<i>Prionospio ehlersi</i>					1	
<i>Prionospio elegantula</i>		1				
<i>Prionospio</i> sp.						
<i>Spiophanes malayensis</i>						1
<i>Spiophanes</i> sp.3						1
<i>Spiophanes</i> sp.4				1		
Sternaspidae						
<i>Sternaspis cf. spinosa</i>						
Terebellidae						
<i>Pista</i> sp.4						
Trichobranchidae						
<i>Terebellides</i> sp.1						
<i>Terebellides</i> sp.2						
Capitellidae						
<i>Capitellethus</i> sp.1						
<i>Mediomastus</i> sp.1						
<i>Mediomastus</i> sp.2			1		1	
<i>Neomediomastus</i> sp.1						
<i>Promastobranhus huloti</i>				1		
Cossuridae						
<i>Cossura</i> sp.				1		
<i>Cossura</i> sp.2						
Maldanidae						
<i>Clymenella</i> sp.1						
<i>Euclymene</i> sp.1	1					
<i>Praxillella nr. gracilis</i>						1
Orbiniidae						
<i>Leodamas</i> sp.1						



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 square meter)

TAXA	LAWA-3C1	LAWA-3C2	LAWA-3C3	LAWA-3D1X	LAWA-3D2	LAWA-3D3
Paraonidae						
<i>Aricidea (Strelzovia) sp.1</i>		1				
<i>Cirrophorus sp.7</i>						
<i>Levinsenia sp.</i>						
<i>Levinsenia sp.1</i>						
<i>Levinsenia sp.2</i>		1				1
<i>Levinsenia sp.5</i>						1
<i>Levinsenia sp.9</i>		1				
Arthropoda						
Crustacea						
Amphipoda						
Ampeliscidae						
<i>Ampelisca bocki</i>						
<i>Ampelisca chinensis</i>						
<i>Ampelisca cyclops</i>						
<i>Ampelisca maia</i>		1				
<i>Byblis febris</i>			1		1	
<i>Byblis sp.</i>						
Aoridae						
<i>Grandidierella gilesi</i>						
Caprellidae						
<i>Caprella sp.1</i>			1			
Oedicerotidae						
<i>Eochelidium nonmiraculum</i>						
Cumacea						
Bodotriidae						
<i>Eocuma cf. latum</i>						
Leuconidae						
<i>Eudorella sp.1</i>						
Nannastacidae						
<i>Campylaspis sp.2</i>			1			1
<i>Campylaspis sp.5</i>						1
Decapoda						
Alpheidae						
<i>Alpheidae sp.4</i>						
<i>Alpheus acutocarinatus</i>		1				1
<i>Alpheus sp.</i>						1
<i>Bermudacaris sp.</i>						
<i>Bermudacaris sp.1</i>					1	
<i>Bermudacaris sp.2</i>						
Axiidae						
<i>Calocaris sp.1</i>						1
Callianassidae						
Callianassidae						
<i>Jocullianassa matzi</i>	1					
<i>Lipkecallianassa sp.1</i>		5	1		3	1
Crangonidae						
<i>Philocheas sp.2</i>						1
Palaemonidae						
<i>Palaemon sp.</i>						1
<i>Palaemon sp.1</i>		1	1			
<i>Periclimenes sp.</i>						1
<i>Periclimenes sp.2</i>						
Parthenopidae						
<i>Parthenopidae sp.1</i>						1



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 square meter)

TAXA	LAWA- 3C1	LAWA- 3C2	LAWA- 3C3	LAWA- 3D1X	LAWA- 3D2	LAWA- 3D3
Penaeidae						
<i>Atypopenaeus</i> sp.1						
Portunidae						
<i>Alionectes pulchricristatus</i>				1		
Upogebiidae						
<i>Gebiakantha laurentae</i>		1				
<i>Gebicula</i> sp.4	2			1		
Isopoda						
Anthuridae						
<i>Amakusanthura</i> sp.1				1		
Gnathiidae						
<i>Caecognathia andamanensis</i>		1	2	1		
<i>Gnathia</i> sp.						
Hyssuridae						
Hyssuridae sp.1						1
Leptostraca						
Nebaliidae						
<i>Nebalia</i> sp.1						
Mysidacea						
Mysidae						
<i>Anchialina</i> sp.1						
Mysidae						
<i>Siriella</i> sp.2						
<i>Siriella</i> sp.4						
Tanaidacea						
Apseudidae						
Apseudidae sp.4				1		
Pagurapseudidae						
Pagurapseudidae sp.1						
Pagurapseudidae sp.2						1
Echinodermata						
Echinoidea						
Diadematoida						
Diadematidae						
Diadematidae						
Spatangoida						
Brissidae						
Brissidae						1
Ophiuroidea						
Ophiurida						
Amphiuridae						
<i>Amphioplus (Lymanella) andreae</i>			1			
<i>Amphioplus</i> sp.1					1	
<i>Amphiura</i> sp.2						
Amphiuridae sp.1						
Amphiuridae sp.3						



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 square meter)

TAXA	LAWA- 3C1	LAWA- 3C2	LAWA- 3C3	LAWA- 3D1X	LAWA- 3D2	LAWA- 3D3
Mollusca						
Aplacophora						
Cavibelonia						
Simrothiellidae						
<i>Helicoradomenia</i> sp.1		1				
Bivalvia						
Nuculoida						
Nuculidae						
<i>Ennucula niponica</i>		1	1			
Gastropoda						
Neotaenioglossa						
Naticidae						
<i>Natica</i> sp.						
Total	8	26	17	24	17	27



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 square meter)

	G4/43REF- G4/43REF- G4/43REF-		
TAXA	A	B	C
Nemertea			
Anopla			
Palaeonemertea			
Tubulanidae			
<i>Callinera</i> sp.1	1		
Sipuncula			
Phascolosomatidea			
Phascolosomatiformes			
Phascolosomatidae			
<i>Apionsoma</i> sp.2		1	3
Annelida			
Polychaeta			
Aciculata			
Amphinomidae			
<i>Linopherus</i> sp.1			
Glyceridae			
<i>Glycera lapidum</i>			
<i>Glycera</i> sp.			1
Goniadidae			
<i>Glycinde cf. oligodon</i>			
Hartmaniellidae			
<i>Hartmaniella</i> sp.1			
Lumbrineridae			
<i>Lumbrinerides</i> sp.1			1
Nephtyidae			
<i>Aglaophamus cf. dicirroides</i>	1	1	
<i>Aglaophamus orientalis</i>	2	1	
<i>Aglaophamus tepens</i>	2		2
Nereididae			
<i>Tambalagama fauveli</i>		1	
Onuphidae			
<i>Onuphis</i> sp.1	1		
Paralacydoniidae			
<i>Paralacydonia</i> sp.1			1
Pilargidae			
<i>Litocorsa nr. antennata</i>		2	
<i>Sigambra</i> sp.1		1	
<i>Synelmis albin</i>		1	1
<i>Synelmis rigida</i>		3	
Polynoidae			
<i>Harmothoe</i> sp.		1	
Sigalionidae			
<i>Sthenolepis japonica</i>		1	
Syllidae			
<i>Exogone (Exogone)</i> sp.1		1	
<i>Syllis</i> sp.1			1
Canalipalpata			
Ampharetidae			
<i>Anobothrus</i> sp.1			1
<i>Eusamythella</i> sp.1		1	
<i>Lysippe labiata</i>			1
<i>Samytha</i> sp.			1
<i>Sosane</i> sp.2			
Chaetopteridae			
<i>Spiochaetopterus</i> sp.1		1	



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 square meter)

TAXA	G4/43REF- G4/43REF- G4/43REF-		
	A	B	C
Cirratulidae			
<i>Aphelocheata</i> sp.1	1	1	1
<i>Kirkegaardia</i> sp.1		1	
<i>Kirkegaardia</i> sp.3			1
<i>Kirkegaardia</i> sp.5			1
Fabriciidae			
<i>Pseudofabriciola</i> sp.1			
Flabelligeridae			
<i>Diplocirrus</i> sp.1			1
Magelonidae			
<i>Magelona</i> sp.13		2	1
Oweniidae			
<i>Galathowenia</i> sp.1			
<i>Galathowenia</i> sp.2	1		
Poecilochaetidae			
<i>Poecilochaetus</i> sp.3			
Sabellidae			
<i>Laonome</i> sp.1			
Spionidae			
<i>Laonice</i> sp.3		1	
<i>Prionospio ehlersi</i>			
<i>Prionospio elegantula</i>			
<i>Prionospio</i> sp.	1		
<i>Spiophanes malayensis</i>			
<i>Spiophanes</i> sp.3			
<i>Spiophanes</i> sp.4			
Sternaspidae			
<i>Sternaspis cf. spinosa</i>			
Terebellidae			
<i>Pista</i> sp.4	1		1
Trichobranchidae			
<i>Terebellides</i> sp.1		1	
<i>Terebellides</i> sp.2		1	1
Capitellidae			
<i>Capitellethus</i> sp.1		1	
<i>Mediomastus</i> sp.1		2	
<i>Mediomastus</i> sp.2		1	1
<i>Neomediomastus</i> sp.1			
<i>Promastobranchnus huloti</i>			
Cossuridae			
<i>Cossura</i> sp.			
<i>Cossura</i> sp.2			
Maldanidae			
<i>Clymenella</i> sp.1			
<i>Euclymene</i> sp.1			
<i>Praxillella nr. gracilis</i>			
Orbiniidae			
<i>Leodamas</i> sp.1	1		



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 square meter)

TAXA	G4/43REF- G4/43REF- G4/43REF-		
	A	B	C
Paraonidae			
<i>Aricidea (Strelzovia)</i> sp.1			
<i>Cirrophorus</i> sp.7		1	
<i>Levinsenia</i> sp.			1
<i>Levinsenia</i> sp.1	1		
<i>Levinsenia</i> sp.2			1
<i>Levinsenia</i> sp.5			
<i>Levinsenia</i> sp.9			
Arthropoda			
Crustacea			
Amphipoda			
Ampeliscidae			
<i>Ampelisca bocki</i>	2		
<i>Ampelisca chinensis</i>		2	
<i>Ampelisca cyclops</i>		4	
<i>Ampelisca maia</i>			2
<i>Byblis febris</i>	3	1	1
<i>Byblis</i> sp.		1	
Aoridae			
<i>Grandidierella gilesi</i>			2
Caprellidae			
<i>Caprella</i> sp.1		1	1
Oedicerotidae			
<i>Eochelidium nonmiraculum</i>			1
Cumacea			
Bodotriidae			
<i>Eocuma cf. latum</i>	1		
Leuconidae			
<i>Eudorella</i> sp.1	1	1	
Nannastacidae			
<i>Campylaspis</i> sp.2			
<i>Campylaspis</i> sp.5			
Decapoda			
Alpheidae			
<i>Alpheidae</i> sp.4			
<i>Alpheus acutocarinatus</i>			
<i>Alpheus</i> sp.			
<i>Bermudacaris</i> sp.			1
<i>Bermudacaris</i> sp.1		1	
<i>Bermudacaris</i> sp.2	1		
Axiidae			
<i>Calocaris</i> sp.1			
Callianassidae			
Callianassidae			
<i>Jocullianassa matzi</i>	1		1
<i>Lipkecallianassa</i> sp.1	3		
Crangonidae			
<i>Philocheiras</i> sp.2			
Palaemonidae			
<i>Palaemon</i> sp.			
<i>Palaemon</i> sp.1			
<i>Periclimenes</i> sp.			
<i>Periclimenes</i> sp.2			
Parthenopidae			
Parthenopidae sp.1			



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 square meter)

TAXA	G4/43REF- G4/43REF- G4/43REF-		
	A	B	C
Penaeidae			
<i>Atyppopenaeus</i> sp.1		1	
Portunidae			
<i>Alionectes pulchricristatus</i>			
Upogebiidae			
<i>Gebiakantha laurentae</i>			2
<i>Gebicula</i> sp.4			
Isopoda			
Anthuridae			
<i>Amakusanthura</i> sp.1			
Gnathiidae			
<i>Caecognathia andamanensis</i>	1	1	
<i>Gnathia</i> sp.			
Hyssuridae			
Hyssuridae sp.1			
Leptostraca			
Nebaliidae			
<i>Nebalia</i> sp.1			1
Mysidacea			
Mysidae			
<i>Anchialina</i> sp.1		1	
Mysidae			
<i>Siriella</i> sp.2		1	
<i>Siriella</i> sp.4			1
Tanaidacea			
Apseudidae			
Apseudidae sp.4	1		1
Pagurapseudidae			
Pagurapseudidae sp.1			1
Pagurapseudidae sp.2			
Echinodermata			
Echinoidea			
Diadematoidea			
Diadematidae			
Diadematidae		1	
Spatangoida			
Brissidae			
Brissidae			
Ophiuroidea			
Ophiurida			
Amphiuridae			
<i>Amphioplus (Lymanella) andreae</i>			
<i>Amphioplus</i> sp.1			1
<i>Amphiura</i> sp.2			
Amphiuridae sp.1	1		
Amphiuridae sp.3			



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 square meter)

TAXA	G4/43REF- G4/43REF- G4/43REF-		
	A	B	C
Mollusca			
Aplacophora			
Cavibelonia			
Simrothiellidae			
<i>Helicoradomenia</i> sp.1			
Bivalvia			
Nuculoida			
Nuculidae			
<i>Ennucula niponica</i>			
Gastropoda			
Neotaenioglossa			
Naticidae			
<i>Natica</i> sp.	1		
Total	29	44	39



Appendix E2
Biomass

No.	Sample ID	Biomass (g)				
		Polychaete	Crustacea	Mollusc	Echinoderm	Other
1	LAWA-1C1	0.0150	0.0087	0.0110	-	0.0025
2	LAWA-1C2	2.8209	0.0187	-	-	-
3	LAWA-1C3X	0.0013	0.1160	-	-	-
4	LAWA-1D1	0.0377	0.0148	0.0001	-	-
5	LAWA-1D2	0.0027	0.00071	-	0.0023	-
6	LAWA-1D3X	0.1037	0.0379	0.0001	0.0001	0.0002
7	LAWA-3C1	0.0014	0.0106	-	-	0.0001
8	LAWA-3C2	0.0456	0.0733	0.0282	-	0.0002
9	LAWA-3C3	0.0181	0.0137	0.0001	0.0081	-
10	LAWA-3D1X	0.0274	0.0799	-	-	-
11	LAWA-3D2	0.0130	0.0097	-	0.0532	0.0002
12	LAWA-3D3	0.0217	0.0714	-	0.0001	0.0004
13	G4/43REF-A	0.0262	0.0604	0.0020	0.0237	0.0015
14	G4/43REF-B	0.0568	0.1011	-	0.0001	0.0001
15	G4/43REF-C	0.0367	0.0940	-	0.0400	0.0013

APPENDIX B
SEAWATER ANALYTICAL LABORATORY REPORTS

ANALYTICAL REPORT

PREPARED FOR

Attn: Ted Donn
Tetra Tech, Inc.
3697 Mt. Diablo Blvd.
Suite 150
Lafayette, California 94549

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JOB DESCRIPTION

Gulf of Thailand - 2023

JOB NUMBER

580-126685-1

Eurofins Seattle

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



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Authorized for release by
Lilly-Anna LaCount, Project Manager
Lilly-Anna.Lacount@et.eurofinsus.com
(253)922-2310



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Case Narrative

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Job ID: 580-126685-1

Laboratory: Eurofins Seattle

Narrative

Job Narrative 580-126685-1

Comments

No additional comments.

Receipt

The samples were received on 5/2/2023 10:04 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 17 coolers at receipt time were -28.8° C, -23.9° C, -23.1° C, -20.8° C, -18.8° C, -18.8° C, -17.1° C, -16.9° C, -16.8° C, -16.0° C, -15.3° C, -14.9° C, -14.6° C, -10.8° C, -6.7° C, -2.9° C and 2.7° C.

Receipt Exceptions

One or more containers for the following samples were received broken or leaking: 126685-84 & 126685-187G443REF-SW-1 (580-126685-1), G443REF-SW-20 (580-126685-2), G443REF-SW-40 (580-126685-3), G443REF-SW-B (580-126685-4), LAWA-1C1-SW-1 (580-126685-5), LAWA-1C1-SW-20 (580-126685-6), LAWA-1C1-SW-40 (580-126685-7), LAWA-1C1-SW-B (580-126685-8), LAWA-1C1-SW-B-FD (580-126685-9), LAWA-1C2-SW-1 (580-126685-10), LAWA-1C2-SW-20 (580-126685-11), LAWA-1C2-SW-40 (580-126685-12), LAWA-1C2-SW-B (580-126685-13), LAWA-1C3X-SW-1 (580-126685-14), LAWA-1C3X-SW-20 (580-126685-15), LAWA-1C3X-SW-40 (580-126685-16), LAWA-1C3X-SW-B (580-126685-17), LAWA-1D1-SW-1 (580-126685-18), LAWA-1D1-SW-20 (580-126685-19), LAWA-1D1-SW-40 (580-126685-20), LAWA-1D1-SW-B (580-126685-21), LAWA-1D2-SW-1 (580-126685-22), LAWA-1D2-SW-1-FD (580-126685-23), LAWA-1D2-SW-20 (580-126685-24), LAWA-1D2-SW-40 (580-126685-25), LAWA-1D2-SW-B (580-126685-26), LAWA-1D3X-SW-1 (580-126685-27), LAWA-1D3X-SW-20 (580-126685-28), LAWA-1D3X-SW-40 (580-126685-29), LAWA-1D3X-SW-B (580-126685-30), LAWA-3C1-SW-1 (580-126685-31), LAWA-3C1-SW-20 (580-126685-32), LAWA-3C1-SW-40 (580-126685-33), LAWA-3C1-SW-B (580-126685-34), LAWA-3C2-SW-1 (580-126685-35), LAWA-3C2-SW-20 (580-126685-36), LAWA-3C2-SW-40 (580-126685-37), LAWA-3C2-SW-B (580-126685-38), LAWA-3C3-SW-1 (580-126685-39), LAWA-3C3-SW-20 (580-126685-40), LAWA-3C3-SW-40 (580-126685-41), LAWA-3C3-SW-B (580-126685-42), LAWA-3D1X-SW-1 (580-126685-43), LAWA-3D1X-SW-20 (580-126685-44), LAWA-3D1X-SW-40 (580-126685-45), LAWA-3D1X-SW-B (580-126685-46), LAWA-3D2-SW-1 (580-126685-47), LAWA-3D2-SW-1-FD (580-126685-48), LAWA-3D2-SW-20 (580-126685-49), LAWA-3D2-SW-40 (580-126685-50), LAWA-3D2-SW-B (580-126685-51), LAWA-3D3-SW-1 (580-126685-52), LAWA-3D3-SW-20 (580-126685-53), LAWA-3D3-SW-40 (580-126685-54), LAWA-3D3-SW-B (580-126685-55), LAWA-EQ (580-126685-56), LAWA-WB (580-126685-57), MAWA-1C2-SW-1 (580-126685-58), MAWA-1C2-SW-20 (580-126685-59), MAWA-1C2-SW-40 (580-126685-60), MAWA-1C2-SW-B (580-126685-61), MAWA-1CP2-SW-1 (580-126685-62), MAWA-1CP2-SW-20 (580-126685-63), MAWA-1CP2-SW-40 (580-126685-64), MAWA-1CP2-SW-B (580-126685-65), MAWA-2B2X-SW-1 (580-126685-66), MAWA-2B2X-SW-20 (580-126685-67), MAWA-2B2X-SW-40 (580-126685-68), MAWA-2B2X-SW-B (580-126685-69), MAWA-3B2-SW-1 (580-126685-70), MAWA-3B2-SW-20 (580-126685-71), MAWA-3B2-SW-20-FD (580-126685-72), MAWA-3B2-SW-40 (580-126685-73), MAWA-3B2-SW-B (580-126685-74), MAWA-3C2-SW-1 (580-126685-75), MAWA-3C2-SW-20 (580-126685-76), MAWA-3C2-SW-40 (580-126685-77), MAWA-3C2-SW-B (580-126685-78), MAWA-4B2X-SW-1 (580-126685-79), MAWA-4B2X-SW-20 (580-126685-80), MAWA-4B2X-SW-40 (580-126685-81), MAWA-4B2X-SW-B (580-126685-82), MAWA-EQ (580-126685-83), MAWA-WB (580-126685-84), MAWB-1B2X-SW-1 (580-126685-85), MAWB-1B2X-SW-1-FD (580-126685-86), MAWB-1B2X-SW-20 (580-126685-87), MAWB-1B2X-SW-40 (580-126685-88), MAWB-1B2X-SW-B (580-126685-89), MAWB-1C2X-SW-1 (580-126685-90), MAWB-1C2X-SW-20 (580-126685-91), MAWB-1C2X-SW-40 (580-126685-92), MAWB-1C2X-SW-B (580-126685-93), MAWB-2B2X-SW-1 (580-126685-94), MAWB-2B2X-SW-20 (580-126685-95), MAWB-2B2X-SW-20-FD (580-126685-96), MAWB-2B2X-SW-40 (580-126685-97), MAWB-2B2X-SW-B (580-126685-98), MAWB-3B2X-SW-1 (580-126685-99), MAWB-3B2X-SW-20 (580-126685-100), MAWB-3B2X-SW-40 (580-126685-101), MAWB-3B2X-SW-B (580-126685-102), MAWB-3C2-SW-1 (580-126685-103), MAWB-3C2-SW-20 (580-126685-104), MAWB-3C2-SW-40 (580-126685-105), MAWB-3C2-SW-B (580-126685-106), MAWB-4B2X-SW-1 (580-126685-107), MAWB-4B2X-SW-20 (580-126685-108), MAWB-4B2X-SW-40 (580-126685-109), MAWB-4B2X-SW-B (580-126685-110), MAWB-4B2X-SW-B-FD (580-126685-111), MAWC-1B2X-SW-1 (580-126685-112), MAWC-1B2X-SW-20 (580-126685-113), MAWC-1B2X-SW-40 (580-126685-114), MAWC-1B2X-SW-B (580-126685-115), MAWC-1C2-SW-1 (580-126685-116), MAWC-1C2-SW-20 (580-126685-117), MAWC-1C2-SW-40 (580-126685-118), MAWC-1C2-SW-B (580-126685-119), MAWC-2B2X-SW-1 (580-126685-120), MAWC-2B2X-SW-20 (580-126685-121), MAWC-2B2X-SW-40 (580-126685-122), MAWC-2B2X-SW-B (580-126685-123), MAWC-3B2X-SW-1 (580-126685-124), MAWC-3B2X-SW-20 (580-126685-125), MAWC-3B2X-SW-40 (580-126685-126), MAWC-3B2X-SW-B (580-126685-127), MAWC-3C2-SW-1 (580-126685-128), MAWC-3C2-SW-20 (580-126685-129), MAWC-3C2-SW-40 (580-126685-130), MAWC-3C2-SW-B (580-126685-131), MAWC-4B2X-SW-1 (580-126685-132), MAWC-4B2X-SW-20 (580-126685-133), MAWC-4B2X-SW-40 (580-126685-134), MAWC-4B2X-SW-B (580-126685-135), MAWC-4B2X-SW-B-FD (580-126685-136), MAWC-EQ (580-126685-137), MAWC-WB (580-126685-138), MAWD-1B2X-SW-1 (580-126685-139), MAWD-1B2X-SW-20 (580-126685-140), MAWD-1B2X-SW-40 (580-126685-141), MAWD-1B2X-SW-B (580-126685-142), MAWD-1C2-SW-1 (580-126685-143), MAWD-1C2-SW-20

Case Narrative

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Job ID: 580-126685-1 (Continued)

Laboratory: Eurofins Seattle (Continued)

(580-126685-144), MAWD-1C2-SW-40 (580-126685-145), MAWD-1C2-SW-B (580-126685-146), MAWD-2C2X-SW-1 (580-126685-147), MAWD-2C2X-SW-20 (580-126685-148), MAWD-2C2X-SW-40 (580-126685-149), MAWD-2C2X-SW-B (580-126685-150), MAWD-3B2-SW-1 (580-126685-151), MAWD-3B2-SW-20 (580-126685-152), MAWD-3B2-SW-40 (580-126685-153), MAWD-3B2-SW-B (580-126685-154), MAWD-3C2X-SW-1 (580-126685-155), MAWD-3C2X-SW-20 (580-126685-156), MAWD-3C2X-SW-40 (580-126685-157), MAWD-3C2X-SW-B (580-126685-158), MAWD-4B2X-SW-1 (580-126685-159), MAWD-4B2X-SW-20 (580-126685-160), MAWD-4B2X-SW-40 (580-126685-161), MAWD-4B2X-SW-B (580-126685-162), Control-3-SW-1 (580-126685-163), Control-3-SW-20 (580-126685-164), Control-3-SW-40 (580-126685-165), Control-3-SW-B (580-126685-166), MAWG-1B2X-SW-1 (580-126685-167), MAWG-1B2X-SW-20 (580-126685-168), MAWG-1B2X-SW-40 (580-126685-169), MAWG-1B2X-SW-B (580-126685-170), MAWG-3B2X-SW-1 (580-126685-171), MAWG-3B2X-SW-1-FD (580-126685-172), MAWG-3B2X-SW-20 (580-126685-173), MAWG-3B2X-SW-40 (580-126685-174), MAWG-3B2X-SW-B (580-126685-175), MAWG-EQ (580-126685-176), MAWG-WB (580-126685-177), TFPSO-1B2-SW-1 (580-126685-178), TFPSO-1B2-SW-20 (580-126685-179), TFPSO-1B2-SW-20-FD (580-126685-180), TFPSO-1B2-SW-40 (580-126685-181), TFPSO-1B2-SW-B (580-126685-182), TFPSO-3B2-SW-1 (580-126685-183), TFPSO-3B2-SW-20 (580-126685-184), TFPSO-3B2-SW-40 (580-126685-185), TFPSO-3B2-SW-B (580-126685-186), TFPSO-EQ (580-126685-187), TFPSO-WB (580-126685-188), YAREF-SW-1 (580-126685-189), YAREF-SW-20 (580-126685-190), YAREF-SW-40 (580-126685-191), YAREF-SW-B (580-126685-192), CBREF-SW-1 (580-126685-193), CBREF-SW-20 (580-126685-194), CBREF-SW-40 (580-126685-195), CBREF-SW-B (580-126685-196), YUWA-1B2X-SW-1 (580-126685-197), YUWA-1B2X-SW-20 (580-126685-198), YUWA-1B2X-SW-40 (580-126685-199), YUWA-1B2X-SW-40-FD (580-126685-200), YUWA-1B2X-SW-B (580-126685-201), YUWA-3B2X-SW-1 (580-126685-202), YUWA-3B2X-SW-20 (580-126685-203), YUWA-3B2X-SW-40 (580-126685-204), YUWA-3B2X-SW-B (580-126685-205), YUWA-EQ (580-126685-206) and YUWA-WB (580-126685-207). Splits were taken from the metals containers.

Metals

Method 1640: A method blank for preparation batch 580-425974 contained Lead above the reporting limit (RL). All reported samples associated with this preparation batch had either results below the reporting limit or 10x higher than this preparation blank.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: G443REF-SW-1

Lab Sample ID: 580-126685-1

Date Collected: 03/23/23 10:11

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.23	J	0.50	0.079	ng/L			05/10/23 15:49	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.2		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 09:28	1
Cadmium	0.011	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 09:28	1
Chromium	0.75		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 09:28	1
Copper	0.22	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 09:28	1
Lead	0.023	J B	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 09:28	1
Nickel	0.13	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 09:28	1
Zinc	0.078	J	0.50	0.070	ug/L		05/11/23 00:00	05/13/23 09:28	1
Barium	6.9		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 09:28	1
Iron	1.1	J	2.0	1.1	ug/L		05/11/23 00:00	05/13/23 09:28	1
Manganese	0.31		0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 09:28	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: G443REF-SW-20

Lab Sample ID: 580-126685-2

Date Collected: 03/23/23 10:17

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.18	J	0.50	0.079	ng/L			05/10/23 15:53	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.2		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 09:42	1
Cadmium	0.012	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 09:42	1
Chromium	0.87		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 09:42	1
Copper	0.13	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 09:42	1
Lead	0.016	J B	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 09:42	1
Nickel	0.13	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 09:42	1
Zinc	ND		0.50	0.070	ug/L		05/11/23 00:00	05/13/23 09:42	1
Barium	7.0		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 09:42	1
Iron	ND		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 09:42	1
Manganese	0.32		0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 09:42	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: G443REF-SW-40

Lab Sample ID: 580-126685-3

Date Collected: 03/23/23 10:25

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.23	J	0.50	0.079	ng/L			05/10/23 15:57	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 09:57	1
Cadmium	0.015	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 09:57	1
Chromium	0.99		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 09:57	1
Copper	0.15	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 09:57	1
Lead	0.016	J B	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 09:57	1
Nickel	0.15	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 09:57	1
Zinc	0.38	J	0.50	0.070	ug/L		05/11/23 00:00	05/13/23 09:57	1
Barium	8.9		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 09:57	1
Iron	2.8		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 09:57	1
Manganese	0.45		0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 09:57	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: G443REF-SW-B

Lab Sample ID: 580-126685-4

Date Collected: 03/23/23 10:37

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19	J	0.50	0.079	ng/L			05/10/23 16:02	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.4		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 10:11	1
Cadmium	0.015	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 10:11	1
Chromium	0.92		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 10:11	1
Copper	0.13	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 10:11	1
Lead	0.042	J B	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 10:11	1
Nickel	0.15	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 10:11	1
Zinc	ND		0.50	0.070	ug/L		05/11/23 00:00	05/13/23 10:11	1
Barium	7.6		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 10:11	1
Iron	20		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 10:11	1
Manganese	1.3		0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 10:11	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1C1-SW-1

Lab Sample ID: 580-126685-5

Date Collected: 03/18/23 04:36

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.24	J	0.50	0.079	ng/L			05/10/23 13:06	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 04:14	1
Cadmium	0.017	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 04:14	1
Chromium	0.81		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 04:14	1
Copper	0.21	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 04:14	1
Lead	0.069	B	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 04:14	1
Nickel	0.21	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 04:14	1
Zinc	0.17	J	0.50	0.070	ug/L		05/11/23 00:00	05/13/23 04:14	1
Barium	8.8		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 04:14	1
Iron	2.4		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 04:14	1
Manganese	0.52		0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 04:14	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1C1-SW-20

Lab Sample ID: 580-126685-6

Date Collected: 03/18/23 04:44

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.22	J	0.50	0.079	ng/L			05/10/23 13:10	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 04:57	1
Cadmium	ND		0.040	0.011	ug/L		05/11/23 00:00	05/13/23 04:57	1
Chromium	0.67		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 04:57	1
Copper	0.14	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 04:57	1
Lead	0.013	J B	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 04:57	1
Nickel	0.14	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 04:57	1
Zinc	0.085	J	0.50	0.070	ug/L		05/11/23 00:00	05/13/23 04:57	1
Barium	5.9		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 04:57	1
Iron	1.4	J	2.0	1.1	ug/L		05/11/23 00:00	05/13/23 04:57	1
Manganese	0.48		0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 04:57	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1C1-SW-40

Lab Sample ID: 580-126685-7

Date Collected: 03/18/23 04:56

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.18	J	0.50	0.079	ng/L			05/10/23 16:06	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 10:25	1
Cadmium	0.015	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 10:25	1
Chromium	1.0		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 10:25	1
Copper	0.13	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 10:25	1
Lead	0.022	J B	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 10:25	1
Nickel	0.15	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 10:25	1
Zinc	0.073	J	0.50	0.070	ug/L		05/11/23 00:00	05/13/23 10:25	1
Barium	9.2		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 10:25	1
Iron	ND		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 10:25	1
Manganese	0.35		0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 10:25	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1C1-SW-B

Lab Sample ID: 580-126685-8

Date Collected: 03/18/23 05:08

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.35	J	0.50	0.079	ng/L			05/10/23 16:10	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.8		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 10:40	1
Cadmium	0.020	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 10:40	1
Chromium	1.1		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 10:40	1
Copper	0.14	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 10:40	1
Lead	0.037	J B	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 10:40	1
Nickel	0.17	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 10:40	1
Zinc	0.081	J	0.50	0.070	ug/L		05/11/23 00:00	05/13/23 10:40	1
Barium	10		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 10:40	1
Iron	14		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 10:40	1
Manganese	1.3		0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 10:40	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1C1-SW-B-FD

Lab Sample ID: 580-126685-9

Date Collected: 03/18/23 05:20

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.24	J	0.50	0.079	ng/L			05/10/23 16:14	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.8		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 10:54	1
Cadmium	0.021	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 10:54	1
Chromium	1.1		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 10:54	1
Copper	0.22	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 10:54	1
Lead	0.037	J B	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 10:54	1
Nickel	0.18	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 10:54	1
Zinc	0.098	J	0.50	0.070	ug/L		05/11/23 00:00	05/13/23 10:54	1
Barium	10		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 10:54	1
Iron	13		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 10:54	1
Manganese	1.4		0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 10:54	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1C2-SW-1

Lab Sample ID: 580-126685-10

Date Collected: 03/18/23 07:08

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.29	J	0.50	0.079	ng/L			05/10/23 16:27	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.2		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 11:08	1
Cadmium	0.012	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 11:08	1
Chromium	0.90		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 11:08	1
Copper	0.14	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 11:08	1
Lead	0.017	J B	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 11:08	1
Nickel	0.12	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 11:08	1
Zinc	0.10	J	0.50	0.070	ug/L		05/11/23 00:00	05/13/23 11:08	1
Barium	7.3		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 11:08	1
Iron	ND		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 11:08	1
Manganese	0.47		0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 11:08	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1C2-SW-20

Lab Sample ID: 580-126685-11

Date Collected: 03/18/23 07:45

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.36	J	0.50	0.079	ng/L			05/10/23 16:31	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 11:22	1
Cadmium	ND		0.040	0.011	ug/L		05/11/23 00:00	05/13/23 11:22	1
Chromium	0.74		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 11:22	1
Copper	0.12	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 11:22	1
Lead	0.011	J B	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 11:22	1
Nickel	0.11	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 11:22	1
Zinc	0.097	J	0.50	0.070	ug/L		05/11/23 00:00	05/13/23 11:22	1
Barium	6.6		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 11:22	1
Iron	ND		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 11:22	1
Manganese	0.36		0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 11:22	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1C2-SW-40

Lab Sample ID: 580-126685-12

Date Collected: 03/18/23 07:55

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17	J	0.50	0.079	ng/L			05/10/23 16:35	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.2		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 11:37	1
Cadmium	0.011	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 11:37	1
Chromium	0.79		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 11:37	1
Copper	0.11	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 11:37	1
Lead	0.0099	J B	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 11:37	1
Nickel	0.11	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 11:37	1
Zinc	ND		0.50	0.070	ug/L		05/11/23 00:00	05/13/23 11:37	1
Barium	7.0		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 11:37	1
Iron	ND		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 11:37	1
Manganese	0.30		0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 11:37	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1C2-SW-B

Lab Sample ID: 580-126685-13

Date Collected: 03/18/23 08:07

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.22	J	0.50	0.079	ng/L			05/10/23 16:39	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.5		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 04:18	1
Cadmium	0.020	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 04:18	1
Chromium	0.78	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 04:18	1
Copper	0.17	J B	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 04:18	1
Lead	0.045	J B	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 04:18	1
Nickel	0.20	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 04:18	1
Zinc	0.097	J B	0.50	0.070	ug/L		05/15/23 00:00	05/16/23 04:18	1
Barium	7.5		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 04:18	1
Iron	17		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 04:18	1
Manganese	1.4		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 04:18	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1C3X-SW-1

Lab Sample ID: 580-126685-14

Date Collected: 03/18/23 19:21

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.25	J	0.50	0.079	ng/L			05/10/23 16:44	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.5		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 05:00	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 05:00	1
Chromium	0.71	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 05:00	1
Copper	0.17	J B	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 05:00	1
Lead	1.0	B	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 05:00	1
Nickel	0.17	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 05:00	1
Zinc	0.13	J B	0.50	0.070	ug/L		05/15/23 00:00	05/16/23 05:00	1
Barium	8.2		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 05:00	1
Iron	1.5	J	2.0	1.1	ug/L		05/15/23 00:00	05/16/23 05:00	1
Manganese	0.70		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 05:00	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1C3X-SW-20

Lab Sample ID: 580-126685-15

Date Collected: 03/18/23 19:29

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19	J	0.50	0.079	ng/L			05/10/23 16:48	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 09:31	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 09:31	1
Chromium	0.67	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 09:31	1
Copper	0.16	J B	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 09:31	1
Lead	0.036	J B	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 09:31	1
Nickel	0.16	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 09:31	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 00:00	05/16/23 09:31	1
Barium	9.4		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 09:31	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 09:31	1
Manganese	0.74		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 09:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1C3X-SW-40

Lab Sample ID: 580-126685-16

Date Collected: 03/18/23 19:40

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19	J	0.50	0.079	ng/L			05/10/23 16:52	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.4		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 09:46	1
Cadmium	ND		0.040	0.011	ug/L		05/15/23 00:00	05/16/23 09:46	1
Chromium	0.64	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 09:46	1
Copper	0.11	J B	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 09:46	1
Lead	0.016	J B	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 09:46	1
Nickel	0.12	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 09:46	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 00:00	05/16/23 09:46	1
Barium	6.6		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 09:46	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 09:46	1
Manganese	0.26		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 09:46	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1C3X-SW-B

Lab Sample ID: 580-126685-17

Date Collected: 03/18/23 19:52

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.22	J	0.50	0.079	ng/L			05/10/23 16:56	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.2		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 10:00	1
Cadmium	0.012	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 10:00	1
Chromium	0.55	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 10:00	1
Copper	0.10	J B	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 10:00	1
Lead	0.047	J B	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 10:00	1
Nickel	0.12	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 10:00	1
Zinc	0.47	J B	0.50	0.070	ug/L		05/15/23 00:00	05/16/23 10:00	1
Barium	6.4		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 10:00	1
Iron	20		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 10:00	1
Manganese	1.5		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 10:00	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1D1-SW-1

Lab Sample ID: 580-126685-18

Date Collected: 03/19/23 02:31

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.53		0.50	0.079	ng/L			05/10/23 17:00	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.3		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 10:14	1
Cadmium	ND		0.040	0.011	ug/L		05/15/23 00:00	05/16/23 10:14	1
Chromium	0.54	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 10:14	1
Copper	0.12	J B	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 10:14	1
Lead	0.019	J B	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 10:14	1
Nickel	0.12	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 10:14	1
Zinc	0.17	J B	0.50	0.070	ug/L		05/15/23 00:00	05/16/23 10:14	1
Barium	6.8		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 10:14	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 10:14	1
Manganese	0.48		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 10:14	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1D1-SW-20

Lab Sample ID: 580-126685-19

Date Collected: 03/19/23 02:37

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.26	J	0.50	0.079	ng/L			05/10/23 17:04	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.4		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 10:28	1
Cadmium	0.011	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 10:28	1
Chromium	0.63	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 10:28	1
Copper	0.13	J B	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 10:28	1
Lead	0.013	J B	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 10:28	1
Nickel	0.12	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 10:28	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 00:00	05/16/23 10:28	1
Barium	7.6		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 10:28	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 10:28	1
Manganese	0.51		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 10:28	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1D1-SW-40

Lab Sample ID: 580-126685-20

Date Collected: 03/19/23 02:46

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	J	0.50	0.079	ng/L			05/10/23 17:17	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.4		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 10:43	1
Cadmium	ND		0.040	0.011	ug/L		05/15/23 00:00	05/16/23 10:43	1
Chromium	0.58	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 10:43	1
Copper	0.16	J B	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 10:43	1
Lead	0.012	J B	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 10:43	1
Nickel	0.11	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 10:43	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 00:00	05/16/23 10:43	1
Barium	6.5		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 10:43	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 10:43	1
Manganese	0.29		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 10:43	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1D1-SW-B

Lab Sample ID: 580-126685-21

Date Collected: 03/19/23 02:59

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10	J	0.50	0.079	ng/L			05/10/23 11:51	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.3		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 05:40	1
Cadmium	0.014	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 05:40	1
Chromium	0.67		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 05:40	1
Copper	0.14	J B	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 05:40	1
Lead	0.036	J	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 05:40	1
Nickel	0.16	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 05:40	1
Zinc	0.087	J	0.50	0.070	ug/L		05/11/23 00:00	05/13/23 05:40	1
Barium	6.4		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 05:40	1
Iron	15		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 05:40	1
Manganese	1.5		0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 05:40	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1D2-SW-1

Lab Sample ID: 580-126685-22

Date Collected: 03/19/23 00:28

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 11:55	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 06:51	1
Cadmium	0.015	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 06:51	1
Chromium	0.92		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 06:51	1
Copper	0.19	J B	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 06:51	1
Lead	0.022	J	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 06:51	1
Nickel	0.18	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 06:51	1
Zinc	0.20	J	0.50	0.070	ug/L		05/11/23 00:00	05/13/23 06:51	1
Barium	9.5		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 06:51	1
Iron	1.2	J	2.0	1.1	ug/L		05/11/23 00:00	05/13/23 06:51	1
Manganese	0.73		0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 06:51	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1D2-SW-1-FD

Lab Sample ID: 580-126685-23

Date Collected: 03/19/23 00:36

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 14:00	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 10:57	1
Cadmium	0.016	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 10:57	1
Chromium	0.70	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 10:57	1
Copper	0.17	J B	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 10:57	1
Lead	0.076		0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 17:08	1
Nickel	0.15	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 10:57	1
Zinc	0.15	J B	0.50	0.070	ug/L		05/15/23 00:00	05/16/23 10:57	1
Barium	9.5		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 10:57	1
Iron	1.6	J	2.0	1.1	ug/L		05/15/23 00:00	05/16/23 10:57	1
Manganese	0.74		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 10:57	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1D2-SW-20

Lab Sample ID: 580-126685-24

Date Collected: 03/19/23 00:43

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17	J	0.50	0.079	ng/L			05/10/23 14:04	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.8		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 11:11	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 11:11	1
Chromium	0.71	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 11:11	1
Copper	0.15	J B	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 11:11	1
Lead	0.012	J B	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 11:11	1
Nickel	0.14	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 11:11	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 00:00	05/16/23 11:11	1
Barium	9.1		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 11:11	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 11:11	1
Manganese	0.68		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 11:11	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1D2-SW-40

Lab Sample ID: 580-126685-25

Date Collected: 03/19/23 00:52

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 15:14	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 11:25	1
Cadmium	0.014	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 11:25	1
Chromium	0.73	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 11:25	1
Copper	0.13	J B	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 11:25	1
Lead	0.014	J B	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 11:25	1
Nickel	0.14	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 11:25	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 00:00	05/16/23 11:25	1
Barium	8.5		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 11:25	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 11:25	1
Manganese	0.37		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 11:25	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1D2-SW-B

Lab Sample ID: 580-126685-26

Date Collected: 03/19/23 01:05

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.26	J	0.50	0.079	ng/L			05/10/23 15:19	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.1		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 11:40	1
Cadmium	0.021	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 11:40	1
Chromium	0.78	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 11:40	1
Copper	0.15	J B	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 11:40	1
Lead	0.039	J B	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 11:40	1
Nickel	0.17	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 11:40	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 00:00	05/16/23 11:40	1
Barium	9.6		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 11:40	1
Iron	19		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 11:40	1
Manganese	1.5		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 11:40	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1D3X-SW-1

Lab Sample ID: 580-126685-27

Date Collected: 03/18/23 20:43

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.088	J	0.50	0.079	ng/L			05/10/23 15:23	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.1		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 12:22	1
Cadmium	0.011	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 12:22	1
Chromium	0.52	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 12:22	1
Copper	0.12	J B	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 12:22	1
Lead	0.022	J B	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 12:22	1
Nickel	0.11	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 12:22	1
Zinc	0.071	J B	0.50	0.070	ug/L		05/15/23 00:00	05/16/23 12:22	1
Barium	6.3		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 12:22	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 12:22	1
Manganese	0.59		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 12:22	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1D3X-SW-20

Lab Sample ID: 580-126685-28

Date Collected: 03/18/23 20:51

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	J	0.50	0.079	ng/L			05/10/23 15:27	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.1		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 12:37	1
Cadmium	ND		0.040	0.011	ug/L		05/15/23 00:00	05/16/23 12:37	1
Chromium	0.55	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 12:37	1
Copper	0.11	J B	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 12:37	1
Lead	0.0087	J B	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 12:37	1
Nickel	0.11	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 12:37	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 00:00	05/16/23 12:37	1
Barium	5.8		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 12:37	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 12:37	1
Manganese	0.56		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 12:37	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1D3X-SW-40

Lab Sample ID: 580-126685-29

Date Collected: 03/18/23 21:01

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.082	J	0.50	0.079	ng/L			05/10/23 15:31	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.8		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 12:51	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 12:51	1
Chromium	0.72	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 12:51	1
Copper	0.13	J B	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 12:51	1
Lead	0.014	J B	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 12:51	1
Nickel	0.15	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 12:51	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 00:00	05/16/23 12:51	1
Barium	8.7		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 12:51	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 12:51	1
Manganese	0.31		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 12:51	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1D3X-SW-B

Lab Sample ID: 580-126685-30

Date Collected: 03/18/23 21:14

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.14	J	0.50	0.079	ng/L			05/10/23 15:35	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 13:05	1
Cadmium	0.016	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 13:05	1
Chromium	0.67	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 13:05	1
Copper	0.14	J B	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 13:05	1
Lead	0.039	J B	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 13:05	1
Nickel	0.15	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 13:05	1
Zinc	0.085	J B	0.50	0.070	ug/L		05/15/23 00:00	05/16/23 13:05	1
Barium	7.5		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 13:05	1
Iron	19		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 13:05	1
Manganese	1.6		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 13:05	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3C1-SW-1

Lab Sample ID: 580-126685-31

Date Collected: 03/17/23 16:43

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13	J	0.50	0.079	ng/L			05/10/23 15:39	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 13:20	1
Cadmium	0.014	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 13:20	1
Chromium	0.67	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 13:20	1
Copper	0.39	J B	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 13:20	1
Lead	0.021	J B	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 13:20	1
Nickel	0.15	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 13:20	1
Zinc	0.090	J B	0.50	0.070	ug/L		05/15/23 00:00	05/16/23 13:20	1
Barium	9.1		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 13:20	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 13:20	1
Manganese	0.58		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 13:20	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3C1-SW-20

Lab Sample ID: 580-126685-32

Date Collected: 03/17/23 16:50

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	J	0.50	0.079	ng/L			05/10/23 15:44	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 13:34	1
Cadmium	0.014	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 13:34	1
Chromium	0.71	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 13:34	1
Copper	0.16	J B	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 13:34	1
Lead	0.014	J B	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 13:34	1
Nickel	0.15	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 13:34	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 00:00	05/16/23 13:34	1
Barium	9.1		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 13:34	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 13:34	1
Manganese	0.57		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 13:34	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3C1-SW-40

Lab Sample ID: 580-126685-33

Date Collected: 03/17/23 17:00

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	J	0.50	0.079	ng/L			05/10/23 15:56	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.8		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 13:48	1
Cadmium	0.014	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 13:48	1
Chromium	0.75	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 13:48	1
Copper	0.13	J B	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 13:48	1
Lead	0.029	J B	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 13:48	1
Nickel	0.15	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 13:48	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 00:00	05/16/23 13:48	1
Barium	9.1		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 13:48	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 13:48	1
Manganese	0.30		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 13:48	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3C1-SW-B

Lab Sample ID: 580-126685-34

Date Collected: 03/17/23 17:13

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.15	J	0.50	0.079	ng/L			05/10/23 16:00	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.9		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 14:02	1
Cadmium	0.021	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 14:02	1
Chromium	0.76	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 14:02	1
Copper	0.14	J B	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 14:02	1
Lead	0.045	J B	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 14:02	1
Nickel	0.18	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 14:02	1
Zinc	0.080	J B	0.50	0.070	ug/L		05/15/23 00:00	05/16/23 14:02	1
Barium	10		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 14:02	1
Iron	17		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 14:02	1
Manganese	1.4		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 14:02	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3C2-SW-1

Lab Sample ID: 580-126685-35

Date Collected: 03/18/23 03:47

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.11	J	0.50	0.079	ng/L			05/10/23 16:04	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.5		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 18:02	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 18:02	1
Chromium	0.94		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 18:02	1
Copper	0.29	J B	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 18:02	1
Lead	0.041	J	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 18:02	1
Nickel	0.15	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 18:02	1
Zinc	0.21	J	0.50	0.070	ug/L		05/11/23 00:00	05/13/23 18:02	1
Barium	9.3		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 18:02	1
Iron	2.2		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 18:02	1
Manganese	0.47		0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 18:02	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3C2-SW-20

Lab Sample ID: 580-126685-36

Date Collected: 03/18/23 03:04

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.097	J	0.50	0.079	ng/L			05/10/23 16:08	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 18:16	1
Cadmium	0.015	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 18:16	1
Chromium	0.91		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 18:16	1
Copper	0.16	J B	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 18:16	1
Lead	0.015	J	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 18:16	1
Nickel	0.15	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 18:16	1
Zinc	0.077	J	0.50	0.070	ug/L		05/11/23 00:00	05/13/23 18:16	1
Barium	9.4		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 18:16	1
Iron	ND		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 18:16	1
Manganese	0.51		0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 18:16	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3C2-SW-40

Lab Sample ID: 580-126685-37

Date Collected: 03/18/23 04:03

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10	J	0.50	0.079	ng/L			05/10/23 16:13	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.1		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 06:54	1
Cadmium	0.012	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 06:54	1
Chromium	0.46	J B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 06:54	1
Copper	0.13	J	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 06:54	1
Lead	0.028	J	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 06:54	1
Nickel	0.14	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 06:54	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 00:00	05/16/23 06:54	1
Barium	4.8		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 06:54	1
Iron	1.8	J	2.0	1.1	ug/L		05/15/23 00:00	05/16/23 06:54	1
Manganese	0.24		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 06:54	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3C2-SW-B

Lab Sample ID: 580-126685-38

Date Collected: 03/18/23 04:15

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17	J	0.50	0.079	ng/L			05/10/23 16:17	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.8		0.60	0.42	ug/L		05/15/23 12:07	05/16/23 07:37	1
Cadmium	0.019	J	0.040	0.011	ug/L		05/15/23 12:07	05/16/23 07:37	1
Chromium	0.68	B	0.50	0.34	ug/L		05/15/23 12:07	05/16/23 07:37	1
Copper	0.14	J	1.0	0.020	ug/L		05/15/23 12:07	05/16/23 07:37	1
Lead	0.044	J	0.050	0.0040	ug/L		05/15/23 12:07	05/16/23 07:37	1
Nickel	0.20	J	0.30	0.11	ug/L		05/15/23 12:07	05/16/23 07:37	1
Zinc	0.096	J B	0.50	0.070	ug/L		05/15/23 12:07	05/16/23 07:37	1
Barium	8.8		0.50	0.13	ug/L		05/15/23 12:07	05/16/23 07:37	1
Iron	20		2.0	1.1	ug/L		05/15/23 12:07	05/16/23 07:37	1
Manganese	1.6		0.050	0.0080	ug/L		05/15/23 12:07	05/16/23 07:37	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3C3-SW-1

Lab Sample ID: 580-126685-39

Date Collected: 03/18/23 02:01

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.15	J	0.50	0.079	ng/L			05/10/23 16:21	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		05/15/23 12:07	05/16/23 08:20	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/15/23 12:07	05/16/23 08:20	1
Chromium	0.69	B	0.50	0.34	ug/L		05/15/23 12:07	05/16/23 08:20	1
Copper	0.17	J	1.0	0.020	ug/L		05/15/23 12:07	05/16/23 08:20	1
Lead	0.016	J	0.050	0.0040	ug/L		05/15/23 12:07	05/16/23 08:20	1
Nickel	0.18	J	0.30	0.11	ug/L		05/15/23 12:07	05/16/23 08:20	1
Zinc	0.13	J B	0.50	0.070	ug/L		05/15/23 12:07	05/16/23 08:20	1
Barium	8.5		0.50	0.13	ug/L		05/15/23 12:07	05/16/23 08:20	1
Iron	1.1	J	2.0	1.1	ug/L		05/15/23 12:07	05/16/23 08:20	1
Manganese	0.47		0.050	0.0080	ug/L		05/15/23 12:07	05/16/23 08:20	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3C3-SW-20

Lab Sample ID: 580-126685-40

Date Collected: 03/18/23 02:08

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13	J	0.50	0.079	ng/L			05/10/23 16:25	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.2		0.60	0.42	ug/L		05/15/23 12:07	05/16/23 19:30	1
Cadmium	ND		0.040	0.011	ug/L		05/15/23 12:07	05/16/23 19:30	1
Chromium	0.58	B	0.50	0.34	ug/L		05/15/23 12:07	05/16/23 19:30	1
Copper	0.12	J	1.0	0.020	ug/L		05/15/23 12:07	05/16/23 19:30	1
Lead	0.0090	J	0.050	0.0040	ug/L		05/15/23 12:07	05/16/23 19:30	1
Nickel	0.11	J	0.30	0.11	ug/L		05/15/23 12:07	05/16/23 19:30	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 12:07	05/16/23 19:30	1
Barium	6.3		0.50	0.13	ug/L		05/15/23 12:07	05/16/23 19:30	1
Iron	ND		2.0	1.1	ug/L		05/15/23 12:07	05/16/23 19:30	1
Manganese	0.45		0.050	0.0080	ug/L		05/15/23 12:07	05/16/23 19:30	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3C3-SW-40

Lab Sample ID: 580-126685-41

Date Collected: 03/18/23 02:07

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.16	J	0.50	0.079	ng/L			05/10/23 13:14	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.3		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 07:34	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 07:34	1
Chromium	0.77		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 07:34	1
Copper	0.13	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 07:34	1
Lead	0.012	J	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 07:34	1
Nickel	0.14	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 07:34	1
Zinc	ND		0.50	0.070	ug/L		05/11/23 00:00	05/13/23 07:34	1
Barium	6.8		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 07:34	1
Iron	ND		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 07:34	1
Manganese	0.30	B	0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 07:34	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3C3-SW-B

Lab Sample ID: 580-126685-42

Date Collected: 03/18/23 02:33

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.32	J	0.50	0.079	ng/L			05/10/23 13:18	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 08:17	1
Cadmium	0.019	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 08:17	1
Chromium	0.83		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 08:17	1
Copper	0.15	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 08:17	1
Lead	0.059		0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 08:17	1
Nickel	0.18	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 08:17	1
Zinc	0.17	J	0.50	0.070	ug/L		05/11/23 00:00	05/13/23 08:17	1
Barium	8.6		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 08:17	1
Iron	16		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 08:17	1
Manganese	1.5	B	0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 08:17	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3D1X-SW-1

Lab Sample ID: 580-126685-43

Date Collected: 03/17/23 12:21

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.39	J	0.50	0.079	ng/L			05/10/23 17:21	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.4		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 19:27	1
Cadmium	0.015	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 19:27	1
Chromium	0.92		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 19:27	1
Copper	0.22	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 19:27	1
Lead	0.020	J	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 19:27	1
Nickel	0.17	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 19:27	1
Zinc	0.090	J	0.50	0.070	ug/L		05/11/23 00:00	05/13/23 19:27	1
Barium	9.5		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 19:27	1
Iron	ND		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 19:27	1
Manganese	0.49	B	0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 19:27	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3D1X-SW-20

Lab Sample ID: 580-126685-44

Date Collected: 03/17/23 12:29

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10	J	0.50	0.079	ng/L			05/10/23 17:25	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.4		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 19:41	1
Cadmium	0.014	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 19:41	1
Chromium	0.94		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 19:41	1
Copper	0.15	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 19:41	1
Lead	0.012	J	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 19:41	1
Nickel	0.15	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 19:41	1
Zinc	ND		0.50	0.070	ug/L		05/11/23 00:00	05/13/23 19:41	1
Barium	9.2		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 19:41	1
Iron	ND		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 19:41	1
Manganese	0.41	B	0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 19:41	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3D1X-SW-40

Lab Sample ID: 580-126685-45

Date Collected: 03/17/23 12:39

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17	J	0.50	0.079	ng/L			05/10/23 17:30	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.5		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 19:56	1
Cadmium	0.014	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 19:56	1
Chromium	0.89		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 19:56	1
Copper	0.11	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 19:56	1
Lead	0.016	J	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 19:56	1
Nickel	0.14	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 19:56	1
Zinc	ND		0.50	0.070	ug/L		05/11/23 00:00	05/13/23 19:56	1
Barium	9.3		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 19:56	1
Iron	ND		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 19:56	1
Manganese	0.31	B	0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 19:56	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3D1X-SW-B

Lab Sample ID: 580-126685-46

Date Collected: 03/17/23 12:51

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.25	J	0.50	0.079	ng/L			05/10/23 17:34	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 20:10	1
Cadmium	0.021	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 20:10	1
Chromium	0.94		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 20:10	1
Copper	0.13	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 20:10	1
Lead	0.038	J	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 20:10	1
Nickel	0.17	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 20:10	1
Zinc	ND		0.50	0.070	ug/L		05/11/23 00:00	05/13/23 20:10	1
Barium	10		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 20:10	1
Iron	16		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 20:10	1
Manganese	1.6	B	0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 20:10	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3D2-SW-1

Lab Sample ID: 580-126685-47

Date Collected: 03/17/23 04:33

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.15	J	0.50	0.079	ng/L			05/10/23 13:22	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.5		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 20:53	1
Cadmium	0.014	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 20:53	1
Chromium	0.89		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 20:53	1
Copper	0.15	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 20:53	1
Lead	0.024	J	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 20:53	1
Nickel	0.15	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 20:53	1
Zinc	ND		0.50	0.070	ug/L		05/11/23 00:00	05/13/23 20:53	1
Barium	9.5		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 20:53	1
Iron	ND		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 20:53	1
Manganese	0.50	B	0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 20:53	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3D2-SW-1-FD

Lab Sample ID: 580-126685-48

Date Collected: 03/17/23 04:41

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17	J	0.50	0.079	ng/L			05/10/23 13:27	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.5		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 21:07	1
Cadmium	0.015	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 21:07	1
Chromium	0.88		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 21:07	1
Copper	0.22	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 21:07	1
Lead	0.11		0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 21:07	1
Nickel	0.15	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 21:07	1
Zinc	0.17	J	0.50	0.070	ug/L		05/11/23 00:00	05/13/23 21:07	1
Barium	9.1		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 21:07	1
Iron	ND		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 21:07	1
Manganese	0.42	B	0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 21:07	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3D2-SW-20

Lab Sample ID: 580-126685-49

Date Collected: 03/17/23 04:48

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.21	J	0.50	0.079	ng/L			05/10/23 17:38	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.5		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 21:21	1
Cadmium	0.014	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 21:21	1
Chromium	0.92		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 21:21	1
Copper	0.16	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 21:21	1
Lead	0.016	J	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 21:21	1
Nickel	0.15	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 21:21	1
Zinc	ND		0.50	0.070	ug/L		05/11/23 00:00	05/13/23 21:21	1
Barium	9.5		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 21:21	1
Iron	ND		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 21:21	1
Manganese	0.39	B	0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 21:21	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3D2-SW-40

Lab Sample ID: 580-126685-50

Date Collected: 03/17/23 04:58

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.088	J	0.50	0.079	ng/L			05/10/23 12:00	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.5		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 21:35	1
Cadmium	0.014	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 21:35	1
Chromium	1.1		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 21:35	1
Copper	0.13	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 21:35	1
Lead	0.015	J	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 21:35	1
Nickel	0.15	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 21:35	1
Zinc	ND		0.50	0.070	ug/L		05/11/23 00:00	05/13/23 21:35	1
Barium	9.8		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 21:35	1
Iron	ND		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 21:35	1
Manganese	0.34	B	0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 21:35	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3D2-SW-B

Lab Sample ID: 580-126685-51

Date Collected: 03/17/23 05:10

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17	J	0.50	0.079	ng/L			05/10/23 12:04	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 21:50	1
Cadmium	0.021	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 21:50	1
Chromium	1.0		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 21:50	1
Copper	0.14	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 21:50	1
Lead	0.033	J	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 21:50	1
Nickel	0.16	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 21:50	1
Zinc	0.080	J	0.50	0.070	ug/L		05/11/23 00:00	05/13/23 21:50	1
Barium	10		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 21:50	1
Iron	13		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 21:50	1
Manganese	1.4	B	0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 21:50	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3D3-SW-1

Lab Sample ID: 580-126685-52

Date Collected: 03/17/23 03:38

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.099	J	0.50	0.079	ng/L			05/10/23 16:29	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.4		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 22:04	1
Cadmium	0.014	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 22:04	1
Chromium	1.1		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 22:04	1
Copper	0.24	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 22:04	1
Lead	1.3		0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 22:04	1
Nickel	0.15	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 22:04	1
Zinc	0.41	J	0.50	0.070	ug/L		05/11/23 00:00	05/13/23 22:04	1
Barium	9.2		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 22:04	1
Iron	1.7	J	2.0	1.1	ug/L		05/11/23 00:00	05/13/23 22:04	1
Manganese	0.48	B	0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 22:04	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3D3-SW-20

Lab Sample ID: 580-126685-53

Date Collected: 03/17/23 03:49

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.098	J	0.50	0.079	ng/L			05/10/23 16:33	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.3		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 22:18	1
Cadmium	0.012	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 22:18	1
Chromium	1.1		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 22:18	1
Copper	0.15	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 22:18	1
Lead	0.017	J	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 22:18	1
Nickel	0.14	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 22:18	1
Zinc	ND		0.50	0.070	ug/L		05/11/23 00:00	05/13/23 22:18	1
Barium	9.4		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 22:18	1
Iron	ND		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 22:18	1
Manganese	0.42	B	0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 22:18	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3D3-SW-40

Lab Sample ID: 580-126685-54

Date Collected: 03/17/23 03:59

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 12:08	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.4		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 22:32	1
Cadmium	0.014	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 22:32	1
Chromium	1.1		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 22:32	1
Copper	0.28	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 22:32	1
Lead	0.029	J	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 22:32	1
Nickel	0.14	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 22:32	1
Zinc	ND		0.50	0.070	ug/L		05/11/23 00:00	05/13/23 22:32	1
Barium	9.7		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 22:32	1
Iron	ND		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 22:32	1
Manganese	0.33	B	0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 22:32	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3D3-SW-B

Lab Sample ID: 580-126685-55

Date Collected: 03/17/23 04:14

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17	J	0.50	0.079	ng/L			05/10/23 12:12	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 22:47	1
Cadmium	0.021	J	0.040	0.011	ug/L		05/11/23 00:00	05/13/23 22:47	1
Chromium	1.1		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 22:47	1
Copper	0.14	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 22:47	1
Lead	0.035	J	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 22:47	1
Nickel	0.17	J	0.30	0.11	ug/L		05/11/23 00:00	05/13/23 22:47	1
Zinc	ND		0.50	0.070	ug/L		05/11/23 00:00	05/13/23 22:47	1
Barium	11		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 22:47	1
Iron	13		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 22:47	1
Manganese	1.4	B	0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 22:47	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-EQ

Lab Sample ID: 580-126685-56

Date Collected: 03/17/23 03:25

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.23	J	0.50	0.079	ng/L			05/10/23 16:46	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 23:01	1
Cadmium	ND		0.040	0.011	ug/L		05/11/23 00:00	05/13/23 23:01	1
Chromium	ND		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 23:01	1
Copper	1.4		1.0	0.020	ug/L		05/11/23 00:00	05/13/23 23:01	1
Lead	0.11		0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 23:01	1
Nickel	ND		0.30	0.11	ug/L		05/11/23 00:00	05/13/23 23:01	1
Zinc	0.96		0.50	0.070	ug/L		05/11/23 00:00	05/13/23 23:01	1
Barium	0.14	J	0.50	0.13	ug/L		05/11/23 00:00	05/13/23 23:01	1
Iron	ND		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 23:01	1
Manganese	0.091	B	0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 23:01	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-WB

Lab Sample ID: 580-126685-57

Date Collected: 03/17/23 03:30

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 16:50	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 05:43	1
Cadmium	ND		0.040	0.011	ug/L		05/15/23 00:00	05/16/23 05:43	1
Chromium	ND		0.50	0.34	ug/L		05/15/23 00:00	05/16/23 05:43	1
Copper	0.026	J	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 05:43	1
Lead	ND		0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 05:43	1
Nickel	ND		0.30	0.11	ug/L		05/15/23 00:00	05/16/23 05:43	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 00:00	05/16/23 05:43	1
Barium	ND		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 05:43	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 05:43	1
Manganese	0.095		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 05:43	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-1B2X-SW-1

Lab Sample ID: 580-126685-139

Date Collected: 03/23/23 00:50

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	J	0.50	0.079	ng/L			05/11/23 18:06	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.4		0.60	0.42	ug/L		05/15/23 12:07	05/16/23 22:07	1
Cadmium	0.014	J	0.040	0.011	ug/L		05/15/23 12:07	05/16/23 22:07	1
Chromium	0.71	B	0.50	0.34	ug/L		05/15/23 12:07	05/16/23 22:07	1
Copper	0.14	J	1.0	0.020	ug/L		05/15/23 12:07	05/16/23 22:07	1
Lead	0.022	J	0.050	0.0040	ug/L		05/15/23 12:07	05/16/23 22:07	1
Nickel	0.14	J	0.30	0.11	ug/L		05/15/23 12:07	05/16/23 22:07	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 12:07	05/16/23 22:07	1
Barium	8.7		0.50	0.13	ug/L		05/15/23 12:07	05/16/23 22:07	1
Iron	ND		2.0	1.1	ug/L		05/15/23 12:07	05/16/23 22:07	1
Manganese	0.39		0.050	0.0080	ug/L		05/15/23 12:07	05/16/23 22:07	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-1B2X-SW-20

Lab Sample ID: 580-126685-140

Date Collected: 03/23/23 00:56

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.24	J	0.50	0.079	ng/L			05/11/23 18:10	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.2		0.60	0.42	ug/L		05/15/23 12:07	05/16/23 22:21	1
Cadmium	0.011	J	0.040	0.011	ug/L		05/15/23 12:07	05/16/23 22:21	1
Chromium	0.73	B	0.50	0.34	ug/L		05/15/23 12:07	05/16/23 22:21	1
Copper	0.13	J	1.0	0.020	ug/L		05/15/23 12:07	05/16/23 22:21	1
Lead	0.014	J	0.050	0.0040	ug/L		05/15/23 12:07	05/16/23 22:21	1
Nickel	0.18	J	0.30	0.11	ug/L		05/15/23 12:07	05/16/23 22:21	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 12:07	05/16/23 22:21	1
Barium	7.6		0.50	0.13	ug/L		05/15/23 12:07	05/16/23 22:21	1
Iron	1.1	J	2.0	1.1	ug/L		05/15/23 12:07	05/16/23 22:21	1
Manganese	0.32		0.050	0.0080	ug/L		05/15/23 12:07	05/16/23 22:21	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-1B2X-SW-40

Lab Sample ID: 580-126685-141

Date Collected: 03/23/23 01:05

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19	J	0.50	0.079	ng/L			05/11/23 18:14	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.3		0.60	0.42	ug/L		05/15/23 12:07	05/16/23 22:35	1
Cadmium	ND		0.040	0.011	ug/L		05/15/23 12:07	05/16/23 22:35	1
Chromium	0.65	B	0.50	0.34	ug/L		05/15/23 12:07	05/16/23 22:35	1
Copper	0.11	J	1.0	0.020	ug/L		05/15/23 12:07	05/16/23 22:35	1
Lead	0.013	J	0.050	0.0040	ug/L		05/15/23 12:07	05/16/23 22:35	1
Nickel	0.11	J	0.30	0.11	ug/L		05/15/23 12:07	05/16/23 22:35	1
Zinc	0.16	J B	0.50	0.070	ug/L		05/15/23 12:07	05/16/23 22:35	1
Barium	7.1		0.50	0.13	ug/L		05/15/23 12:07	05/16/23 22:35	1
Iron	ND		2.0	1.1	ug/L		05/15/23 12:07	05/16/23 22:35	1
Manganese	0.21		0.050	0.0080	ug/L		05/15/23 12:07	05/16/23 22:35	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-1B2X-SW-B

Lab Sample ID: 580-126685-142

Date Collected: 03/23/23 01:17

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.28	J	0.50	0.079	ng/L			05/11/23 18:19	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.9		0.60	0.42	ug/L		05/15/23 12:07	05/16/23 22:50	1
Cadmium	0.019	J	0.040	0.011	ug/L		05/15/23 12:07	05/16/23 22:50	1
Chromium	0.76	B	0.50	0.34	ug/L		05/15/23 12:07	05/16/23 22:50	1
Copper	0.13	J	1.0	0.020	ug/L		05/15/23 12:07	05/16/23 22:50	1
Lead	0.038	J	0.050	0.0040	ug/L		05/15/23 12:07	05/16/23 22:50	1
Nickel	0.16	J	0.30	0.11	ug/L		05/15/23 12:07	05/16/23 22:50	1
Zinc	0.080	J B	0.50	0.070	ug/L		05/15/23 12:07	05/16/23 22:50	1
Barium	10		0.50	0.13	ug/L		05/15/23 12:07	05/16/23 22:50	1
Iron	13		2.0	1.1	ug/L		05/15/23 12:07	05/16/23 22:50	1
Manganese	1.1		0.050	0.0080	ug/L		05/15/23 12:07	05/16/23 22:50	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-1C2-SW-1

Lab Sample ID: 580-126685-143

Date Collected: 03/23/23 02:22

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 18:00	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.1		0.60	0.42	ug/L		05/15/23 12:07	05/16/23 23:04	1
Cadmium	0.011	J	0.040	0.011	ug/L		05/15/23 12:07	05/16/23 23:04	1
Chromium	0.69	B	0.50	0.34	ug/L		05/15/23 12:07	05/16/23 23:04	1
Copper	0.12	J	1.0	0.020	ug/L		05/15/23 12:07	05/16/23 23:04	1
Lead	0.045	J	0.050	0.0040	ug/L		05/15/23 12:07	05/16/23 23:04	1
Nickel	0.11	J	0.30	0.11	ug/L		05/15/23 12:07	05/16/23 23:04	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 12:07	05/16/23 23:04	1
Barium	7.2		0.50	0.13	ug/L		05/15/23 12:07	05/16/23 23:04	1
Iron	ND		2.0	1.1	ug/L		05/15/23 12:07	05/16/23 23:04	1
Manganese	0.34		0.050	0.0080	ug/L		05/15/23 12:07	05/16/23 23:04	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-1C2-SW-20

Lab Sample ID: 580-126685-144

Date Collected: 03/23/23 02:28

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 18:04	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.2		0.60	0.42	ug/L		05/15/23 12:07	05/16/23 23:47	1
Cadmium	ND		0.040	0.011	ug/L		05/15/23 12:07	05/16/23 23:47	1
Chromium	0.62	B	0.50	0.34	ug/L		05/15/23 12:07	05/16/23 23:47	1
Copper	0.12	J	1.0	0.020	ug/L		05/15/23 12:07	05/16/23 23:47	1
Lead	0.013	J	0.050	0.0040	ug/L		05/15/23 12:07	05/16/23 23:47	1
Nickel	0.11	J	0.30	0.11	ug/L		05/15/23 12:07	05/16/23 23:47	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 12:07	05/16/23 23:47	1
Barium	6.8		0.50	0.13	ug/L		05/15/23 12:07	05/16/23 23:47	1
Iron	ND		2.0	1.1	ug/L		05/15/23 12:07	05/16/23 23:47	1
Manganese	0.29		0.050	0.0080	ug/L		05/15/23 12:07	05/16/23 23:47	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-1C2-SW-40

Lab Sample ID: 580-126685-145

Date Collected: 03/23/23 02:37

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 18:09	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.8		0.60	0.42	ug/L		05/15/23 12:07	05/17/23 00:01	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/15/23 12:07	05/17/23 00:01	1
Chromium	0.74	B	0.50	0.34	ug/L		05/15/23 12:07	05/17/23 00:01	1
Copper	0.12	J	1.0	0.020	ug/L		05/15/23 12:07	05/17/23 00:01	1
Lead	0.018	J	0.050	0.0040	ug/L		05/15/23 12:07	05/17/23 00:01	1
Nickel	0.14	J	0.30	0.11	ug/L		05/15/23 12:07	05/17/23 00:01	1
Zinc	0.12	J B	0.50	0.070	ug/L		05/15/23 12:07	05/17/23 00:01	1
Barium	8.8		0.50	0.13	ug/L		05/15/23 12:07	05/17/23 00:01	1
Iron	ND		2.0	1.1	ug/L		05/15/23 12:07	05/17/23 00:01	1
Manganese	0.27		0.050	0.0080	ug/L		05/15/23 12:07	05/17/23 00:01	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-1C2-SW-B

Lab Sample ID: 580-126685-146

Date Collected: 03/23/23 02:48

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.14	J	0.50	0.079	ng/L			05/10/23 18:13	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.8		0.60	0.42	ug/L		05/15/23 12:07	05/17/23 00:15	1
Cadmium	0.017	J	0.040	0.011	ug/L		05/15/23 12:07	05/17/23 00:15	1
Chromium	0.73	B	0.50	0.34	ug/L		05/15/23 12:07	05/17/23 00:15	1
Copper	0.13	J	1.0	0.020	ug/L		05/15/23 12:07	05/17/23 00:15	1
Lead	0.028	J	0.050	0.0040	ug/L		05/15/23 12:07	05/17/23 00:15	1
Nickel	0.15	J	0.30	0.11	ug/L		05/15/23 12:07	05/17/23 00:15	1
Zinc	0.11	J B	0.50	0.070	ug/L		05/15/23 12:07	05/17/23 00:15	1
Barium	9.4		0.50	0.13	ug/L		05/15/23 12:07	05/17/23 00:15	1
Iron	13		2.0	1.1	ug/L		05/15/23 12:07	05/17/23 00:15	1
Manganese	1.2		0.050	0.0080	ug/L		05/15/23 12:07	05/17/23 00:15	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-2C2X-SW-1

Lab Sample ID: 580-126685-147

Date Collected: 03/23/23 04:27

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.079	J	0.50	0.079	ng/L			05/10/23 18:25	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.3		0.60	0.42	ug/L		05/15/23 12:07	05/17/23 00:29	1
Cadmium	0.011	J	0.040	0.011	ug/L		05/15/23 12:07	05/17/23 00:29	1
Chromium	0.74	B	0.50	0.34	ug/L		05/15/23 12:07	05/17/23 00:29	1
Copper	0.13	J	1.0	0.020	ug/L		05/15/23 12:07	05/17/23 00:29	1
Lead	0.059		0.050	0.0040	ug/L		05/15/23 12:07	05/17/23 00:29	1
Nickel	0.14	J	0.30	0.11	ug/L		05/15/23 12:07	05/17/23 00:29	1
Zinc	0.079	J B	0.50	0.070	ug/L		05/15/23 12:07	05/17/23 00:29	1
Barium	7.8		0.50	0.13	ug/L		05/15/23 12:07	05/17/23 00:29	1
Iron	ND		2.0	1.1	ug/L		05/15/23 12:07	05/17/23 00:29	1
Manganese	0.34		0.050	0.0080	ug/L		05/15/23 12:07	05/17/23 00:29	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-2C2X-SW-20

Lab Sample ID: 580-126685-148

Date Collected: 03/23/23 04:34

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.35	J	0.50	0.079	ng/L			05/10/23 18:29	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.3		0.60	0.42	ug/L		05/17/23 00:00	05/18/23 23:16	1
Cadmium	0.014	J	0.040	0.011	ug/L		05/17/23 00:00	05/18/23 23:16	1
Chromium	1.1		0.50	0.34	ug/L		05/17/23 00:00	05/18/23 23:16	1
Copper	0.21		0.10	0.020	ug/L		05/17/23 00:00	05/18/23 23:16	1
Lead	0.24		0.025	0.0040	ug/L		05/17/23 00:00	05/18/23 23:16	1
Nickel	0.20	J	0.30	0.11	ug/L		05/17/23 00:00	05/18/23 23:16	1
Zinc	0.87		0.50	0.070	ug/L		05/17/23 00:00	05/18/23 23:16	1
Barium	8.9		0.20	0.13	ug/L		05/17/23 00:00	05/18/23 23:16	1
Iron	10		2.0	1.1	ug/L		05/17/23 00:00	05/18/23 23:16	1
Manganese	0.59		0.050	0.0080	ug/L		05/17/23 00:00	05/18/23 23:16	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-2C2X-SW-40

Lab Sample ID: 580-126685-149

Date Collected: 03/23/23 04:43

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 18:33	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.5		0.60	0.42	ug/L		05/17/23 00:00	05/18/23 23:59	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/17/23 00:00	05/18/23 23:59	1
Chromium	1.2		0.50	0.34	ug/L		05/17/23 00:00	05/18/23 23:59	1
Copper	0.14		0.10	0.020	ug/L		05/17/23 00:00	05/18/23 23:59	1
Lead	0.023	J	0.025	0.0040	ug/L		05/17/23 00:00	05/18/23 23:59	1
Nickel	0.16	J	0.30	0.11	ug/L		05/17/23 00:00	05/18/23 23:59	1
Zinc	0.070	J	0.50	0.070	ug/L		05/17/23 00:00	05/18/23 23:59	1
Barium	8.1		0.20	0.13	ug/L		05/17/23 00:00	05/18/23 23:59	1
Iron	ND		2.0	1.1	ug/L		05/17/23 00:00	05/18/23 23:59	1
Manganese	0.29		0.050	0.0080	ug/L		05/17/23 00:00	05/18/23 23:59	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-2C2X-SW-B

Lab Sample ID: 580-126685-150

Date Collected: 03/23/23 04:55

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.54		0.50	0.079	ng/L			05/10/23 18:38	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.2		0.60	0.42	ug/L		05/17/23 00:00	05/19/23 06:24	1
Cadmium	0.014	J	0.040	0.011	ug/L		05/17/23 00:00	05/19/23 06:24	1
Chromium	1.1		0.50	0.34	ug/L		05/17/23 00:00	05/19/23 06:24	1
Copper	0.13		0.10	0.020	ug/L		05/17/23 00:00	05/19/23 06:24	1
Lead	0.039		0.025	0.0040	ug/L		05/17/23 00:00	05/19/23 06:24	1
Nickel	0.13	J	0.30	0.11	ug/L		05/17/23 00:00	05/19/23 06:24	1
Zinc	ND		0.50	0.070	ug/L		05/17/23 00:00	05/19/23 06:24	1
Barium	7.1		0.20	0.13	ug/L		05/17/23 00:00	05/19/23 06:24	1
Iron	15		2.0	1.1	ug/L		05/17/23 00:00	05/19/23 06:24	1
Manganese	1.4		0.050	0.0080	ug/L		05/17/23 00:00	05/19/23 06:24	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-3B2-SW-1

Lab Sample ID: 580-126685-151

Date Collected: 03/22/23 20:25

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.085	J	0.50	0.079	ng/L			05/10/23 18:42	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.2		0.60	0.42	ug/L		05/17/23 00:00	05/19/23 06:38	1
Cadmium	0.011	J	0.040	0.011	ug/L		05/17/23 00:00	05/19/23 06:38	1
Chromium	1.2		0.50	0.34	ug/L		05/17/23 00:00	05/19/23 06:38	1
Copper	0.15		0.10	0.020	ug/L		05/17/23 00:00	05/19/23 06:38	1
Lead	0.019	J	0.025	0.0040	ug/L		05/17/23 00:00	05/19/23 06:38	1
Nickel	0.13	J	0.30	0.11	ug/L		05/17/23 00:00	05/19/23 06:38	1
Zinc	0.092	J	0.50	0.070	ug/L		05/17/23 00:00	05/19/23 06:38	1
Barium	8.1		0.20	0.13	ug/L		05/17/23 00:00	05/19/23 06:38	1
Iron	ND		2.0	1.1	ug/L		05/17/23 00:00	05/19/23 06:38	1
Manganese	0.41		0.050	0.0080	ug/L		05/17/23 00:00	05/19/23 06:38	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-3B2-SW-20

Lab Sample ID: 580-126685-152

Date Collected: 03/22/23 20:31

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 18:46	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.3		0.60	0.42	ug/L		05/25/23 00:00	05/26/23 23:19	1
Cadmium	0.012	J	0.040	0.011	ug/L		05/25/23 00:00	05/26/23 23:19	1
Chromium	1.5		0.50	0.34	ug/L		05/25/23 00:00	05/26/23 23:19	1
Copper	0.18	J B	1.0	0.020	ug/L		05/25/23 00:00	05/26/23 23:19	1
Lead	0.028	J B	0.050	0.0040	ug/L		05/25/23 00:00	05/26/23 23:19	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/26/23 23:19	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/26/23 23:19	1
Barium	7.0		0.50	0.13	ug/L		05/25/23 00:00	05/26/23 23:19	1
Iron	1.8	J	2.0	1.1	ug/L		05/25/23 00:00	05/26/23 23:19	1
Manganese	0.36		0.050	0.0080	ug/L		05/25/23 00:00	05/26/23 23:19	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-3B2-SW-40

Lab Sample ID: 580-126685-153

Date Collected: 03/22/23 20:42

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.092	J	0.50	0.079	ng/L			05/10/23 18:50	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 00:02	1
Cadmium	0.014	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 00:02	1
Chromium	1.6		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 00:02	1
Copper	0.13	J B	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 00:02	1
Lead	0.018	J B	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 00:02	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 00:02	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/27/23 00:02	1
Barium	7.9		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 00:02	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 00:02	1
Manganese	0.27		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 00:02	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-3B2-SW-B

Lab Sample ID: 580-126685-154

Date Collected: 03/22/23 20:54

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17	J	0.50	0.079	ng/L			05/10/23 18:54	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.9		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 07:24	1
Cadmium	0.019	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 07:24	1
Chromium	1.4		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 07:24	1
Copper	0.16	J B	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 07:24	1
Lead	0.10	B	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 07:24	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 07:24	1
Zinc	0.071	J B	0.50	0.070	ug/L		05/25/23 00:00	05/27/23 07:24	1
Barium	9.4		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 07:24	1
Iron	16		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 07:24	1
Manganese	1.4		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 07:24	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-3C2X-SW-1

Lab Sample ID: 580-126685-155

Date Collected: 03/22/23 19:15

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.082	J	0.50	0.079	ng/L			05/10/23 18:58	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.3		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 07:38	1
Cadmium	0.014	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 07:38	1
Chromium	1.4		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 07:38	1
Copper	0.17	J B	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 07:38	1
Lead	0.016	J B	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 07:38	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 07:38	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/27/23 07:38	1
Barium	7.7		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 07:38	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 07:38	1
Manganese	0.40		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 07:38	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-3C2X-SW-20

Lab Sample ID: 580-126685-156

Date Collected: 03/22/23 19:24

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 19:03	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.2		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 07:53	1
Cadmium	0.012	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 07:53	1
Chromium	1.4		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 07:53	1
Copper	0.21	J B	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 07:53	1
Lead	0.024	J B	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 07:53	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 07:53	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/27/23 07:53	1
Barium	6.9		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 07:53	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 07:53	1
Manganese	0.33		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 07:53	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-3C2X-SW-40

Lab Sample ID: 580-126685-157

Date Collected: 03/22/23 19:33

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 19:15	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.9		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 08:07	1
Cadmium	0.014	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 08:07	1
Chromium	1.5		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 08:07	1
Copper	0.16	J B	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 08:07	1
Lead	0.030	J B	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 08:07	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 08:07	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/27/23 08:07	1
Barium	8.2		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 08:07	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 08:07	1
Manganese	0.27		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 08:07	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-3C2X-SW-B

Lab Sample ID: 580-126685-158

Date Collected: 03/22/23 19:44

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17	J	0.50	0.079	ng/L			05/10/23 19:19	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.0		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 08:21	1
Cadmium	0.019	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 08:21	1
Chromium	1.6		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 08:21	1
Copper	0.14	J B	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 08:21	1
Lead	0.037	J B	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 08:21	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 08:21	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/27/23 08:21	1
Barium	8.8		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 08:21	1
Iron	13		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 08:21	1
Manganese	1.1		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 08:21	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-4B2X-SW-1

Lab Sample ID: 580-126685-159

Date Collected: 03/22/23 22:18

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.097	J	0.50	0.079	ng/L			05/10/23 19:23	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.3		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 08:35	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 08:35	1
Chromium	1.5		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 08:35	1
Copper	0.15	J B	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 08:35	1
Lead	0.041	J B	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 08:35	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 08:35	1
Zinc	2.2	B	0.50	0.070	ug/L		05/25/23 00:00	05/27/23 08:35	1
Barium	7.4		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 08:35	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 08:35	1
Manganese	0.38		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 08:35	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-4B2X-SW-20

Lab Sample ID: 580-126685-160

Date Collected: 03/22/23 22:24

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 19:27	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 09:18	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 09:18	1
Chromium	1.6		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 09:18	1
Copper	0.21	J B	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 09:18	1
Lead	0.059	B	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 09:18	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 09:18	1
Zinc	0.099	J B	0.50	0.070	ug/L		05/25/23 00:00	05/27/23 09:18	1
Barium	7.8		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 09:18	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 09:18	1
Manganese	0.38		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 09:18	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-4B2X-SW-40

Lab Sample ID: 580-126685-161

Date Collected: 03/22/23 22:33

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.15	J	0.50	0.079	ng/L			05/10/23 18:45	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.9		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 09:32	1
Cadmium	0.014	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 09:32	1
Chromium	1.6		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 09:32	1
Copper	0.14	J B	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 09:32	1
Lead	0.037	J B	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 09:32	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 09:32	1
Zinc	0.43	J B	0.50	0.070	ug/L		05/25/23 00:00	05/27/23 09:32	1
Barium	8.0		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 09:32	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 09:32	1
Manganese	0.27		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 09:32	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-4B2X-SW-B

Lab Sample ID: 580-126685-162

Date Collected: 03/22/23 22:44

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.15	J	0.50	0.079	ng/L			05/10/23 18:57	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.8		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 09:46	1
Cadmium	0.017	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 09:46	1
Chromium	1.5		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 09:46	1
Copper	0.13	J B	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 09:46	1
Lead	0.030	J B	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 09:46	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 09:46	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/27/23 09:46	1
Barium	7.5		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 09:46	1
Iron	14		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 09:46	1
Manganese	1.2		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 09:46	1

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 580-425969/20

Matrix: Water

Analysis Batch: 425969

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/11/23 13:19	1

Lab Sample ID: MB 580-425969/23

Matrix: Water

Analysis Batch: 425969

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/11/23 13:31	1

Lab Sample ID: MB 580-425969/24

Matrix: Water

Analysis Batch: 425969

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/11/23 13:35	1

Lab Sample ID: MB 580-425969/25

Matrix: Water

Analysis Batch: 425969

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/11/23 13:39	1

Lab Sample ID: MB 580-425969/26

Matrix: Water

Analysis Batch: 425969

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.108	J	0.50	0.079	ng/L			05/11/23 13:44	1

Lab Sample ID: MB 580-425969/27

Matrix: Water

Analysis Batch: 425969

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.133	J	0.50	0.079	ng/L			05/11/23 13:48	1

Lab Sample ID: LCS 580-425969/30

Matrix: Water

Analysis Batch: 425969

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.04		ng/L		101	77 - 123

Lab Sample ID: LCS 580-425969/32

Matrix: Water

Analysis Batch: 425969

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.01		ng/L		100	77 - 123

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: LCSD 580-425969/31
Matrix: Water
Analysis Batch: 425969

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	5.00		ng/L		100	77 - 123	1	24

Lab Sample ID: LCSD 580-425969/35
Matrix: Water
Analysis Batch: 425969

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	4.96		ng/L		99	77 - 123	1	24

Lab Sample ID: MB 580-425972/17
Matrix: Water
Analysis Batch: 425972

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 13:31	1

Lab Sample ID: MB 580-425972/18
Matrix: Water
Analysis Batch: 425972

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 13:35	1

Lab Sample ID: MB 580-425972/19
Matrix: Water
Analysis Batch: 425972

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 13:39	1

Lab Sample ID: MB 580-425972/20
Matrix: Water
Analysis Batch: 425972

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 13:43	1

Lab Sample ID: MB 580-425972/23
Matrix: Water
Analysis Batch: 425972

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 13:56	1

Lab Sample ID: MB 580-425972/24
Matrix: Water
Analysis Batch: 425972

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 14:00	1

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 580-425972/25
Matrix: Water
Analysis Batch: 425972

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 14:04	1

Lab Sample ID: MB 580-425972/26
Matrix: Water
Analysis Batch: 425972

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 14:08	1

Lab Sample ID: MB 580-425972/27
Matrix: Water
Analysis Batch: 425972

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 14:13	1

Lab Sample ID: LCS 580-425972/28
Matrix: Water
Analysis Batch: 425972

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.39		ng/L		108	77 - 123

Lab Sample ID: LCS 580-425972/30
Matrix: Water
Analysis Batch: 425972

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.26		ng/L		105	77 - 123

Lab Sample ID: LCS 580-425972/32
Matrix: Water
Analysis Batch: 425972

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.17		ng/L		103	77 - 123

Lab Sample ID: LCSD 580-425972/29
Matrix: Water
Analysis Batch: 425972

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	5.21		ng/L		104	77 - 123	3	24

Lab Sample ID: LCSD 580-425972/31
Matrix: Water
Analysis Batch: 425972

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	5.39		ng/L		108	77 - 123	2	24

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: LCSD 580-425972/35

Matrix: Water

Analysis Batch: 425972

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	5.14		ng/L		103	77 - 123	1	24

Lab Sample ID: 580-126685-5 MS

Matrix: Water

Analysis Batch: 425972

Client Sample ID: LAWA-1C1-SW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.24	J	5.00	4.87		ng/L		93	71 - 125		

Lab Sample ID: 580-126685-5 MSD

Matrix: Water

Analysis Batch: 425972

Client Sample ID: LAWA-1C1-SW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.24	J	5.00	4.84		ng/L		92	71 - 125	1	24

Lab Sample ID: 580-126685-6 MS

Matrix: Water

Analysis Batch: 425972

Client Sample ID: LAWA-1C1-SW-20

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.22	J	5.00	5.13		ng/L		98	71 - 125		

Lab Sample ID: 580-126685-6 MSD

Matrix: Water

Analysis Batch: 425972

Client Sample ID: LAWA-1C1-SW-20

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.22	J	5.00	4.84		ng/L		92	71 - 125	6	24

Lab Sample ID: 580-126685-41 MS

Matrix: Water

Analysis Batch: 425972

Client Sample ID: LAWA-3C3-SW-40

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.16	J	5.00	4.42		ng/L		85	71 - 125		

Lab Sample ID: 580-126685-41 MSD

Matrix: Water

Analysis Batch: 425972

Client Sample ID: LAWA-3C3-SW-40

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.16	J	5.00	4.45		ng/L		86	71 - 125	1	24

Lab Sample ID: 580-126685-42 MS

Matrix: Water

Analysis Batch: 425972

Client Sample ID: LAWA-3C3-SW-B

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.32	J	5.00	4.93		ng/L		92	71 - 125		

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: 580-126685-42 MSD
Matrix: Water
Analysis Batch: 425972

Client Sample ID: LAWA-3C3-SW-B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.32	J	5.00	4.92		ng/L		92	71 - 125	0	24

Lab Sample ID: 580-126685-47 MS
Matrix: Water
Analysis Batch: 425972

Client Sample ID: LAWA-3D2-SW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	0.15	J	5.00	4.61		ng/L		89	71 - 125		

Lab Sample ID: 580-126685-47 MSD
Matrix: Water
Analysis Batch: 425972

Client Sample ID: LAWA-3D2-SW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.15	J	5.00	4.57		ng/L		88	71 - 125	1	24

Lab Sample ID: 580-126685-48 MS
Matrix: Water
Analysis Batch: 425972

Client Sample ID: LAWA-3D2-SW-1-FD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	0.17	J	5.00	4.60		ng/L		89	71 - 125		

Lab Sample ID: 580-126685-48 MSD
Matrix: Water
Analysis Batch: 425972

Client Sample ID: LAWA-3D2-SW-1-FD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.17	J	5.00	4.43		ng/L		85	71 - 125	4	24

Lab Sample ID: MB 580-426164/17
Matrix: Water
Analysis Batch: 426164

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 12:16	1

Lab Sample ID: MB 580-426164/18
Matrix: Water
Analysis Batch: 426164

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 12:20	1

Lab Sample ID: MB 580-426164/19
Matrix: Water
Analysis Batch: 426164

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 12:25	1

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 580-426164/22

Matrix: Water

Analysis Batch: 426164

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 12:37	1

Lab Sample ID: MB 580-426164/23

Matrix: Water

Analysis Batch: 426164

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 12:41	1

Lab Sample ID: MB 580-426164/24

Matrix: Water

Analysis Batch: 426164

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 12:45	1

Lab Sample ID: MB 580-426164/25

Matrix: Water

Analysis Batch: 426164

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 12:49	1

Lab Sample ID: MB 580-426164/26

Matrix: Water

Analysis Batch: 426164

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 12:54	1

Lab Sample ID: MB 580-426164/27

Matrix: Water

Analysis Batch: 426164

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 12:58	1

Lab Sample ID: LCS 580-426164/28

Matrix: Water

Analysis Batch: 426164

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.99		ng/L		100	77 - 123

Lab Sample ID: LCS 580-426164/30

Matrix: Water

Analysis Batch: 426164

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.05		ng/L		101	77 - 123

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: LCS 580-426164/34
Matrix: Water
Analysis Batch: 426164

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.08		ng/L		102	77 - 123

Lab Sample ID: LCSD 580-426164/29
Matrix: Water
Analysis Batch: 426164

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	4.97		ng/L		99	77 - 123	0	24

Lab Sample ID: LCSD 580-426164/31
Matrix: Water
Analysis Batch: 426164

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	4.94		ng/L		99	77 - 123	2	24

Lab Sample ID: LCSD 580-426164/35
Matrix: Water
Analysis Batch: 426164

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	4.99		ng/L		100	77 - 123	2	24

Lab Sample ID: 580-126685-21 MS
Matrix: Water
Analysis Batch: 426164

Client Sample ID: LAWA-1D1-SW-B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.10	J	5.00	4.41		ng/L		86	71 - 125

Lab Sample ID: 580-126685-21 MSD
Matrix: Water
Analysis Batch: 426164

Client Sample ID: LAWA-1D1-SW-B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.10	J	5.00	4.15		ng/L		81	71 - 125	6	24

Lab Sample ID: 580-126685-22 MS
Matrix: Water
Analysis Batch: 426164

Client Sample ID: LAWA-1D2-SW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		5.00	4.24		ng/L		85	71 - 125

Lab Sample ID: 580-126685-22 MSD
Matrix: Water
Analysis Batch: 426164

Client Sample ID: LAWA-1D2-SW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		5.00	4.48		ng/L		90	71 - 125	6	24

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: 580-126685-50 MS

Matrix: Water

Analysis Batch: 426164

Client Sample ID: LAWA-3D2-SW-40

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	0.088	J	5.00	3.81		ng/L		74	71 - 125		

Lab Sample ID: 580-126685-50 MSD

Matrix: Water

Analysis Batch: 426164

Client Sample ID: LAWA-3D2-SW-40

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.088	J	5.00	4.21		ng/L		82	71 - 125	10	24

Lab Sample ID: 580-126685-51 MS

Matrix: Water

Analysis Batch: 426164

Client Sample ID: LAWA-3D2-SW-B

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	0.17	J	5.00	4.59		ng/L		88	71 - 125		

Lab Sample ID: 580-126685-51 MSD

Matrix: Water

Analysis Batch: 426164

Client Sample ID: LAWA-3D2-SW-B

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.17	J	5.00	4.44		ng/L		85	71 - 125	3	24

Lab Sample ID: 580-126685-54 MS

Matrix: Water

Analysis Batch: 426164

Client Sample ID: LAWA-3D3-SW-40

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		5.00	4.29		ng/L		86	71 - 125		

Lab Sample ID: 580-126685-54 MSD

Matrix: Water

Analysis Batch: 426164

Client Sample ID: LAWA-3D3-SW-40

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		5.00	4.25		ng/L		85	71 - 125	1	24

Lab Sample ID: 580-126685-55 MS

Matrix: Water

Analysis Batch: 426164

Client Sample ID: LAWA-3D3-SW-B

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	0.17	J	5.00	4.11		ng/L		79	71 - 125		

Lab Sample ID: 580-126685-55 MSD

Matrix: Water

Analysis Batch: 426164

Client Sample ID: LAWA-3D3-SW-B

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.17	J	5.00	4.13		ng/L		79	71 - 125	1	24

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1640 - Metals (ICPMS)

Lab Sample ID: MB 580-425693/1-A
Matrix: Water
Analysis Batch: 426103

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 425693

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 00:55	1
Cadmium	ND		0.040	0.011	ug/L		05/11/23 00:00	05/13/23 00:55	1
Chromium	ND		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 00:55	1
Copper	ND		1.0	0.020	ug/L		05/11/23 00:00	05/13/23 00:55	1
Lead	0.00461	J	0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 00:55	1
Nickel	ND		0.30	0.11	ug/L		05/11/23 00:00	05/13/23 00:55	1
Zinc	ND		0.50	0.070	ug/L		05/11/23 00:00	05/13/23 00:55	1
Barium	ND		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 00:55	1
Iron	ND		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 00:55	1
Manganese	ND		0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 00:55	1

Lab Sample ID: MB 580-425693/2-A
Matrix: Water
Analysis Batch: 426103

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 425693

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 01:09	1
Cadmium	ND		0.040	0.011	ug/L		05/11/23 00:00	05/13/23 01:09	1
Chromium	ND		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 01:09	1
Copper	ND		1.0	0.020	ug/L		05/11/23 00:00	05/13/23 01:09	1
Lead	ND		0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 01:09	1
Nickel	ND		0.30	0.11	ug/L		05/11/23 00:00	05/13/23 01:09	1
Zinc	ND		0.50	0.070	ug/L		05/11/23 00:00	05/13/23 01:09	1
Barium	ND		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 01:09	1
Iron	ND		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 01:09	1
Manganese	ND		0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 01:09	1

Lab Sample ID: LCS 580-425693/3-A
Matrix: Water
Analysis Batch: 426103

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 425693

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	12.5	12.1		ug/L		97	70 - 130
Cadmium	1.25	1.24		ug/L		99	70 - 130
Chromium	12.5	12.8		ug/L		102	70 - 130
Copper	12.5	13.1		ug/L		105	70 - 130
Lead	2.50	2.49		ug/L		100	70 - 130
Nickel	12.5	13.2		ug/L		105	70 - 130
Zinc	12.5	12.8		ug/L		103	70 - 130
Barium	12.5	13.0		ug/L		104	70 - 130
Iron	62.5	63.5		ug/L		102	70 - 130
Manganese	12.5	13.1		ug/L		105	70 - 130

Lab Sample ID: LCSD 580-425693/4-A
Matrix: Water
Analysis Batch: 426103

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 425693

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	12.5	12.4		ug/L		99	70 - 130	2	20

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: LCSD 580-425693/4-A
Matrix: Water
Analysis Batch: 426103

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 425693

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cadmium	1.25	1.24		ug/L		99	70 - 130	0	20
Chromium	12.5	12.8		ug/L		102	70 - 130	0	20
Copper	12.5	12.8		ug/L		102	70 - 130	3	20
Lead	2.50	2.45		ug/L		98	70 - 130	2	20
Nickel	12.5	13.0		ug/L		104	70 - 130	1	20
Zinc	12.5	12.5		ug/L		100	70 - 130	2	20
Barium	12.5	12.9		ug/L		103	70 - 130	1	20
Iron	62.5	63.9		ug/L		102	70 - 130	1	20
Manganese	12.5	12.9		ug/L		103	70 - 130	1	20

Lab Sample ID: 580-126685-5 MS
Matrix: Water
Analysis Batch: 426103

Client Sample ID: LAWA-1C1-SW-1
Prep Type: Total/NA
Prep Batch: 425693

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.6		12.5	17.7		ug/L		128	50 - 150
Cadmium	0.017	J	1.25	1.20		ug/L		95	50 - 150
Chromium	0.81		12.5	14.2		ug/L		107	50 - 150
Copper	0.21	J	12.5	12.6		ug/L		99	50 - 150
Lead	0.069	B	2.50	2.52		ug/L		98	50 - 150
Nickel	0.21	J	12.5	12.9		ug/L		102	50 - 150
Zinc	0.17	J	12.5	12.6		ug/L		99	50 - 150
Barium	8.8		12.5	22.2		ug/L		107	50 - 150
Iron	2.4		62.5	66.8		ug/L		103	50 - 150
Manganese	0.52		12.5	13.8		ug/L		106	50 - 150

Lab Sample ID: 580-126685-5 MSD
Matrix: Water
Analysis Batch: 426103

Client Sample ID: LAWA-1C1-SW-1
Prep Type: Total/NA
Prep Batch: 425693

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.6		12.5	17.2		ug/L		125	50 - 150	3	20
Cadmium	0.017	J	1.25	1.19		ug/L		94	50 - 150	1	20
Chromium	0.81		12.5	14.2		ug/L		107	50 - 150	0	20
Copper	0.21	J	12.5	12.5		ug/L		98	50 - 150	1	20
Lead	0.069	B	2.50	2.44		ug/L		95	50 - 150	4	20
Nickel	0.21	J	12.5	12.6		ug/L		99	50 - 150	3	20
Zinc	0.17	J	12.5	12.4		ug/L		98	50 - 150	2	20
Barium	8.8		12.5	22.1		ug/L		106	50 - 150	0	20
Iron	2.4		62.5	65.8		ug/L		101	50 - 150	2	20
Manganese	0.52		12.5	13.6		ug/L		105	50 - 150	1	20

Lab Sample ID: 580-126685-6 MS
Matrix: Water
Analysis Batch: 426103

Client Sample ID: LAWA-1C1-SW-20
Prep Type: Total/NA
Prep Batch: 425693

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.0		12.5	15.6		ug/L		117	50 - 150
Cadmium	ND		1.25	1.18		ug/L		94	50 - 150

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: 580-126685-6 MS

Matrix: Water

Analysis Batch: 426103

Client Sample ID: LAWA-1C1-SW-20

Prep Type: Total/NA

Prep Batch: 425693

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium	0.67		12.5	13.5		ug/L		103	50 - 150
Copper	0.14	J	12.5	12.5		ug/L		99	50 - 150
Lead	0.013	J B	2.50	2.38		ug/L		95	50 - 150
Nickel	0.14	J	12.5	12.6		ug/L		100	50 - 150
Zinc	0.085	J	12.5	12.2		ug/L		97	50 - 150
Barium	5.9		12.5	19.1		ug/L		106	50 - 150
Iron	1.4	J	62.5	64.5		ug/L		101	50 - 150
Manganese	0.48		12.5	13.5		ug/L		104	50 - 150

Lab Sample ID: 580-126685-6 MSD

Matrix: Water

Analysis Batch: 426103

Client Sample ID: LAWA-1C1-SW-20

Prep Type: Total/NA

Prep Batch: 425693

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Arsenic	1.0		12.5	15.5		ug/L		116	50 - 150	1	20
Cadmium	ND		1.25	1.15		ug/L		92	50 - 150	2	20
Chromium	0.67		12.5	13.6		ug/L		104	50 - 150	1	20
Copper	0.14	J	12.5	12.3		ug/L		97	50 - 150	1	20
Lead	0.013	J B	2.50	2.33		ug/L		93	50 - 150	2	20
Nickel	0.14	J	12.5	12.3		ug/L		97	50 - 150	2	20
Zinc	0.085	J	12.5	12.2		ug/L		97	50 - 150	0	20
Barium	5.9		12.5	19.2		ug/L		107	50 - 150	0	20
Iron	1.4	J	62.5	63.1		ug/L		99	50 - 150	2	20
Manganese	0.48		12.5	13.3		ug/L		102	50 - 150	2	20

Lab Sample ID: MB 580-425696/1-A

Matrix: Water

Analysis Batch: 426103

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 425696

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 01:23	1
Cadmium	ND		0.040	0.011	ug/L		05/11/23 00:00	05/13/23 01:23	1
Chromium	ND		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 01:23	1
Copper	ND		1.0	0.020	ug/L		05/11/23 00:00	05/13/23 01:23	1
Lead	ND		0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 01:23	1
Nickel	ND		0.30	0.11	ug/L		05/11/23 00:00	05/13/23 01:23	1
Zinc	ND		0.50	0.070	ug/L		05/11/23 00:00	05/13/23 01:23	1
Barium	ND		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 01:23	1
Iron	ND		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 01:23	1
Manganese	ND		0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 01:23	1

Lab Sample ID: MB 580-425696/2-A

Matrix: Water

Analysis Batch: 426103

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 425696

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 01:37	1
Cadmium	ND		0.040	0.011	ug/L		05/11/23 00:00	05/13/23 01:37	1
Chromium	ND		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 01:37	1

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: MB 580-425696/2-A
Matrix: Water
Analysis Batch: 426103

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 425696

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.0267	J	1.0	0.020	ug/L		05/11/23 00:00	05/13/23 01:37	1
Lead	ND		0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 01:37	1
Nickel	ND		0.30	0.11	ug/L		05/11/23 00:00	05/13/23 01:37	1
Zinc	ND		0.50	0.070	ug/L		05/11/23 00:00	05/13/23 01:37	1
Barium	ND		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 01:37	1
Iron	ND		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 01:37	1
Manganese	ND		0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 01:37	1

Lab Sample ID: LCS 580-425696/3-A
Matrix: Water
Analysis Batch: 426103

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 425696

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	12.5	12.7		ug/L		101	70 - 130
Cadmium	1.25	1.24		ug/L		99	70 - 130
Chromium	12.5	12.8		ug/L		102	70 - 130
Copper	12.5	13.1		ug/L		105	70 - 130
Lead	2.50	2.52		ug/L		101	70 - 130
Nickel	12.5	13.1		ug/L		105	70 - 130
Zinc	12.5	13.0		ug/L		104	70 - 130
Barium	12.5	12.9		ug/L		104	70 - 130
Iron	62.5	65.3		ug/L		104	70 - 130
Manganese	12.5	13.2		ug/L		106	70 - 130

Lab Sample ID: LCSD 580-425696/4-A
Matrix: Water
Analysis Batch: 426103

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 425696

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Arsenic	12.5	12.5		ug/L		100	70 - 130	1	20
Cadmium	1.25	1.23		ug/L		98	70 - 130	1	20
Chromium	12.5	12.7		ug/L		101	70 - 130	1	20
Copper	12.5	12.9		ug/L		103	70 - 130	1	20
Lead	2.50	2.49		ug/L		100	70 - 130	1	20
Nickel	12.5	13.0		ug/L		104	70 - 130	1	20
Zinc	12.5	13.0		ug/L		104	70 - 130	0	20
Barium	12.5	12.9		ug/L		103	70 - 130	0	20
Iron	62.5	65.9		ug/L		105	70 - 130	1	20
Manganese	12.5	13.1		ug/L		105	70 - 130	0	20

Lab Sample ID: 580-126685-21 MS
Matrix: Water
Analysis Batch: 426103

Client Sample ID: LAWA-1D1-SW-B
Prep Type: Total/NA
Prep Batch: 425696

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.3		12.5	15.8		ug/L		116	50 - 150
Cadmium	0.014	J	1.25	1.17		ug/L		93	50 - 150
Chromium	0.67		12.5	13.6		ug/L		104	50 - 150
Copper	0.14	J B	12.5	12.2		ug/L		96	50 - 150

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: 580-126685-21 MS

Matrix: Water

Analysis Batch: 426103

Client Sample ID: LAWA-1D1-SW-B

Prep Type: Total/NA

Prep Batch: 425696

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	0.036	J	2.50	2.35		ug/L		93	50 - 150
Nickel	0.16	J	12.5	12.3		ug/L		97	50 - 150
Zinc	0.087	J	12.5	12.1		ug/L		96	50 - 150
Barium	6.4		12.5	19.3		ug/L		103	50 - 150
Iron	15		62.5	77.6		ug/L		100	50 - 150
Manganese	1.5		12.5	14.3		ug/L		102	50 - 150

Lab Sample ID: 580-126685-21 MSD

Matrix: Water

Analysis Batch: 426103

Client Sample ID: LAWA-1D1-SW-B

Prep Type: Total/NA

Prep Batch: 425696

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.3		12.5	15.7		ug/L		115	50 - 150	1	20
Cadmium	0.014	J	1.25	1.16		ug/L		92	50 - 150	1	20
Chromium	0.67		12.5	13.5		ug/L		103	50 - 150	1	20
Copper	0.14	J B	12.5	12.3		ug/L		97	50 - 150	1	20
Lead	0.036	J	2.50	2.44		ug/L		96	50 - 150	3	20
Nickel	0.16	J	12.5	12.3		ug/L		97	50 - 150	0	20
Zinc	0.087	J	12.5	12.3		ug/L		98	50 - 150	2	20
Barium	6.4		12.5	19.8		ug/L		107	50 - 150	3	20
Iron	15		62.5	77.4		ug/L		100	50 - 150	0	20
Manganese	1.5		12.5	14.4		ug/L		103	50 - 150	1	20

Lab Sample ID: 580-126685-22 MS

Matrix: Water

Analysis Batch: 426103

Client Sample ID: LAWA-1D2-SW-1

Prep Type: Total/NA

Prep Batch: 425696

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.6		12.5	17.5		ug/L		127	50 - 150
Cadmium	0.015	J	1.25	1.19		ug/L		94	50 - 150
Chromium	0.92		12.5	14.3		ug/L		107	50 - 150
Copper	0.19	J B	12.5	12.2		ug/L		96	50 - 150
Lead	0.022	J	2.50	2.39		ug/L		95	50 - 150
Nickel	0.18	J	12.5	12.2		ug/L		96	50 - 150
Zinc	0.20	J	12.5	12.3		ug/L		97	50 - 150
Barium	9.5		12.5	22.8		ug/L		107	50 - 150
Iron	1.2	J	62.5	63.0		ug/L		99	50 - 150
Manganese	0.73		12.5	13.6		ug/L		103	50 - 150

Lab Sample ID: 580-126685-22 MSD

Matrix: Water

Analysis Batch: 426103

Client Sample ID: LAWA-1D2-SW-1

Prep Type: Total/NA

Prep Batch: 425696

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.6		12.5	17.8		ug/L		130	50 - 150	2	20
Cadmium	0.015	J	1.25	1.18		ug/L		93	50 - 150	1	20
Chromium	0.92		12.5	14.1		ug/L		106	50 - 150	1	20
Copper	0.19	J B	12.5	12.3		ug/L		97	50 - 150	0	20
Lead	0.022	J	2.50	2.41		ug/L		96	50 - 150	1	20

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: 580-126685-22 MSD

Matrix: Water

Analysis Batch: 426103

Client Sample ID: LAWA-1D2-SW-1

Prep Type: Total/NA

Prep Batch: 425696

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nickel	0.18	J	12.5	12.2		ug/L		96	50 - 150	0	20
Zinc	0.20	J	12.5	12.3		ug/L		97	50 - 150	0	20
Barium	9.5		12.5	23.4		ug/L		112	50 - 150	3	20
Iron	1.2	J	62.5	63.5		ug/L		100	50 - 150	1	20
Manganese	0.73		12.5	13.6		ug/L		103	50 - 150	0	20

Lab Sample ID: MB 580-425697/1-A

Matrix: Water

Analysis Batch: 426103

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 425697

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 01:52	1
Cadmium	ND		0.040	0.011	ug/L		05/11/23 00:00	05/13/23 01:52	1
Chromium	ND		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 01:52	1
Copper	ND		1.0	0.020	ug/L		05/11/23 00:00	05/13/23 01:52	1
Lead	ND		0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 01:52	1
Nickel	ND		0.30	0.11	ug/L		05/11/23 00:00	05/13/23 01:52	1
Zinc	ND		0.50	0.070	ug/L		05/11/23 00:00	05/13/23 01:52	1
Barium	ND		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 01:52	1
Iron	ND		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 01:52	1
Manganese	0.00815	J	0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 01:52	1

Lab Sample ID: MB 580-425697/2-A

Matrix: Water

Analysis Batch: 426103

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 425697

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/11/23 00:00	05/13/23 02:06	1
Cadmium	ND		0.040	0.011	ug/L		05/11/23 00:00	05/13/23 02:06	1
Chromium	ND		0.50	0.34	ug/L		05/11/23 00:00	05/13/23 02:06	1
Copper	ND		1.0	0.020	ug/L		05/11/23 00:00	05/13/23 02:06	1
Lead	ND		0.050	0.0040	ug/L		05/11/23 00:00	05/13/23 02:06	1
Nickel	ND		0.30	0.11	ug/L		05/11/23 00:00	05/13/23 02:06	1
Zinc	ND		0.50	0.070	ug/L		05/11/23 00:00	05/13/23 02:06	1
Barium	ND		0.50	0.13	ug/L		05/11/23 00:00	05/13/23 02:06	1
Iron	ND		2.0	1.1	ug/L		05/11/23 00:00	05/13/23 02:06	1
Manganese	ND		0.050	0.0080	ug/L		05/11/23 00:00	05/13/23 02:06	1

Lab Sample ID: LCS 580-425697/3-A

Matrix: Water

Analysis Batch: 426103

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 425697

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	12.5	12.8		ug/L		102	70 - 130
Cadmium	1.25	1.24		ug/L		99	70 - 130
Chromium	12.5	12.6		ug/L		101	70 - 130
Copper	12.5	13.9		ug/L		111	70 - 130
Lead	2.50	2.50		ug/L		100	70 - 130
Nickel	12.5	13.1		ug/L		105	70 - 130

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: LCS 580-425697/3-A

Matrix: Water

Analysis Batch: 426103

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 425697

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	12.5	12.9		ug/L		103	70 - 130
Barium	12.5	12.8		ug/L		103	70 - 130
Iron	62.5	64.1		ug/L		103	70 - 130
Manganese	12.5	13.1		ug/L		105	70 - 130

Lab Sample ID: LCSD 580-425697/4-A

Matrix: Water

Analysis Batch: 426103

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 425697

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	12.5	12.3		ug/L		98	70 - 130	4	20
Cadmium	1.25	1.22		ug/L		97	70 - 130	2	20
Chromium	12.5	12.8		ug/L		102	70 - 130	1	20
Copper	12.5	13.1		ug/L		105	70 - 130	5	20
Lead	2.50	2.47		ug/L		99	70 - 130	1	20
Nickel	12.5	13.1		ug/L		105	70 - 130	0	20
Zinc	12.5	12.7		ug/L		101	70 - 130	1	20
Barium	12.5	13.0		ug/L		104	70 - 130	1	20
Iron	62.5	64.8		ug/L		104	70 - 130	1	20
Manganese	12.5	13.0		ug/L		104	70 - 130	0	20

Lab Sample ID: 580-126685-41 MS

Matrix: Water

Analysis Batch: 426103

Client Sample ID: LAWA-3C3-SW-40

Prep Type: Total/NA

Prep Batch: 425697

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.3		12.5	16.5		ug/L		122	50 - 150
Cadmium	0.013	J	1.25	1.18		ug/L		93	50 - 150
Chromium	0.77		12.5	13.9		ug/L		105	50 - 150
Copper	0.13	J	12.5	12.5		ug/L		99	50 - 150
Lead	0.012	J	2.50	2.43		ug/L		97	50 - 150
Nickel	0.14	J	12.5	12.5		ug/L		99	50 - 150
Zinc	ND		12.5	12.5		ug/L		100	50 - 150
Barium	6.8		12.5	20.6		ug/L		110	50 - 150
Iron	ND		62.5	63.4		ug/L		101	50 - 150
Manganese	0.30	B	12.5	13.2		ug/L		104	50 - 150

Lab Sample ID: 580-126685-41 MSD

Matrix: Water

Analysis Batch: 426103

Client Sample ID: LAWA-3C3-SW-40

Prep Type: Total/NA

Prep Batch: 425697

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.3		12.5	16.1		ug/L		118	50 - 150	3	20
Cadmium	0.013	J	1.25	1.17		ug/L		93	50 - 150	1	20
Chromium	0.77		12.5	14.0		ug/L		106	50 - 150	1	20
Copper	0.13	J	12.5	12.4		ug/L		98	50 - 150	1	20
Lead	0.012	J	2.50	2.40		ug/L		95	50 - 150	2	20
Nickel	0.14	J	12.5	12.3		ug/L		97	50 - 150	2	20
Zinc	ND		12.5	12.3		ug/L		99	50 - 150	1	20

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: 580-126685-41 MSD

Matrix: Water

Analysis Batch: 426103

Client Sample ID: LAWA-3C3-SW-40

Prep Type: Total/NA

Prep Batch: 425697

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Barium	6.8		12.5	20.2		ug/L		107	50 - 150	2	20
Iron	ND		62.5	63.6		ug/L		102	50 - 150	0	20
Manganese	0.30	B	12.5	13.2		ug/L		103	50 - 150	1	20

Lab Sample ID: 580-126685-42 MS

Matrix: Water

Analysis Batch: 426103

Client Sample ID: LAWA-3C3-SW-B

Prep Type: Total/NA

Prep Batch: 425697

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.7		12.5	17.5		ug/L		127	50 - 150
Cadmium	0.019	J	1.25	1.20		ug/L		94	50 - 150
Chromium	0.83		12.5	14.4		ug/L		109	50 - 150
Copper	0.15	J	12.5	12.4		ug/L		98	50 - 150
Lead	0.059		2.50	2.46		ug/L		96	50 - 150
Nickel	0.18	J	12.5	12.2		ug/L		96	50 - 150
Zinc	0.17	J	12.5	12.3		ug/L		97	50 - 150
Barium	8.6		12.5	22.3		ug/L		110	50 - 150
Iron	16		62.5	78.1		ug/L		100	50 - 150
Manganese	1.5	B	12.5	14.4		ug/L		104	50 - 150

Lab Sample ID: 580-126685-42 MSD

Matrix: Water

Analysis Batch: 426103

Client Sample ID: LAWA-3C3-SW-B

Prep Type: Total/NA

Prep Batch: 425697

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.7		12.5	17.6		ug/L		127	50 - 150	0	20
Cadmium	0.019	J	1.25	1.21		ug/L		95	50 - 150	1	20
Chromium	0.83		12.5	14.2		ug/L		107	50 - 150	2	20
Copper	0.15	J	12.5	12.5		ug/L		99	50 - 150	1	20
Lead	0.059		2.50	2.47		ug/L		96	50 - 150	1	20
Nickel	0.18	J	12.5	12.5		ug/L		99	50 - 150	2	20
Zinc	0.17	J	12.5	12.7		ug/L		100	50 - 150	3	20
Barium	8.6		12.5	22.4		ug/L		111	50 - 150	1	20
Iron	16		62.5	80.2		ug/L		103	50 - 150	3	20
Manganese	1.5	B	12.5	14.6		ug/L		105	50 - 150	1	20

Lab Sample ID: MB 580-425974/1-A

Matrix: Water

Analysis Batch: 426380

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 425974

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 00:58	1
Cadmium	ND		0.040	0.011	ug/L		05/15/23 00:00	05/16/23 00:58	1
Chromium	0.491	J	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 00:58	1
Copper	ND		1.0	0.020	ug/L		05/15/23 00:00	05/16/23 00:58	1
Lead	0.00408	J	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 00:58	1
Nickel	ND		0.30	0.11	ug/L		05/15/23 00:00	05/16/23 00:58	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 00:00	05/16/23 00:58	1
Barium	ND		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 00:58	1

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: MB 580-425974/1-A

Matrix: Water

Analysis Batch: 426380

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 425974

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 00:58	1
Manganese	ND		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 00:58	1

Lab Sample ID: MB 580-425974/2-A

Matrix: Water

Analysis Batch: 426380

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 425974

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 01:12	1
Cadmium	ND		0.040	0.011	ug/L		05/15/23 00:00	05/16/23 01:12	1
Chromium	0.392	J	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 01:12	1
Copper	0.683	J	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 01:12	1
Lead	0.0586		0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 01:12	1
Nickel	ND		0.30	0.11	ug/L		05/15/23 00:00	05/16/23 01:12	1
Zinc	0.298	J	0.50	0.070	ug/L		05/15/23 00:00	05/16/23 01:12	1
Barium	ND		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 01:12	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 01:12	1
Manganese	ND		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 01:12	1

Lab Sample ID: LCS 580-425974/3-A

Matrix: Water

Analysis Batch: 426380

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 425974

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	12.5	13.5		ug/L		108	70 - 130
Cadmium	1.25	1.27		ug/L		102	70 - 130
Chromium	12.5	12.7		ug/L		101	70 - 130
Copper	12.5	12.5		ug/L		100	70 - 130
Lead	2.50	2.46		ug/L		98	70 - 130
Nickel	12.5	13.1		ug/L		105	70 - 130
Zinc	12.5	12.6		ug/L		101	70 - 130
Barium	12.5	12.3		ug/L		98	70 - 130
Iron	62.5	62.4		ug/L		100	70 - 130
Manganese	12.5	12.7		ug/L		102	70 - 130

Lab Sample ID: LCSD 580-425974/4-A

Matrix: Water

Analysis Batch: 426380

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 425974

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	12.5	12.7		ug/L		101	70 - 130	6	20
Cadmium	1.25	1.23		ug/L		98	70 - 130	3	20
Chromium	12.5	13.0		ug/L		104	70 - 130	2	20
Copper	12.5	12.8		ug/L		102	70 - 130	2	20
Lead	2.50	2.42		ug/L		97	70 - 130	2	20
Nickel	12.5	13.0		ug/L		104	70 - 130	1	20
Zinc	12.5	12.7		ug/L		101	70 - 130	0	20
Barium	12.5	12.3		ug/L		98	70 - 130	0	20
Iron	62.5	62.9		ug/L		101	70 - 130	1	20

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: LCSD 580-425974/4-A

Matrix: Water

Analysis Batch: 426380

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 425974

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Manganese	12.5	12.7		ug/L		101	70 - 130	0	20

Lab Sample ID: 580-126685-13 MS

Matrix: Water

Analysis Batch: 426380

Client Sample ID: LAWA-1C2-SW-B

Prep Type: Total/NA

Prep Batch: 425974

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.5		12.5	17.1		ug/L		125	50 - 150		
Cadmium	0.020	J	1.25	1.26		ug/L		99	50 - 150		
Chromium	0.78	B	12.5	13.6		ug/L		102	50 - 150		
Copper	0.17	J B	12.5	12.5		ug/L		98	50 - 150		
Lead	0.045	J B	2.50	2.48		ug/L		98	50 - 150		
Nickel	0.20	J	12.5	12.8		ug/L		100	50 - 150		
Zinc	0.097	J B	12.5	12.4		ug/L		98	50 - 150		
Barium	7.5		12.5	20.6		ug/L		105	50 - 150		
Iron	17		62.5	76.8		ug/L		96	50 - 150		
Manganese	1.4		12.5	13.6		ug/L		98	50 - 150		

Lab Sample ID: 580-126685-13 MSD

Matrix: Water

Analysis Batch: 426380

Client Sample ID: LAWA-1C2-SW-B

Prep Type: Total/NA

Prep Batch: 425974

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.5		12.5	16.1		ug/L		117	50 - 150	6	20
Cadmium	0.020	J	1.25	1.25		ug/L		98	50 - 150	1	20
Chromium	0.78	B	12.5	13.7		ug/L		103	50 - 150	1	20
Copper	0.17	J B	12.5	12.3		ug/L		97	50 - 150	1	20
Lead	0.045	J B	2.50	2.49		ug/L		98	50 - 150	0	20
Nickel	0.20	J	12.5	12.7		ug/L		100	50 - 150	1	20
Zinc	0.097	J B	12.5	12.2		ug/L		97	50 - 150	2	20
Barium	7.5		12.5	20.7		ug/L		105	50 - 150	0	20
Iron	17		62.5	76.7		ug/L		96	50 - 150	0	20
Manganese	1.4		12.5	13.6		ug/L		98	50 - 150	0	20

Lab Sample ID: 580-126685-14 MS

Matrix: Water

Analysis Batch: 426380

Client Sample ID: LAWA-1C3X-SW-1

Prep Type: Total/NA

Prep Batch: 425974

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.5		12.5	17.7		ug/L		129	50 - 150		
Cadmium	0.013	J	1.25	1.25		ug/L		99	50 - 150		
Chromium	0.71	B	12.5	13.2		ug/L		100	50 - 150		
Copper	0.17	J B	12.5	12.3		ug/L		97	50 - 150		
Lead	1.0	B	2.50	3.37		ug/L		95	50 - 150		
Nickel	0.17	J	12.5	12.7		ug/L		100	50 - 150		
Zinc	0.13	J B	12.5	12.5		ug/L		99	50 - 150		
Barium	8.2		12.5	21.2		ug/L		104	50 - 150		
Iron	1.5	J	62.5	63.9		ug/L		100	50 - 150		
Manganese	0.70		12.5	13.3		ug/L		101	50 - 150		

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QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: 580-126685-14 MSD

Matrix: Water

Analysis Batch: 426380

Client Sample ID: LAWA-1C3X-SW-1

Prep Type: Total/NA

Prep Batch: 425974

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.5		12.5	16.9		ug/L		123	50 - 150	5	20
Cadmium	0.013	J	1.25	1.23		ug/L		97	50 - 150	1	20
Chromium	0.71	B	12.5	13.6		ug/L		103	50 - 150	3	20
Copper	0.17	J B	12.5	12.4		ug/L		98	50 - 150	1	20
Lead	1.0	B	2.50	3.38		ug/L		95	50 - 150	0	20
Nickel	0.17	J	12.5	12.7		ug/L		100	50 - 150	0	20
Zinc	0.13	J B	12.5	12.3		ug/L		97	50 - 150	2	20
Barium	8.2		12.5	21.5		ug/L		106	50 - 150	1	20
Iron	1.5	J	62.5	62.5		ug/L		98	50 - 150	2	20
Manganese	0.70		12.5	12.9		ug/L		98	50 - 150	3	20

Lab Sample ID: MB 580-425976/1-A

Matrix: Water

Analysis Batch: 426380

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 425976

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 01:26	1
Cadmium	ND		0.040	0.011	ug/L		05/15/23 00:00	05/16/23 01:26	1
Chromium	ND		0.50	0.34	ug/L		05/15/23 00:00	05/16/23 01:26	1
Copper	ND		1.0	0.020	ug/L		05/15/23 00:00	05/16/23 01:26	1
Lead	ND		0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 01:26	1
Nickel	ND		0.30	0.11	ug/L		05/15/23 00:00	05/16/23 01:26	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 00:00	05/16/23 01:26	1
Barium	ND		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 01:26	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 01:26	1
Manganese	ND		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 01:26	1

Lab Sample ID: MB 580-425976/2-A

Matrix: Water

Analysis Batch: 426380

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 425976

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 01:41	1
Cadmium	ND		0.040	0.011	ug/L		05/15/23 00:00	05/16/23 01:41	1
Chromium	0.360	J	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 01:41	1
Copper	ND		1.0	0.020	ug/L		05/15/23 00:00	05/16/23 01:41	1
Lead	ND		0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 01:41	1
Nickel	ND		0.30	0.11	ug/L		05/15/23 00:00	05/16/23 01:41	1
Zinc	0.102	J	0.50	0.070	ug/L		05/15/23 00:00	05/16/23 01:41	1
Barium	ND		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 01:41	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 01:41	1
Manganese	ND		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 01:41	1

Lab Sample ID: LCS 580-425976/3-A

Matrix: Water

Analysis Batch: 426380

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 425976

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	12.5	12.4		ug/L		99	70 - 130

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QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: LCS 580-425976/3-A
Matrix: Water
Analysis Batch: 426380

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 425976

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	1.25	1.24		ug/L		99	70 - 130
Chromium	12.5	12.9		ug/L		103	70 - 130
Copper	12.5	12.6		ug/L		101	70 - 130
Lead	2.50	2.43		ug/L		97	70 - 130
Nickel	12.5	12.8		ug/L		103	70 - 130
Zinc	12.5	12.4		ug/L		99	70 - 130
Barium	12.5	12.3		ug/L		99	70 - 130
Iron	62.5	63.4		ug/L		101	70 - 130
Manganese	12.5	12.5		ug/L		100	70 - 130

Lab Sample ID: LCSD 580-425976/4-A
Matrix: Water
Analysis Batch: 426380

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 425976

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	12.5	13.0		ug/L		104	70 - 130	5	20
Cadmium	1.25	1.24		ug/L		99	70 - 130	0	20
Chromium	12.5	12.4		ug/L		99	70 - 130	4	20
Copper	12.5	12.5		ug/L		100	70 - 130	1	20
Lead	2.50	2.51		ug/L		100	70 - 130	3	20
Nickel	12.5	12.7		ug/L		102	70 - 130	1	20
Zinc	12.5	12.5		ug/L		100	70 - 130	1	20
Barium	12.5	12.0		ug/L		96	70 - 130	2	20
Iron	62.5	63.5		ug/L		102	70 - 130	0	20
Manganese	12.5	12.8		ug/L		102	70 - 130	2	20

Lab Sample ID: 580-126685-37 MS
Matrix: Water
Analysis Batch: 426380

Client Sample ID: LAWA-3C2-SW-40
Prep Type: Total/NA
Prep Batch: 425976

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.1		12.5	16.1		ug/L		120	50 - 150
Cadmium	0.012	J	1.25	1.27		ug/L		100	50 - 150
Chromium	0.46	J B	12.5	13.2		ug/L		102	50 - 150
Copper	0.13	J	12.5	12.5		ug/L		99	50 - 150
Lead	0.028	J	2.50	2.47		ug/L		98	50 - 150
Nickel	0.14	J	12.5	12.7		ug/L		101	50 - 150
Zinc	ND		12.5	12.6		ug/L		101	50 - 150
Barium	4.8		12.5	18.0		ug/L		106	50 - 150
Iron	1.8	J	62.5	64.3		ug/L		100	50 - 150
Manganese	0.24		12.5	12.9		ug/L		101	50 - 150

Lab Sample ID: 580-126685-37 MSD
Matrix: Water
Analysis Batch: 426380

Client Sample ID: LAWA-3C2-SW-40
Prep Type: Total/NA
Prep Batch: 425976

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.1		12.5	15.9		ug/L		119	50 - 150	1	20
Cadmium	0.012	J	1.25	1.29		ug/L		102	50 - 150	2	20

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QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: 580-126685-37 MSD

Matrix: Water

Analysis Batch: 426380

Client Sample ID: LAWA-3C2-SW-40

Prep Type: Total/NA

Prep Batch: 425976

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium	0.46	J B	12.5	13.0		ug/L		100	50 - 150	2	20
Copper	0.13	J	12.5	12.3		ug/L		98	50 - 150	1	20
Lead	0.028	J	2.50	2.48		ug/L		98	50 - 150	0	20
Nickel	0.14	J	12.5	12.7		ug/L		100	50 - 150	1	20
Zinc	ND		12.5	12.3		ug/L		99	50 - 150	2	20
Barium	4.8		12.5	18.0		ug/L		106	50 - 150	0	20
Iron	1.8	J	62.5	64.3		ug/L		100	50 - 150	0	20
Manganese	0.24		12.5	12.9		ug/L		101	50 - 150	0	20

Lab Sample ID: 580-126685-57 MS

Matrix: Water

Analysis Batch: 426380

Client Sample ID: LAWA-WB

Prep Type: Total/NA

Prep Batch: 425976

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Arsenic	ND		12.5	13.8		ug/L		110	50 - 150		
Cadmium	ND		1.25	1.23		ug/L		99	50 - 150		
Chromium	ND		12.5	12.7		ug/L		101	50 - 150		
Copper	0.026	J	12.5	12.6		ug/L		101	50 - 150		
Lead	ND		2.50	2.40		ug/L		96	50 - 150		
Nickel	ND		12.5	12.7		ug/L		102	50 - 150		
Zinc	ND		12.5	12.4		ug/L		99	50 - 150		
Barium	ND		12.5	12.9		ug/L		103	50 - 150		
Iron	ND		62.5	61.1		ug/L		98	50 - 150		
Manganese	0.095		12.5	12.7		ug/L		101	50 - 150		

Lab Sample ID: 580-126685-57 MSD

Matrix: Water

Analysis Batch: 426380

Client Sample ID: LAWA-WB

Prep Type: Total/NA

Prep Batch: 425976

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND		12.5	13.2		ug/L		106	50 - 150	4	20
Cadmium	ND		1.25	1.23		ug/L		99	50 - 150	0	20
Chromium	ND		12.5	12.6		ug/L		101	50 - 150	1	20
Copper	0.026	J	12.5	12.4		ug/L		99	50 - 150	1	20
Lead	ND		2.50	2.42		ug/L		97	50 - 150	1	20
Nickel	ND		12.5	12.7		ug/L		101	50 - 150	0	20
Zinc	ND		12.5	12.2		ug/L		98	50 - 150	2	20
Barium	ND		12.5	12.7		ug/L		101	50 - 150	1	20
Iron	ND		62.5	63.0		ug/L		101	50 - 150	3	20
Manganese	0.095		12.5	13.0		ug/L		103	50 - 150	2	20

Lab Sample ID: MB 580-425977/1-A

Matrix: Water

Analysis Batch: 426380

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 425977

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/15/23 12:07	05/16/23 01:55	1
Cadmium	ND		0.040	0.011	ug/L		05/15/23 12:07	05/16/23 01:55	1
Chromium	ND		0.50	0.34	ug/L		05/15/23 12:07	05/16/23 01:55	1

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QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: MB 580-425977/1-A
Matrix: Water
Analysis Batch: 426380

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 425977

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		1.0	0.020	ug/L		05/15/23 12:07	05/16/23 01:55	1
Lead	ND		0.050	0.0040	ug/L		05/15/23 12:07	05/16/23 01:55	1
Nickel	ND		0.30	0.11	ug/L		05/15/23 12:07	05/16/23 01:55	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 12:07	05/16/23 01:55	1
Barium	ND		0.50	0.13	ug/L		05/15/23 12:07	05/16/23 01:55	1
Iron	ND		2.0	1.1	ug/L		05/15/23 12:07	05/16/23 01:55	1
Manganese	ND		0.050	0.0080	ug/L		05/15/23 12:07	05/16/23 01:55	1

Lab Sample ID: MB 580-425977/2-A
Matrix: Water
Analysis Batch: 426380

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 425977

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/15/23 12:07	05/16/23 02:09	1
Cadmium	ND		0.040	0.011	ug/L		05/15/23 12:07	05/16/23 02:09	1
Chromium	0.361	J	0.50	0.34	ug/L		05/15/23 12:07	05/16/23 02:09	1
Copper	ND		1.0	0.020	ug/L		05/15/23 12:07	05/16/23 02:09	1
Lead	ND		0.050	0.0040	ug/L		05/15/23 12:07	05/16/23 02:09	1
Nickel	ND		0.30	0.11	ug/L		05/15/23 12:07	05/16/23 02:09	1
Zinc	0.0966	J	0.50	0.070	ug/L		05/15/23 12:07	05/16/23 02:09	1
Barium	ND		0.50	0.13	ug/L		05/15/23 12:07	05/16/23 02:09	1
Iron	ND		2.0	1.1	ug/L		05/15/23 12:07	05/16/23 02:09	1
Manganese	ND		0.050	0.0080	ug/L		05/15/23 12:07	05/16/23 02:09	1

Lab Sample ID: LCS 580-425977/3-A
Matrix: Water
Analysis Batch: 426380

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 425977

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	12.5	13.7		ug/L		109	70 - 130
Cadmium	1.25	1.22		ug/L		97	70 - 130
Chromium	12.5	12.6		ug/L		101	70 - 130
Copper	12.5	12.6		ug/L		100	70 - 130
Lead	2.50	2.46		ug/L		98	70 - 130
Nickel	12.5	12.8		ug/L		102	70 - 130
Zinc	12.5	12.4		ug/L		99	70 - 130
Barium	12.5	12.4		ug/L		100	70 - 130
Iron	62.5	62.6		ug/L		100	70 - 130
Manganese	12.5	12.5		ug/L		100	70 - 130

Lab Sample ID: LCSD 580-425977/4-A
Matrix: Water
Analysis Batch: 426380

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 425977

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	12.5	13.1		ug/L		105	70 - 130	4	20
Cadmium	1.25	1.25		ug/L		100	70 - 130	3	20
Chromium	12.5	12.5		ug/L		100	70 - 130	1	20
Copper	12.5	12.5		ug/L		100	70 - 130	0	20

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: LCSD 580-425977/4-A

Matrix: Water

Analysis Batch: 426380

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 425977

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	2.50	2.47		ug/L		99	70 - 130	0	20
Nickel	12.5	12.8		ug/L		102	70 - 130	0	20
Zinc	12.5	12.3		ug/L		99	70 - 130	1	20
Barium	12.5	12.5		ug/L		100	70 - 130	1	20
Iron	62.5	63.9		ug/L		102	70 - 130	2	20
Manganese	12.5	12.7		ug/L		101	70 - 130	1	20

Lab Sample ID: 580-126685-38 MS

Matrix: Water

Analysis Batch: 426380

Client Sample ID: LAWA-3C2-SW-B

Prep Type: Total/NA

Prep Batch: 425977

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.8		12.5	19.0		ug/L		137	50 - 150		
Cadmium	0.019	J	1.25	1.23		ug/L		97	50 - 150		
Chromium	0.68	B	12.5	13.5		ug/L		102	50 - 150		
Copper	0.14	J	12.5	12.3		ug/L		97	50 - 150		
Lead	0.044	J	2.50	2.46		ug/L		97	50 - 150		
Nickel	0.20	J	12.5	12.7		ug/L		100	50 - 150		
Zinc	0.096	J B	12.5	12.2		ug/L		97	50 - 150		
Barium	8.8		12.5	21.9		ug/L		105	50 - 150		
Iron	20		62.5	80.4		ug/L		97	50 - 150		
Manganese	1.6		12.5	13.8		ug/L		98	50 - 150		

Lab Sample ID: 580-126685-38 MSD

Matrix: Water

Analysis Batch: 426380

Client Sample ID: LAWA-3C2-SW-B

Prep Type: Total/NA

Prep Batch: 425977

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.8		12.5	17.8		ug/L		128	50 - 150	7	20
Cadmium	0.019	J	1.25	1.26		ug/L		99	50 - 150	3	20
Chromium	0.68	B	12.5	13.5		ug/L		103	50 - 150	0	20
Copper	0.14	J	12.5	12.2		ug/L		96	50 - 150	1	20
Lead	0.044	J	2.50	2.45		ug/L		96	50 - 150	1	20
Nickel	0.20	J	12.5	12.4		ug/L		97	50 - 150	3	20
Zinc	0.096	J B	12.5	12.1		ug/L		96	50 - 150	1	20
Barium	8.8		12.5	22.1		ug/L		107	50 - 150	1	20
Iron	20		62.5	80.8		ug/L		97	50 - 150	1	20
Manganese	1.6		12.5	13.8		ug/L		98	50 - 150	0	20

Lab Sample ID: 580-126685-39 MS

Matrix: Water

Analysis Batch: 426380

Client Sample ID: LAWA-3C3-SW-1

Prep Type: Total/NA

Prep Batch: 425977

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.7		12.5	19.2		ug/L		140	50 - 150		
Cadmium	0.013	J	1.25	1.23		ug/L		98	50 - 150		
Chromium	0.69	B	12.5	13.5		ug/L		102	50 - 150		
Copper	0.17	J	12.5	12.0		ug/L		95	50 - 150		
Lead	0.016	J	2.50	2.40		ug/L		95	50 - 150		

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: 580-126685-39 MS

Matrix: Water

Analysis Batch: 426380

Client Sample ID: LAWA-3C3-SW-1

Prep Type: Total/NA

Prep Batch: 425977

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nickel	0.18	J	12.5	12.3		ug/L		97	50 - 150
Zinc	0.13	J B	12.5	12.1		ug/L		95	50 - 150
Barium	8.5		12.5	21.7		ug/L		106	50 - 150
Iron	1.1	J	62.5	61.8		ug/L		99	50 - 150
Manganese	0.47		12.5	12.6		ug/L		97	50 - 150

Lab Sample ID: 580-126685-39 MSD

Matrix: Water

Analysis Batch: 426380

Client Sample ID: LAWA-3C3-SW-1

Prep Type: Total/NA

Prep Batch: 425977

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.7		12.5	18.4		ug/L		133	50 - 150	4	20
Cadmium	0.013	J	1.25	1.24		ug/L		98	50 - 150	0	20
Chromium	0.69	B	12.5	13.8		ug/L		105	50 - 150	2	20
Copper	0.17	J	12.5	12.4		ug/L		98	50 - 150	3	20
Lead	0.016	J	2.50	2.42		ug/L		96	50 - 150	1	20
Nickel	0.18	J	12.5	12.5		ug/L		99	50 - 150	2	20
Zinc	0.13	J B	12.5	12.4		ug/L		98	50 - 150	3	20
Barium	8.5		12.5	22.1		ug/L		109	50 - 150	2	20
Iron	1.1	J	62.5	63.5		ug/L		102	50 - 150	3	20
Manganese	0.47		12.5	13.0		ug/L		100	50 - 150	2	20

Lab Sample ID: MB 580-426148/1-A

Matrix: Water

Analysis Batch: 426551

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 426148

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/17/23 00:00	05/18/23 19:57	1
Cadmium	ND		0.040	0.011	ug/L		05/17/23 00:00	05/18/23 19:57	1
Chromium	ND		0.50	0.34	ug/L		05/17/23 00:00	05/18/23 19:57	1
Copper	ND		0.10	0.020	ug/L		05/17/23 00:00	05/18/23 19:57	1
Lead	ND		0.025	0.0040	ug/L		05/17/23 00:00	05/18/23 19:57	1
Nickel	ND		0.30	0.11	ug/L		05/17/23 00:00	05/18/23 19:57	1
Zinc	ND		0.50	0.070	ug/L		05/17/23 00:00	05/18/23 19:57	1
Barium	ND		0.20	0.13	ug/L		05/17/23 00:00	05/18/23 19:57	1
Iron	ND		2.0	1.1	ug/L		05/17/23 00:00	05/18/23 19:57	1
Manganese	ND		0.050	0.0080	ug/L		05/17/23 00:00	05/18/23 19:57	1

Lab Sample ID: MB 580-426148/2-A

Matrix: Water

Analysis Batch: 426551

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 426148

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/17/23 00:00	05/18/23 20:11	1
Cadmium	ND		0.040	0.011	ug/L		05/17/23 00:00	05/18/23 20:11	1
Chromium	ND		0.50	0.34	ug/L		05/17/23 00:00	05/18/23 20:11	1
Copper	ND		0.10	0.020	ug/L		05/17/23 00:00	05/18/23 20:11	1
Lead	ND		0.025	0.0040	ug/L		05/17/23 00:00	05/18/23 20:11	1
Nickel	ND		0.30	0.11	ug/L		05/17/23 00:00	05/18/23 20:11	1

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: MB 580-426148/2-A

Matrix: Water

Analysis Batch: 426551

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 426148

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		0.50	0.070	ug/L		05/17/23 00:00	05/18/23 20:11	1
Barium	ND		0.20	0.13	ug/L		05/17/23 00:00	05/18/23 20:11	1
Iron	ND		2.0	1.1	ug/L		05/17/23 00:00	05/18/23 20:11	1
Manganese	ND		0.050	0.0080	ug/L		05/17/23 00:00	05/18/23 20:11	1

Lab Sample ID: LCS 580-426148/3-A

Matrix: Water

Analysis Batch: 426551

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 426148

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	12.5	11.6		ug/L		93	70 - 130
Cadmium	1.25	1.21		ug/L		96	70 - 130
Chromium	12.5	12.8		ug/L		102	70 - 130
Copper	12.5	12.4		ug/L		99	70 - 130
Lead	2.50	2.41		ug/L		97	70 - 130
Nickel	12.5	12.0		ug/L		96	70 - 130
Zinc	12.5	12.6		ug/L		101	70 - 130
Barium	12.5	12.5		ug/L		100	70 - 130
Iron	62.5	59.2		ug/L		95	70 - 130
Manganese	12.5	12.5		ug/L		100	70 - 130

Lab Sample ID: LCSD 580-426148/4-A

Matrix: Water

Analysis Batch: 426551

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 426148

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	12.5	12.0		ug/L		96	70 - 130	3	20
Cadmium	1.25	1.20		ug/L		96	70 - 130	0	20
Chromium	12.5	12.9		ug/L		103	70 - 130	1	20
Copper	12.5	12.4		ug/L		99	70 - 130	0	20
Lead	2.50	2.46		ug/L		98	70 - 130	2	20
Nickel	12.5	12.0		ug/L		96	70 - 130	0	20
Zinc	12.5	12.5		ug/L		100	70 - 130	1	20
Barium	12.5	12.5		ug/L		100	70 - 130	0	20
Iron	62.5	60.3		ug/L		96	70 - 130	2	20
Manganese	12.5	12.4		ug/L		99	70 - 130	1	20

Lab Sample ID: 580-126685-148 MS

Matrix: Water

Analysis Batch: 426551

Client Sample ID: MAWD-2C2X-SW-20

Prep Type: Total/NA

Prep Batch: 426148

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.3		12.5	15.5		ug/L		113	50 - 150
Cadmium	0.014	J	1.25	1.16		ug/L		92	50 - 150
Chromium	1.1		12.5	14.2		ug/L		105	50 - 150
Copper	0.21		12.5	12.1		ug/L		95	50 - 150
Lead	0.24		2.50	2.63		ug/L		96	50 - 150
Nickel	0.20	J	12.5	12.2		ug/L		96	50 - 150
Zinc	0.87		12.5	13.3		ug/L		99	50 - 150

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: 580-126685-148 MS

Matrix: Water

Analysis Batch: 426551

Client Sample ID: MAWD-2C2X-SW-20

Prep Type: Total/NA

Prep Batch: 426148

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	8.9		12.5	22.1		ug/L		106	50 - 150
Iron	10		62.5	71.7		ug/L		99	50 - 150
Manganese	0.59		12.5	14.1		ug/L		108	50 - 150

Lab Sample ID: 580-126685-148 MSD

Matrix: Water

Analysis Batch: 426551

Client Sample ID: MAWD-2C2X-SW-20

Prep Type: Total/NA

Prep Batch: 426148

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Arsenic	1.3		12.5	16.0		ug/L		117	50 - 150	3	20
Cadmium	0.014	J	1.25	1.18		ug/L		93	50 - 150	1	20
Chromium	1.1		12.5	14.2		ug/L		104	50 - 150	0	20
Copper	0.21		12.5	12.4		ug/L		97	50 - 150	2	20
Lead	0.24		2.50	2.74		ug/L		100	50 - 150	4	20
Nickel	0.20	J	12.5	12.2		ug/L		96	50 - 150	0	20
Zinc	0.87		12.5	13.3		ug/L		99	50 - 150	0	20
Barium	8.9		12.5	22.3		ug/L		107	50 - 150	1	20
Iron	10		62.5	72.2		ug/L		99	50 - 150	1	20
Manganese	0.59		12.5	13.7		ug/L		105	50 - 150	2	20

Lab Sample ID: 580-126685-149 MS

Matrix: Water

Analysis Batch: 426551

Client Sample ID: MAWD-2C2X-SW-40

Prep Type: Total/NA

Prep Batch: 426148

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.5		12.5	15.5		ug/L		112	50 - 150
Cadmium	0.013	J	1.25	1.20		ug/L		95	50 - 150
Chromium	1.2		12.5	14.1		ug/L		104	50 - 150
Copper	0.14		12.5	12.3		ug/L		97	50 - 150
Lead	0.023	J	2.50	2.46		ug/L		97	50 - 150
Nickel	0.16	J	12.5	12.4		ug/L		98	50 - 150
Zinc	0.070	J	12.5	12.4		ug/L		99	50 - 150
Barium	8.1		12.5	21.6		ug/L		108	50 - 150
Iron	ND		62.5	63.4		ug/L		101	50 - 150
Manganese	0.29		12.5	13.7		ug/L		107	50 - 150

Lab Sample ID: 580-126685-149 MSD

Matrix: Water

Analysis Batch: 426551

Client Sample ID: MAWD-2C2X-SW-40

Prep Type: Total/NA

Prep Batch: 426148

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Arsenic	1.5		12.5	17.0		ug/L		124	50 - 150	9	20
Cadmium	0.013	J	1.25	1.19		ug/L		94	50 - 150	1	20
Chromium	1.2		12.5	14.0		ug/L		103	50 - 150	1	20
Copper	0.14		12.5	12.2		ug/L		97	50 - 150	0	20
Lead	0.023	J	2.50	2.49		ug/L		99	50 - 150	1	20
Nickel	0.16	J	12.5	12.4		ug/L		98	50 - 150	0	20
Zinc	0.070	J	12.5	12.4		ug/L		99	50 - 150	0	20
Barium	8.1		12.5	21.2		ug/L		105	50 - 150	2	20

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QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: 580-126685-149 MSD

Matrix: Water

Analysis Batch: 426551

Client Sample ID: MAWD-2C2X-SW-40

Prep Type: Total/NA

Prep Batch: 426148

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	ND		62.5	63.6		ug/L		102	50 - 150	0	20
Manganese	0.29		12.5	13.7		ug/L		107	50 - 150	0	20

Lab Sample ID: MB 580-426506/1-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 426506

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/25/23 00:00	05/26/23 19:02	1
Cadmium	ND		0.040	0.011	ug/L		05/25/23 00:00	05/26/23 19:02	1
Chromium	ND		0.50	0.34	ug/L		05/25/23 00:00	05/26/23 19:02	1
Copper	ND		1.0	0.020	ug/L		05/25/23 00:00	05/26/23 19:02	1
Lead	0.00553	J	0.050	0.0040	ug/L		05/25/23 00:00	05/26/23 19:02	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/26/23 19:02	1
Zinc	0.0972	J	0.50	0.070	ug/L		05/25/23 00:00	05/26/23 19:02	1
Barium	ND		0.50	0.13	ug/L		05/25/23 00:00	05/26/23 19:02	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/26/23 19:02	1
Manganese	ND		0.050	0.0080	ug/L		05/25/23 00:00	05/26/23 19:02	1

Lab Sample ID: MB 580-426506/2-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 426506

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/25/23 00:00	05/26/23 19:16	1
Cadmium	ND		0.040	0.011	ug/L		05/25/23 00:00	05/26/23 19:16	1
Chromium	ND		0.50	0.34	ug/L		05/25/23 00:00	05/26/23 19:16	1
Copper	0.498	J	1.0	0.020	ug/L		05/25/23 00:00	05/26/23 19:16	1
Lead	0.0480	J	0.050	0.0040	ug/L		05/25/23 00:00	05/26/23 19:16	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/26/23 19:16	1
Zinc	0.256	J	0.50	0.070	ug/L		05/25/23 00:00	05/26/23 19:16	1
Barium	ND		0.50	0.13	ug/L		05/25/23 00:00	05/26/23 19:16	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/26/23 19:16	1
Manganese	ND		0.050	0.0080	ug/L		05/25/23 00:00	05/26/23 19:16	1

Lab Sample ID: LCS 580-426506/3-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 426506

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	12.5	14.5		ug/L		116	70 - 130
Cadmium	1.25	1.29		ug/L		103	70 - 130
Chromium	12.5	13.4		ug/L		107	70 - 130
Copper	12.5	12.1		ug/L		97	70 - 130
Lead	2.50	2.65		ug/L		106	70 - 130
Nickel	12.5	12.7		ug/L		102	70 - 130
Zinc	12.5	12.6		ug/L		101	70 - 130
Barium	12.5	12.0		ug/L		96	70 - 130
Iron	62.5	61.9		ug/L		99	70 - 130

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: LCS 580-426506/3-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 426506

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Manganese	12.5	12.6		ug/L		101	70 - 130

Lab Sample ID: LCSD 580-426506/4-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 426506

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	12.5	14.3		ug/L		114	70 - 130	2	20
Cadmium	1.25	1.24		ug/L		99	70 - 130	4	20
Chromium	12.5	13.2		ug/L		106	70 - 130	1	20
Copper	12.5	12.3		ug/L		98	70 - 130	1	20
Lead	2.50	2.69		ug/L		107	70 - 130	1	20
Nickel	12.5	12.7		ug/L		102	70 - 130	0	20
Zinc	12.5	12.8		ug/L		103	70 - 130	2	20
Barium	12.5	11.9		ug/L		95	70 - 130	1	20
Iron	62.5	62.1		ug/L		99	70 - 130	0	20
Manganese	12.5	12.7		ug/L		101	70 - 130	0	20

Lab Sample ID: 580-126685-152 MS

Matrix: Water

Analysis Batch: 427365

Client Sample ID: MAWD-3B2-SW-20

Prep Type: Total/NA

Prep Batch: 426506

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.3		12.5	16.6		ug/L		122	50 - 150
Cadmium	0.012	J	1.25	1.26		ug/L		100	50 - 150
Chromium	1.5		12.5	15.1		ug/L		109	50 - 150
Copper	0.18	J B	12.5	11.8		ug/L		93	50 - 150
Lead	0.028	J B	2.50	2.77		ug/L		110	50 - 150
Nickel	ND		12.5	12.6		ug/L		101	50 - 150
Zinc	ND		12.5	13.0		ug/L		104	50 - 150
Barium	7.0		12.5	19.9		ug/L		103	50 - 150
Iron	1.8	J	62.5	63.6		ug/L		99	50 - 150
Manganese	0.36		12.5	13.0		ug/L		101	50 - 150

Lab Sample ID: 580-126685-152 MSD

Matrix: Water

Analysis Batch: 427365

Client Sample ID: MAWD-3B2-SW-20

Prep Type: Total/NA

Prep Batch: 426506

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.3		12.5	16.8		ug/L		124	50 - 150	2	20
Cadmium	0.012	J	1.25	1.29		ug/L		103	50 - 150	3	20
Chromium	1.5		12.5	14.6		ug/L		105	50 - 150	3	20
Copper	0.18	J B	12.5	11.6		ug/L		91	50 - 150	2	20
Lead	0.028	J B	2.50	2.77		ug/L		109	50 - 150	0	20
Nickel	ND		12.5	12.3		ug/L		98	50 - 150	3	20
Zinc	ND		12.5	13.2		ug/L		105	50 - 150	1	20
Barium	7.0		12.5	19.2		ug/L		97	50 - 150	4	20
Iron	1.8	J	62.5	61.5		ug/L		95	50 - 150	3	20
Manganese	0.36		12.5	12.5		ug/L		97	50 - 150	4	20

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: 580-126685-153 MS

Matrix: Water

Analysis Batch: 427365

Client Sample ID: MAWD-3B2-SW-40

Prep Type: Total/NA

Prep Batch: 426506

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.7		12.5	18.4		ug/L		134	50 - 150
Cadmium	0.014	J	1.25	1.23		ug/L		98	50 - 150
Chromium	1.6		12.5	15.1		ug/L		108	50 - 150
Copper	0.13	J B	12.5	11.9		ug/L		94	50 - 150
Lead	0.018	J B	2.50	2.78		ug/L		110	50 - 150
Nickel	ND		12.5	12.5		ug/L		100	50 - 150
Zinc	ND		12.5	12.8		ug/L		102	50 - 150
Barium	7.9		12.5	21.2		ug/L		106	50 - 150
Iron	ND		62.5	64.9		ug/L		104	50 - 150
Manganese	0.27		12.5	13.4		ug/L		105	50 - 150

Lab Sample ID: 580-126685-153 MSD

Matrix: Water

Analysis Batch: 427365

Client Sample ID: MAWD-3B2-SW-40

Prep Type: Total/NA

Prep Batch: 426506

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.7		12.5	17.6		ug/L		128	50 - 150	4	20
Cadmium	0.014	J	1.25	1.26		ug/L		100	50 - 150	2	20
Chromium	1.6		12.5	15.0		ug/L		107	50 - 150	1	20
Copper	0.13	J B	12.5	11.7		ug/L		93	50 - 150	2	20
Lead	0.018	J B	2.50	2.70		ug/L		107	50 - 150	3	20
Nickel	ND		12.5	12.4		ug/L		99	50 - 150	1	20
Zinc	ND		12.5	12.9		ug/L		103	50 - 150	1	20
Barium	7.9		12.5	20.6		ug/L		102	50 - 150	3	20
Iron	ND		62.5	63.2		ug/L		101	50 - 150	3	20
Manganese	0.27		12.5	13.2		ug/L		103	50 - 150	1	20

Lab Sample ID: MB 580-426511/1-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 426511

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/25/23 00:00	05/26/23 19:59	1
Cadmium	ND		0.040	0.011	ug/L		05/25/23 00:00	05/26/23 19:59	1
Chromium	ND		0.50	0.34	ug/L		05/25/23 00:00	05/26/23 19:59	1
Copper	ND		1.0	0.020	ug/L		05/25/23 00:00	05/26/23 19:59	1
Lead	ND		0.050	0.0040	ug/L		05/25/23 00:00	05/26/23 19:59	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/26/23 19:59	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/26/23 19:59	1
Barium	ND		0.50	0.13	ug/L		05/25/23 00:00	05/26/23 19:59	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/26/23 19:59	1
Manganese	ND		0.050	0.0080	ug/L		05/25/23 00:00	05/26/23 19:59	1

Lab Sample ID: MB 580-426511/2-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 426511

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/25/23 00:00	05/26/23 20:14	1

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: MB 580-426511/2-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 426511

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.040	0.011	ug/L		05/25/23 00:00	05/26/23 20:14	1
Chromium	ND		0.50	0.34	ug/L		05/25/23 00:00	05/26/23 20:14	1
Copper	ND		1.0	0.020	ug/L		05/25/23 00:00	05/26/23 20:14	1
Lead	ND		0.050	0.0040	ug/L		05/25/23 00:00	05/26/23 20:14	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/26/23 20:14	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/26/23 20:14	1
Barium	ND		0.50	0.13	ug/L		05/25/23 00:00	05/26/23 20:14	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/26/23 20:14	1
Manganese	ND		0.050	0.0080	ug/L		05/25/23 00:00	05/26/23 20:14	1

Lab Sample ID: LCS 580-426511/3-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 426511

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	12.5	13.7		ug/L		110	70 - 130
Cadmium	1.25	1.29		ug/L		103	70 - 130
Chromium	12.5	13.6		ug/L		108	70 - 130
Copper	12.5	12.6		ug/L		101	70 - 130
Lead	2.50	3.06		ug/L		123	70 - 130
Nickel	12.5	12.6		ug/L		101	70 - 130
Zinc	12.5	13.1		ug/L		105	70 - 130
Barium	12.5	10.6		ug/L		85	70 - 130
Iron	62.5	65.5		ug/L		105	70 - 130
Manganese	12.5	13.5		ug/L		108	70 - 130

Lab Sample ID: LCSD 580-426511/4-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 426511

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Arsenic	12.5	13.0		ug/L		104	70 - 130	5	20
Cadmium	1.25	1.27		ug/L		102	70 - 130	2	20
Chromium	12.5	13.3		ug/L		107	70 - 130	2	20
Copper	12.5	12.4		ug/L		99	70 - 130	2	20
Lead	2.50	3.08		ug/L		123	70 - 130	1	20
Nickel	12.5	12.8		ug/L		103	70 - 130	2	20
Zinc	12.5	13.5		ug/L		108	70 - 130	3	20
Barium	12.5	10.5		ug/L		84	70 - 130	1	20
Iron	62.5	64.6		ug/L		103	70 - 130	1	20
Manganese	12.5	13.2		ug/L		106	70 - 130	2	20

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: G443REF-SW-1

Lab Sample ID: 580-126685-1

Date Collected: 03/23/23 10:11

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 15:49
Total/NA	Prep	1640			425693	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 09:28

Client Sample ID: G443REF-SW-20

Lab Sample ID: 580-126685-2

Date Collected: 03/23/23 10:17

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 15:53
Total/NA	Prep	1640			425693	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 09:42

Client Sample ID: G443REF-SW-40

Lab Sample ID: 580-126685-3

Date Collected: 03/23/23 10:25

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 15:57
Total/NA	Prep	1640			425693	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 09:57

Client Sample ID: G443REF-SW-B

Lab Sample ID: 580-126685-4

Date Collected: 03/23/23 10:37

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 16:02
Total/NA	Prep	1640			425693	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 10:11

Client Sample ID: LAWA-1C1-SW-1

Lab Sample ID: 580-126685-5

Date Collected: 03/18/23 04:36

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 13:06
Total/NA	Prep	1640			425693	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 04:14

Client Sample ID: LAWA-1C1-SW-20

Lab Sample ID: 580-126685-6

Date Collected: 03/18/23 04:44

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 13:10

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Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1C1-SW-20

Lab Sample ID: 580-126685-6

Date Collected: 03/18/23 04:44

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			425693	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 04:57

Client Sample ID: LAWA-1C1-SW-40

Lab Sample ID: 580-126685-7

Date Collected: 03/18/23 04:56

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 16:06
Total/NA	Prep	1640			425693	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 10:25

Client Sample ID: LAWA-1C1-SW-B

Lab Sample ID: 580-126685-8

Date Collected: 03/18/23 05:08

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 16:10
Total/NA	Prep	1640			425693	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 10:40

Client Sample ID: LAWA-1C1-SW-B-FD

Lab Sample ID: 580-126685-9

Date Collected: 03/18/23 05:20

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 16:14
Total/NA	Prep	1640			425693	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 10:54

Client Sample ID: LAWA-1C2-SW-1

Lab Sample ID: 580-126685-10

Date Collected: 03/18/23 07:08

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 16:27
Total/NA	Prep	1640			425693	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 11:08

Client Sample ID: LAWA-1C2-SW-20

Lab Sample ID: 580-126685-11

Date Collected: 03/18/23 07:45

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 16:31

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Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1C2-SW-20

Lab Sample ID: 580-126685-11

Date Collected: 03/18/23 07:45

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			425693	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 11:22

Client Sample ID: LAWA-1C2-SW-40

Lab Sample ID: 580-126685-12

Date Collected: 03/18/23 07:55

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 16:35
Total/NA	Prep	1640			425693	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 11:37

Client Sample ID: LAWA-1C2-SW-B

Lab Sample ID: 580-126685-13

Date Collected: 03/18/23 08:07

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 16:39
Total/NA	Prep	1640			425974	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 04:18

Client Sample ID: LAWA-1C3X-SW-1

Lab Sample ID: 580-126685-14

Date Collected: 03/18/23 19:21

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 16:44
Total/NA	Prep	1640			425974	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 05:00

Client Sample ID: LAWA-1C3X-SW-20

Lab Sample ID: 580-126685-15

Date Collected: 03/18/23 19:29

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 16:48
Total/NA	Prep	1640			425974	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 09:31

Client Sample ID: LAWA-1C3X-SW-40

Lab Sample ID: 580-126685-16

Date Collected: 03/18/23 19:40

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 16:52

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Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1C3X-SW-40

Lab Sample ID: 580-126685-16

Date Collected: 03/18/23 19:40

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			425974	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 09:46

Client Sample ID: LAWA-1C3X-SW-B

Lab Sample ID: 580-126685-17

Date Collected: 03/18/23 19:52

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 16:56
Total/NA	Prep	1640			425974	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 10:00

Client Sample ID: LAWA-1D1-SW-1

Lab Sample ID: 580-126685-18

Date Collected: 03/19/23 02:31

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 17:00
Total/NA	Prep	1640			425974	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 10:14

Client Sample ID: LAWA-1D1-SW-20

Lab Sample ID: 580-126685-19

Date Collected: 03/19/23 02:37

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 17:04
Total/NA	Prep	1640			425974	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 10:28

Client Sample ID: LAWA-1D1-SW-40

Lab Sample ID: 580-126685-20

Date Collected: 03/19/23 02:46

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 17:17
Total/NA	Prep	1640			425974	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 10:43

Client Sample ID: LAWA-1D1-SW-B

Lab Sample ID: 580-126685-21

Date Collected: 03/19/23 02:59

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 11:51

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1D1-SW-B

Lab Sample ID: 580-126685-21

Date Collected: 03/19/23 02:59

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			425696	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 05:40

Client Sample ID: LAWA-1D2-SW-1

Lab Sample ID: 580-126685-22

Date Collected: 03/19/23 00:28

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 11:55
Total/NA	Prep	1640			425696	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 06:51

Client Sample ID: LAWA-1D2-SW-1-FD

Lab Sample ID: 580-126685-23

Date Collected: 03/19/23 00:36

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 14:00
Total/NA	Prep	1640			425974	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 10:57
Total/NA	Prep	1640			426511	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 17:08

Client Sample ID: LAWA-1D2-SW-20

Lab Sample ID: 580-126685-24

Date Collected: 03/19/23 00:43

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 14:04
Total/NA	Prep	1640			425974	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 11:11

Client Sample ID: LAWA-1D2-SW-40

Lab Sample ID: 580-126685-25

Date Collected: 03/19/23 00:52

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 15:14
Total/NA	Prep	1640			425974	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 11:25

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-1D2-SW-B

Lab Sample ID: 580-126685-26

Date Collected: 03/19/23 01:05

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 15:19
Total/NA	Prep	1640			425974	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 11:40

Client Sample ID: LAWA-1D3X-SW-1

Lab Sample ID: 580-126685-27

Date Collected: 03/18/23 20:43

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 15:23
Total/NA	Prep	1640			425974	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 12:22

Client Sample ID: LAWA-1D3X-SW-20

Lab Sample ID: 580-126685-28

Date Collected: 03/18/23 20:51

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 15:27
Total/NA	Prep	1640			425974	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 12:37

Client Sample ID: LAWA-1D3X-SW-40

Lab Sample ID: 580-126685-29

Date Collected: 03/18/23 21:01

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 15:31
Total/NA	Prep	1640			425974	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 12:51

Client Sample ID: LAWA-1D3X-SW-B

Lab Sample ID: 580-126685-30

Date Collected: 03/18/23 21:14

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 15:35
Total/NA	Prep	1640			425974	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 13:05

Client Sample ID: LAWA-3C1-SW-1

Lab Sample ID: 580-126685-31

Date Collected: 03/17/23 16:43

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 15:39

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3C1-SW-1

Lab Sample ID: 580-126685-31

Date Collected: 03/17/23 16:43

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			425974	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 13:20

Client Sample ID: LAWA-3C1-SW-20

Lab Sample ID: 580-126685-32

Date Collected: 03/17/23 16:50

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 15:44
Total/NA	Prep	1640			425974	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 13:34

Client Sample ID: LAWA-3C1-SW-40

Lab Sample ID: 580-126685-33

Date Collected: 03/17/23 17:00

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 15:56
Total/NA	Prep	1640			425974	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 13:48

Client Sample ID: LAWA-3C1-SW-B

Lab Sample ID: 580-126685-34

Date Collected: 03/17/23 17:13

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 16:00
Total/NA	Prep	1640			425974	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 14:02

Client Sample ID: LAWA-3C2-SW-1

Lab Sample ID: 580-126685-35

Date Collected: 03/18/23 03:47

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 16:04
Total/NA	Prep	1640			425696	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 18:02

Client Sample ID: LAWA-3C2-SW-20

Lab Sample ID: 580-126685-36

Date Collected: 03/18/23 03:04

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 16:08

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Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3C2-SW-20

Lab Sample ID: 580-126685-36

Date Collected: 03/18/23 03:04

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			425696	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 18:16

Client Sample ID: LAWA-3C2-SW-40

Lab Sample ID: 580-126685-37

Date Collected: 03/18/23 04:03

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 16:13
Total/NA	Prep	1640			425976	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 06:54

Client Sample ID: LAWA-3C2-SW-B

Lab Sample ID: 580-126685-38

Date Collected: 03/18/23 04:15

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 16:17
Total/NA	Prep	1640			425977	V1R	EET SEA	05/15/23 12:07
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 07:37

Client Sample ID: LAWA-3C3-SW-1

Lab Sample ID: 580-126685-39

Date Collected: 03/18/23 02:01

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 16:21
Total/NA	Prep	1640			425977	V1R	EET SEA	05/15/23 12:07
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 08:20

Client Sample ID: LAWA-3C3-SW-20

Lab Sample ID: 580-126685-40

Date Collected: 03/18/23 02:08

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 16:25
Total/NA	Prep	1640			425977	V1R	EET SEA	05/15/23 12:07
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 19:30

Client Sample ID: LAWA-3C3-SW-40

Lab Sample ID: 580-126685-41

Date Collected: 03/18/23 02:07

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 13:14

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Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3C3-SW-40

Lab Sample ID: 580-126685-41

Date Collected: 03/18/23 02:07

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			425697	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 07:34

Client Sample ID: LAWA-3C3-SW-B

Lab Sample ID: 580-126685-42

Date Collected: 03/18/23 02:33

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 13:18
Total/NA	Prep	1640			425697	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 08:17

Client Sample ID: LAWA-3D1X-SW-1

Lab Sample ID: 580-126685-43

Date Collected: 03/17/23 12:21

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 17:21
Total/NA	Prep	1640			425697	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 19:27

Client Sample ID: LAWA-3D1X-SW-20

Lab Sample ID: 580-126685-44

Date Collected: 03/17/23 12:29

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 17:25
Total/NA	Prep	1640			425697	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 19:41

Client Sample ID: LAWA-3D1X-SW-40

Lab Sample ID: 580-126685-45

Date Collected: 03/17/23 12:39

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 17:30
Total/NA	Prep	1640			425697	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 19:56

Client Sample ID: LAWA-3D1X-SW-B

Lab Sample ID: 580-126685-46

Date Collected: 03/17/23 12:51

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 17:34

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Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3D1X-SW-B

Lab Sample ID: 580-126685-46

Date Collected: 03/17/23 12:51

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			425697	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 20:10

Client Sample ID: LAWA-3D2-SW-1

Lab Sample ID: 580-126685-47

Date Collected: 03/17/23 04:33

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 13:22
Total/NA	Prep	1640			425697	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 20:53

Client Sample ID: LAWA-3D2-SW-1-FD

Lab Sample ID: 580-126685-48

Date Collected: 03/17/23 04:41

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 13:27
Total/NA	Prep	1640			425697	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 21:07

Client Sample ID: LAWA-3D2-SW-20

Lab Sample ID: 580-126685-49

Date Collected: 03/17/23 04:48

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 17:38
Total/NA	Prep	1640			425697	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 21:21

Client Sample ID: LAWA-3D2-SW-40

Lab Sample ID: 580-126685-50

Date Collected: 03/17/23 04:58

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 12:00
Total/NA	Prep	1640			425697	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 21:35

Client Sample ID: LAWA-3D2-SW-B

Lab Sample ID: 580-126685-51

Date Collected: 03/17/23 05:10

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 12:04

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Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-3D2-SW-B

Lab Sample ID: 580-126685-51

Date Collected: 03/17/23 05:10

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			425697	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 21:50

Client Sample ID: LAWA-3D3-SW-1

Lab Sample ID: 580-126685-52

Date Collected: 03/17/23 03:38

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 16:29
Total/NA	Prep	1640			425697	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 22:04

Client Sample ID: LAWA-3D3-SW-20

Lab Sample ID: 580-126685-53

Date Collected: 03/17/23 03:49

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 16:33
Total/NA	Prep	1640			425697	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 22:18

Client Sample ID: LAWA-3D3-SW-40

Lab Sample ID: 580-126685-54

Date Collected: 03/17/23 03:59

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 12:08
Total/NA	Prep	1640			425697	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 22:32

Client Sample ID: LAWA-3D3-SW-B

Lab Sample ID: 580-126685-55

Date Collected: 03/17/23 04:14

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 12:12
Total/NA	Prep	1640			425697	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 22:47

Client Sample ID: LAWA-EQ

Lab Sample ID: 580-126685-56

Date Collected: 03/17/23 03:25

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 16:46

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Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: LAWA-EQ

Lab Sample ID: 580-126685-56

Date Collected: 03/17/23 03:25

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			425697	V1R	EET SEA	05/11/23 00:00
Total/NA	Analysis	1640		1	426103	V1R	EET SEA	05/13/23 23:01

Client Sample ID: LAWA-WB

Lab Sample ID: 580-126685-57

Date Collected: 03/17/23 03:30

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 16:50
Total/NA	Prep	1640			425976	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 05:43

Client Sample ID: MAWD-1B2X-SW-1

Lab Sample ID: 580-126685-139

Date Collected: 03/23/23 00:50

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 18:06
Total/NA	Prep	1640			425977	V1R	EET SEA	05/15/23 12:07
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 22:07

Client Sample ID: MAWD-1B2X-SW-20

Lab Sample ID: 580-126685-140

Date Collected: 03/23/23 00:56

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 18:10
Total/NA	Prep	1640			425977	V1R	EET SEA	05/15/23 12:07
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 22:21

Client Sample ID: MAWD-1B2X-SW-40

Lab Sample ID: 580-126685-141

Date Collected: 03/23/23 01:05

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 18:14
Total/NA	Prep	1640			425977	V1R	EET SEA	05/15/23 12:07
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 22:35

Client Sample ID: MAWD-1B2X-SW-B

Lab Sample ID: 580-126685-142

Date Collected: 03/23/23 01:17

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 18:19

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Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-1B2X-SW-B

Lab Sample ID: 580-126685-142

Date Collected: 03/23/23 01:17

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			425977	V1R	EET SEA	05/15/23 12:07
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 22:50

Client Sample ID: MAWD-1C2-SW-1

Lab Sample ID: 580-126685-143

Date Collected: 03/23/23 02:22

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 18:00
Total/NA	Prep	1640			425977	V1R	EET SEA	05/15/23 12:07
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 23:04

Client Sample ID: MAWD-1C2-SW-20

Lab Sample ID: 580-126685-144

Date Collected: 03/23/23 02:28

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 18:04
Total/NA	Prep	1640			425977	V1R	EET SEA	05/15/23 12:07
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 23:47

Client Sample ID: MAWD-1C2-SW-40

Lab Sample ID: 580-126685-145

Date Collected: 03/23/23 02:37

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 18:09
Total/NA	Prep	1640			425977	V1R	EET SEA	05/15/23 12:07
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/17/23 00:01

Client Sample ID: MAWD-1C2-SW-B

Lab Sample ID: 580-126685-146

Date Collected: 03/23/23 02:48

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 18:13
Total/NA	Prep	1640			425977	V1R	EET SEA	05/15/23 12:07
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/17/23 00:15

Client Sample ID: MAWD-2C2X-SW-1

Lab Sample ID: 580-126685-147

Date Collected: 03/23/23 04:27

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 18:25

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-2C2X-SW-1

Lab Sample ID: 580-126685-147

Date Collected: 03/23/23 04:27

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			425977	V1R	EET SEA	05/15/23 12:07
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/17/23 00:29

Client Sample ID: MAWD-2C2X-SW-20

Lab Sample ID: 580-126685-148

Date Collected: 03/23/23 04:34

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 18:29
Total/NA	Prep	1640			426148	V1R	EET SEA	05/17/23 00:00
Total/NA	Analysis	1640		1	426551	V1R	EET SEA	05/18/23 23:16

Client Sample ID: MAWD-2C2X-SW-40

Lab Sample ID: 580-126685-149

Date Collected: 03/23/23 04:43

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 18:33
Total/NA	Prep	1640			426148	V1R	EET SEA	05/17/23 00:00
Total/NA	Analysis	1640		1	426551	V1R	EET SEA	05/18/23 23:59

Client Sample ID: MAWD-2C2X-SW-B

Lab Sample ID: 580-126685-150

Date Collected: 03/23/23 04:55

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 18:38
Total/NA	Prep	1640			426148	V1R	EET SEA	05/17/23 00:00
Total/NA	Analysis	1640		1	426551	V1R	EET SEA	05/19/23 06:24

Client Sample ID: MAWD-3B2-SW-1

Lab Sample ID: 580-126685-151

Date Collected: 03/22/23 20:25

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 18:42
Total/NA	Prep	1640			426148	V1R	EET SEA	05/17/23 00:00
Total/NA	Analysis	1640		1	426551	V1R	EET SEA	05/19/23 06:38

Client Sample ID: MAWD-3B2-SW-20

Lab Sample ID: 580-126685-152

Date Collected: 03/22/23 20:31

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 18:46

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-3B2-SW-20

Lab Sample ID: 580-126685-152

Date Collected: 03/22/23 20:31

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			426506	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/26/23 23:19

Client Sample ID: MAWD-3B2-SW-40

Lab Sample ID: 580-126685-153

Date Collected: 03/22/23 20:42

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 18:50
Total/NA	Prep	1640			426506	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 00:02

Client Sample ID: MAWD-3B2-SW-B

Lab Sample ID: 580-126685-154

Date Collected: 03/22/23 20:54

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 18:54
Total/NA	Prep	1640			426506	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 07:24

Client Sample ID: MAWD-3C2X-SW-1

Lab Sample ID: 580-126685-155

Date Collected: 03/22/23 19:15

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 18:58
Total/NA	Prep	1640			426506	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 07:38

Client Sample ID: MAWD-3C2X-SW-20

Lab Sample ID: 580-126685-156

Date Collected: 03/22/23 19:24

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 19:03
Total/NA	Prep	1640			426506	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 07:53

Client Sample ID: MAWD-3C2X-SW-40

Lab Sample ID: 580-126685-157

Date Collected: 03/22/23 19:33

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 19:15

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-3C2X-SW-40

Lab Sample ID: 580-126685-157

Date Collected: 03/22/23 19:33

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			426506	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 08:07

Client Sample ID: MAWD-3C2X-SW-B

Lab Sample ID: 580-126685-158

Date Collected: 03/22/23 19:44

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 19:19
Total/NA	Prep	1640			426506	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 08:21

Client Sample ID: MAWD-4B2X-SW-1

Lab Sample ID: 580-126685-159

Date Collected: 03/22/23 22:18

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 19:23
Total/NA	Prep	1640			426506	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 08:35

Client Sample ID: MAWD-4B2X-SW-20

Lab Sample ID: 580-126685-160

Date Collected: 03/22/23 22:24

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 19:27
Total/NA	Prep	1640			426506	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 09:18

Client Sample ID: MAWD-4B2X-SW-40

Lab Sample ID: 580-126685-161

Date Collected: 03/22/23 22:33

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 18:45
Total/NA	Prep	1640			426506	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 09:32

Client Sample ID: MAWD-4B2X-SW-B

Lab Sample ID: 580-126685-162

Date Collected: 03/22/23 22:44

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 18:57

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Client Sample ID: MAWD-4B2X-SW-B
Date Collected: 03/22/23 22:44
Date Received: 05/02/23 10:04

Lab Sample ID: 580-126685-162
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			426506	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 09:46

Laboratory References:
EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Laboratory: Eurofins Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc

ANAB	Dept. of Defense ELAP	L2236	01-19-25
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc

ANAB	Dept. of Energy	L2236	01-19-25
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc

ANAB	ISO/IEC 17025	L2236	01-19-25
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Laboratory: Eurofins Seattle (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc
California	State	2954	07-07-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc
Florida	NELAP	E87575	06-30-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Barium
1640	1640	Water	Chromium
1640	1640	Water	Iron
1640	1640	Water	Manganese
Louisiana (All)	NELAP	03073	06-30-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Barium
1640	1640	Water	Iron
1640	1640	Water	Manganese
Maine	State	WA01273	05-02-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Laboratory: Eurofins Seattle (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc
Montana (UST)	State	NA	04-14-27

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1631E		Water	Mercury
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc
New Jersey	NELAP	WA014	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc
New York	NELAP	11662	03-31-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Laboratory: Eurofins Seattle (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc
Oregon	NELAP	4167	07-07-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Barium
1640	1640	Water	Iron
1640	1640	Water	Manganese
US Fish & Wildlife	US Federal Programs	A20571	06-30-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631E		Water	Mercury
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc
USDA	US Federal Programs	525-23-4-22573	01-04-26
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631E		Water	Mercury
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc
Washington	State	C788	07-13-23

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Laboratory: Eurofins Seattle (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc
Wisconsin	State	399133460	08-31-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-126685-1	G443REF-SW-1	Water	03/23/23 10:11	05/02/23 10:04
580-126685-2	G443REF-SW-20	Water	03/23/23 10:17	05/02/23 10:04
580-126685-3	G443REF-SW-40	Water	03/23/23 10:25	05/02/23 10:04
580-126685-4	G443REF-SW-B	Water	03/23/23 10:37	05/02/23 10:04
580-126685-5	LAWA-1C1-SW-1	Water	03/18/23 04:36	05/02/23 10:04
580-126685-6	LAWA-1C1-SW-20	Water	03/18/23 04:44	05/02/23 10:04
580-126685-7	LAWA-1C1-SW-40	Water	03/18/23 04:56	05/02/23 10:04
580-126685-8	LAWA-1C1-SW-B	Water	03/18/23 05:08	05/02/23 10:04
580-126685-9	LAWA-1C1-SW-B-FD	Water	03/18/23 05:20	05/02/23 10:04
580-126685-10	LAWA-1C2-SW-1	Water	03/18/23 07:08	05/02/23 10:04
580-126685-11	LAWA-1C2-SW-20	Water	03/18/23 07:45	05/02/23 10:04
580-126685-12	LAWA-1C2-SW-40	Water	03/18/23 07:55	05/02/23 10:04
580-126685-13	LAWA-1C2-SW-B	Water	03/18/23 08:07	05/02/23 10:04
580-126685-14	LAWA-1C3X-SW-1	Water	03/18/23 19:21	05/02/23 10:04
580-126685-15	LAWA-1C3X-SW-20	Water	03/18/23 19:29	05/02/23 10:04
580-126685-16	LAWA-1C3X-SW-40	Water	03/18/23 19:40	05/02/23 10:04
580-126685-17	LAWA-1C3X-SW-B	Water	03/18/23 19:52	05/02/23 10:04
580-126685-18	LAWA-1D1-SW-1	Water	03/19/23 02:31	05/02/23 10:04
580-126685-19	LAWA-1D1-SW-20	Water	03/19/23 02:37	05/02/23 10:04
580-126685-20	LAWA-1D1-SW-40	Water	03/19/23 02:46	05/02/23 10:04
580-126685-21	LAWA-1D1-SW-B	Water	03/19/23 02:59	05/02/23 10:04
580-126685-22	LAWA-1D2-SW-1	Water	03/19/23 00:28	05/02/23 10:04
580-126685-23	LAWA-1D2-SW-1-FD	Water	03/19/23 00:36	05/02/23 10:04
580-126685-24	LAWA-1D2-SW-20	Water	03/19/23 00:43	05/02/23 10:04
580-126685-25	LAWA-1D2-SW-40	Water	03/19/23 00:52	05/02/23 10:04
580-126685-26	LAWA-1D2-SW-B	Water	03/19/23 01:05	05/02/23 10:04
580-126685-27	LAWA-1D3X-SW-1	Water	03/18/23 20:43	05/02/23 10:04
580-126685-28	LAWA-1D3X-SW-20	Water	03/18/23 20:51	05/02/23 10:04
580-126685-29	LAWA-1D3X-SW-40	Water	03/18/23 21:01	05/02/23 10:04
580-126685-30	LAWA-1D3X-SW-B	Water	03/18/23 21:14	05/02/23 10:04
580-126685-31	LAWA-3C1-SW-1	Water	03/17/23 16:43	05/02/23 10:04
580-126685-32	LAWA-3C1-SW-20	Water	03/17/23 16:50	05/02/23 10:04
580-126685-33	LAWA-3C1-SW-40	Water	03/17/23 17:00	05/02/23 10:04
580-126685-34	LAWA-3C1-SW-B	Water	03/17/23 17:13	05/02/23 10:04
580-126685-35	LAWA-3C2-SW-1	Water	03/18/23 03:47	05/02/23 10:04
580-126685-36	LAWA-3C2-SW-20	Water	03/18/23 03:04	05/02/23 10:04
580-126685-37	LAWA-3C2-SW-40	Water	03/18/23 04:03	05/02/23 10:04
580-126685-38	LAWA-3C2-SW-B	Water	03/18/23 04:15	05/02/23 10:04
580-126685-39	LAWA-3C3-SW-1	Water	03/18/23 02:01	05/02/23 10:04
580-126685-40	LAWA-3C3-SW-20	Water	03/18/23 02:08	05/02/23 10:04
580-126685-41	LAWA-3C3-SW-40	Water	03/18/23 02:07	05/02/23 10:04
580-126685-42	LAWA-3C3-SW-B	Water	03/18/23 02:33	05/02/23 10:04
580-126685-43	LAWA-3D1X-SW-1	Water	03/17/23 12:21	05/02/23 10:04
580-126685-44	LAWA-3D1X-SW-20	Water	03/17/23 12:29	05/02/23 10:04
580-126685-45	LAWA-3D1X-SW-40	Water	03/17/23 12:39	05/02/23 10:04
580-126685-46	LAWA-3D1X-SW-B	Water	03/17/23 12:51	05/02/23 10:04
580-126685-47	LAWA-3D2-SW-1	Water	03/17/23 04:33	05/02/23 10:04
580-126685-48	LAWA-3D2-SW-1-FD	Water	03/17/23 04:41	05/02/23 10:04
580-126685-49	LAWA-3D2-SW-20	Water	03/17/23 04:48	05/02/23 10:04
580-126685-50	LAWA-3D2-SW-40	Water	03/17/23 04:58	05/02/23 10:04
580-126685-51	LAWA-3D2-SW-B	Water	03/17/23 05:10	05/02/23 10:04
580-126685-52	LAWA-3D3-SW-1	Water	03/17/23 03:38	05/02/23 10:04
580-126685-53	LAWA-3D3-SW-20	Water	03/17/23 03:49	05/02/23 10:04
580-126685-54	LAWA-3D3-SW-40	Water	03/17/23 03:59	05/02/23 10:04
580-126685-55	LAWA-3D3-SW-B	Water	03/17/23 04:14	05/02/23 10:04



Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-126685-56	LAWA-EQ	Water	03/17/23 03:25	05/02/23 10:04
580-126685-57	LAWA-WB	Water	03/17/23 03:30	05/02/23 10:04
580-126685-139	MAWD-1B2X-SW-1	Water	03/23/23 00:50	05/02/23 10:04
580-126685-140	MAWD-1B2X-SW-20	Water	03/23/23 00:56	05/02/23 10:04
580-126685-141	MAWD-1B2X-SW-40	Water	03/23/23 01:05	05/02/23 10:04
580-126685-142	MAWD-1B2X-SW-B	Water	03/23/23 01:17	05/02/23 10:04
580-126685-143	MAWD-1C2-SW-1	Water	03/23/23 02:22	05/02/23 10:04
580-126685-144	MAWD-1C2-SW-20	Water	03/23/23 02:28	05/02/23 10:04
580-126685-145	MAWD-1C2-SW-40	Water	03/23/23 02:37	05/02/23 10:04
580-126685-146	MAWD-1C2-SW-B	Water	03/23/23 02:48	05/02/23 10:04
580-126685-147	MAWD-2C2X-SW-1	Water	03/23/23 04:27	05/02/23 10:04
580-126685-148	MAWD-2C2X-SW-20	Water	03/23/23 04:34	05/02/23 10:04
580-126685-149	MAWD-2C2X-SW-40	Water	03/23/23 04:43	05/02/23 10:04
580-126685-150	MAWD-2C2X-SW-B	Water	03/23/23 04:55	05/02/23 10:04
580-126685-151	MAWD-3B2-SW-1	Water	03/22/23 20:25	05/02/23 10:04
580-126685-152	MAWD-3B2-SW-20	Water	03/22/23 20:31	05/02/23 10:04
580-126685-153	MAWD-3B2-SW-40	Water	03/22/23 20:42	05/02/23 10:04
580-126685-154	MAWD-3B2-SW-B	Water	03/22/23 20:54	05/02/23 10:04
580-126685-155	MAWD-3C2X-SW-1	Water	03/22/23 19:15	05/02/23 10:04
580-126685-156	MAWD-3C2X-SW-20	Water	03/22/23 19:24	05/02/23 10:04
580-126685-157	MAWD-3C2X-SW-40	Water	03/22/23 19:33	05/02/23 10:04
580-126685-158	MAWD-3C2X-SW-B	Water	03/22/23 19:44	05/02/23 10:04
580-126685-159	MAWD-4B2X-SW-1	Water	03/22/23 22:18	05/02/23 10:04
580-126685-160	MAWD-4B2X-SW-20	Water	03/22/23 22:24	05/02/23 10:04
580-126685-161	MAWD-4B2X-SW-40	Water	03/22/23 22:33	05/02/23 10:04
580-126685-162	MAWD-4B2X-SW-B	Water	03/22/23 22:44	05/02/23 10:04

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 580-126685-1

Login Number: 126685

List Source: Eurofins Seattle

List Number: 1

Creator: Groden, Kyle J

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



June 19, 2023

Theodore E. Donn
Tetra Tech, Inc.
3746 Mt. Diablo Blvd,
Lafayette, CA 94549-

Project Name: T423.20
Physis Project ID: 2107007-004

Dear Theodore,

Enclosed are the analytical results for samples submitted to PHYSIS Environmental Laboratories, Inc. (PHYSIS) on 5/5/2023. A total of 55 samples were received for analysis in accordance with the attached chain of custody (COC). Per the COC, the samples were analyzed for:

Organics
Total Organic Carbon by SM 5310 B

Analytical results in this report apply only to samples submitted to PHYSIS in accordance with the COC and are intended to be considered in their entirety.

Please feel free to contact me at any time with any questions. PHYSIS appreciates the opportunity to provide you with our analytical and support services.

Regards,

Rachel Hansen
714 602-5320
Extension 203
rachelhansen@physislabs.com

PROJECT SAMPLE LIST

Tetra Tech, Inc.

PHYSIS Project ID: 2107007-004

T423.20

Total Samples: 55

PHYSIS ID	Sample ID	Description	Date	Time	Matrix	Sample Type
106378	G4/43REF-SW-1		3/23/2023	10:11	Samplewater	Not Specified
106379	G4/43REF-SW-20		3/23/2023	10:17	Samplewater	Not Specified
106380	G4/43REF-SW-40		3/23/2023	10:25	Samplewater	Not Specified
106381	G4/43REF-SW-B		3/23/2023	10:37	Samplewater	Not Specified
106382	LAWA-1C1-SW-1		3/18/2023	4:36	Samplewater	Not Specified
106383	LAWA-1C1-SW-20		3/18/2023	4:44	Samplewater	Not Specified
106384	LAWA-1C1-SW-40		3/18/2023	4:56	Samplewater	Not Specified
106385	LAWA-1C1-SW-B		3/18/2023	5:08	Samplewater	Not Specified
106386	LAWA-1C1-SW-B-FD		3/18/2023	5:20	Samplewater	Not Specified
106387	LAWA-1C2-SW-1		3/18/2023	7:08	Samplewater	Not Specified
106388	LAWA-1C2-SW-20		3/18/2023	7:45	Samplewater	Not Specified
106389	LAWA-1C2-SW-40		3/18/2023	7:55	Samplewater	Not Specified
106390	LAWA-1C2-SW-B		3/18/2023	8:07	Samplewater	Not Specified
106391	LAWA-1C3X-SW-1		3/18/2023	19:21	Samplewater	Not Specified
106392	LAWA-1C3X-SW-20		3/18/2023	19:29	Samplewater	Not Specified
106393	LAWA-1C3X-SW-40		3/18/2023	19:40	Samplewater	Not Specified
106394	LAWA-1C3X-SW-B		3/18/2023	19:52	Samplewater	Not Specified
106395	LAWA-1D1-SW-1		3/19/2023	2:31	Samplewater	Not Specified
106396	LAWA-1D1-SW-20		3/19/2023	2:37	Samplewater	Not Specified
106397	LAWA-1D1-SW-40		3/19/2023	2:46	Samplewater	Not Specified
106398	LAWA-1D1-SW-B		3/19/2023	2:59	Samplewater	Not Specified
106399	LAWA-1D2-SW-1		3/19/2023	0:28	Samplewater	Not Specified
106400	LAWA-1D2-SW-1-FD		3/19/2023	0:36	Samplewater	Not Specified
106401	LAWA-1D2-SW-20		3/19/2023	0:43	Samplewater	Not Specified
106402	LAWA-1D2-SW-40		3/19/2023	0:52	Samplewater	Not Specified
106403	LAWA-1D2-SW-B		3/19/2023	1:05	Samplewater	Not Specified
106404	LAWA-1D3X-SW-1		3/18/2023	20:43	Samplewater	Not Specified
106405	LAWA-1D3X-SW-20		3/18/2023	20:51	Samplewater	Not Specified
106406	LAWA-1D3X-SW-40		3/18/2023	21:01	Samplewater	Not Specified
106407	LAWA-1D3X-SW-B		3/18/2023	21:14	Samplewater	Not Specified
106408	LAWA-3C1-SW-1		3/17/2023	16:43	Samplewater	Not Specified
106409	LAWA-3C1-SW-20		3/17/2023	16:50	Samplewater	Not Specified
106410	LAWA-3C1-SW-40		3/17/2023	17:00	Samplewater	Not Specified
106411	LAWA-3C1-SW-B		3/17/2023	17:13	Samplewater	Not Specified
106412	LAWA-3C2-SW-1		3/18/2023	3:47	Samplewater	Not Specified

Tetra Tech, Inc.

PHYSIS Project ID: 2107007-004

T423.20

Total Samples: 55

PHYSIS ID	Sample ID	Description	Date	Time	Matrix	Sample Type
106413	LAWA-3C2-SW-20		3/18/2023	3:04	Samplewater	Not Specified
106414	LAWA-3C2-SW-40		3/18/2023	4:03	Samplewater	Not Specified
106415	LAWA-3C2-SW-B		3/18/2023	4:15	Samplewater	Not Specified
106416	LAWA-3C3-SW-1		3/18/2023	2:01	Samplewater	Not Specified
106417	LAWA-3C3-SW-20		3/18/2023	2:08	Samplewater	Not Specified
106418	LAWA-3C3-SW-40		3/18/2023	2:07	Samplewater	Not Specified
106419	LAWA-3C3-SW-B		3/18/2023	2:33	Samplewater	Not Specified
106420	LAWA-3D1X-SW-1		3/17/2023	12:21	Samplewater	Not Specified
106421	LAWA-3D1X-SW-20		3/17/2023	12:29	Samplewater	Not Specified
106422	LAWA-3D1X-SW-40		3/17/2023	12:39	Samplewater	Not Specified
106423	LAWA-3D1X-SW-B		3/17/2023	12:51	Samplewater	Not Specified
106424	LAWA-3D2-SW-1		3/17/2023	4:33	Samplewater	Not Specified
106425	LAWA-3D2-SW-1-FD		3/17/2023	4:41	Samplewater	Not Specified
106426	LAWA-3D2-SW-20		3/17/2023	4:48	Samplewater	Not Specified
106427	LAWA-3D2-SW-40		3/17/2023	4:58	Samplewater	Not Specified
106428	LAWA-3D2-SW-B		3/17/2023	5:10	Samplewater	Not Specified
106429	LAWA-3D3-SW-1		3/17/2023	3:38	Samplewater	Not Specified
106430	LAWA-3D3-SW-20		3/17/2023	3:49	Samplewater	Not Specified
106431	LAWA-3D3-SW-40		3/17/2023	3:59	Samplewater	Not Specified
106432	LAWA-3D3-SW-B		3/17/2023	4:14	Samplewater	Not Specified

ABBREVIATIONS and ACRONYMS

QM	Quality Manual
QA	Quality Assurance
QC	Quality Control
MDL	method detection limit
RL	reporting limit
R1	project sample
R2	project sample replicate
MS1	matrix spike
MS2	matrix spike replicate
B1	procedural blank
B2	procedural blank replicate
BS1	blank spike
BS2	blank spike replicate
LCS1	laboratory control spike
LCS2	laboratory control spike replicate
LCM1	laboratory control material
LCM2	laboratory control material replicate
CRM1	certified reference material
CRM2	certified reference material replicate
RPD	relative percent difference
LMW	low molecular weight
HMW	high molecular weight

QUALITY ASSURANCE SUMMARY

LABORATORY BATCH: Physis' QM defines a laboratory batch as a group of 20 or fewer project samples of similar matrix, processed together under the same conditions and with the same reagents. QC samples are associated with each batch and were used to assess the validity of the sample analyses.

PROCEDURAL BLANK: Laboratory contamination introduced during method use is assessed through the preparation and analysis of procedural blanks is provided at a minimum frequency of one per batch.

ACCURACY: Accuracy of analytical measurements is the degree of closeness based on percent recovery calculations between measured values and the actual or true value and includes a combination of reproducibility error and systematic bias due to sampling and analytical operations. Accuracy of the project data was indicated by analysis of MS, BS, LCS, LCM, CRM, and/or surrogate spikes on a minimum frequency of one per batch. Physis' QM requires that 95% of the target compounds greater than 10 times the MDL be within the specified acceptance limits.

PRECISION: Precision is the agreement among a set of replicate measurements without assumption of knowledge of the true value and is based on RPD calculations between repeated values. Precision of the project data was determined by analysis of replicate MS₁/MS₂, BS₁/BS₂, LCS₁/LCS₂, LCM₁/LCM₂, CRM₁/CRM₂, surrogate spikes and/or replicate project sample analysis (R₁/R₂) on a minimum frequency of one per batch. Physis' QM requires that for 95% of the compounds greater than 10 times the MDL, the percent RPD should be within the specified acceptance range.

BLANK SPIKES: BS is the introduction of a known concentration of analyte into the procedural blank. BS demonstrates performance of the preparation and analytical methods on a clean matrix void of potential matrix related interferences. The BS is performed in laboratory deionized water, making these recoveries a better indicator of the efficiency of the laboratory method per se.

MATRIX SPIKES: MS is the introduction of a known concentration of analyte into a sample. MS samples demonstrate the effect a particular project sample matrix has on the accuracy of a measurement. Individually, MS samples also indicate the bias of analytical measurements due to chemical interferences inherent in the specific project sample spiked. Intrinsic target analyte concentration in the specific project sample can also significantly impact MS recovery.

CERTIFIED REFERENCE MATERIALS: CRMs are materials of various matrices for which analytical information has been determined and certified by a recognized authority. These are used to provide a quantitative assessment of the accuracy of an analytical method. CRMs provide evidence that the laboratory preparation and analysis produces results that are comparable to those obtained by an independent organization.

LABORATORY CONTROL MATERIAL: LCM is provided because a suitable natural seawater CRM is not available and can be used to indicate accuracy of the method. Physis' internal LCM is seawater collected at ~800 meters in the Southern California San Pedro Basin and can be used as a reference for background concentrations in clean, natural seawater for comparison to project samples.

LABORATORY CONTROL SPIKES: LCS is the introduction of a known concentration of analyte into Physis' LCM. LCS samples were employed to assess the effect the seawater matrix has on the accuracy of a measurement. LCS also indicate the bias of this method due to chemical interferences inherent in the seawater matrix. Intrinsic LCM concentration can also significantly impact LCS recovery.

SURROGATES: A surrogate is a pure analyte unlikely to be found in any project sample, behaves similarly to

the target analyte and most often used with organic analytical procedures. Surrogates are added in known concentration to all samples and are measured to indicate overall efficiency of the method including processing and analyses.

HOLDING TIME: Method recommended holding times are the length of time a project sample can be stored under specific conditions after collection and prior to analysis without significantly affecting the analyte's concentration. Holding times can be extended if preservation techniques are employed to reduce biodegradation, volatilization, oxidation, sorption, precipitation, and other physical and chemical processes.

SAMPLE STORAGE/RETENTION: In order to maintain chemical integrity prior to analysis, all samples submitted to Pysis are refrigerated (liquids) or frozen (solids) upon receipt unless otherwise recommended by applicable methods. Solid samples are retained for 1 year from collection while liquid samples are retained until method recommended holding times elapse.

TOTAL/DISSOLVED FRACTION: In some instances, the results for the dissolved fraction may be higher than the total fraction for a particular analyte (e.g. trace metals). This is typically caused by the analytical variation for each result and indicates that the target analyte is primarily in the dissolved phase, within the sample.

PHYSIS QUALIFIER CODES

CODE	DEFINITION
#	see Case Narrative
ND	analyte not detected at or above the MDL
B	analyte was detected in the procedural blank greater than 10 times the MDL
E	analyte concentration exceeds the upper limit of the linear calibration range, reported value is estimated
H	sample received and/or analyzed past the recommended holding time
J	analyte was detected at a concentration below the RL and above the MDL, reported value is estimated
N	insufficient sample, analysis could not be performed
M	analyte was outside the specified accuracy and/or precision acceptance limits due to matrix interference. The associated B/BS were within limits, therefore the sample data was reported without further clarification
SH	analyte concentration in the project sample exceeded the spike concentration, therefore accuracy and/or precision acceptance limits do not apply
SL	analyte results were lower than 10 times the MDL, therefore accuracy and/or precision acceptance limits do not apply
NH	project sample was heterogeneous and sample homogeneity could not be readily achieved using routine laboratory practices, therefore accuracy and/or precision acceptance limits do not apply
Q	analyte was outside the specified QAPP acceptance limits for precision and/or accuracy but within Physis derived acceptance limits, therefore the sample data was reported without further clarification
R	Physis' QM allows for 5% of the target compounds greater than 10 times the MDL to be outside the specified acceptance limits for precision and/or accuracy. This is often due to random error and does not indicate any significant problems with the analysis of these project samples

ANALYTICAL

REPORT

TERRA

AURA

ENVIRONMENTAL LABORATORIES, INC.

Innovative Solutions for Nature

Conventionals

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 106378-R1	G4/43REF-SW-1		Matrix: Samplewater				Sampled: 23-Mar-23 10:11			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	1.14	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106379-R1	G4/43REF-SW-20		Matrix: Samplewater				Sampled: 23-Mar-23 10:17			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	1.33	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106380-R1	G4/43REF-SW-40		Matrix: Samplewater				Sampled: 23-Mar-23 10:25			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	1.19	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106381-R1	G4/43REF-SW-B		Matrix: Samplewater				Sampled: 23-Mar-23 10:37			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	1.11	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106382-R1	LAWA-1C1-SW-1		Matrix: Samplewater				Sampled: 18-Mar-23 4:36			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	1.32	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106383-R1	LAWA-1C1-SW-20		Matrix: Samplewater				Sampled: 18-Mar-23 4:44			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	1.34	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106384-R1	LAWA-1C1-SW-40		Matrix: Samplewater				Sampled: 18-Mar-23 4:56			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	1.51	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106385-R1	LAWA-1C1-SW-B		Matrix: Samplewater				Sampled: 18-Mar-23 5:08			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	0.989	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106386-R1	LAWA-1C1-SW-B-FD		Matrix: Samplewater				Sampled: 18-Mar-23 5:20			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	1.23	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106387-R1	LAWA-1C2-SW-1		Matrix: Samplewater				Sampled: 18-Mar-23 7:08			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	1.16	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106388-R1	LAWA-1C2-SW-20		Matrix: Samplewater				Sampled: 18-Mar-23 7:45			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	1.26	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23

Conventionals

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 106389-R1	LAWA-1C2-SW-40		Matrix: Samplewater				Sampled:	18-Mar-23	7:55	Received:	05-May-23
Total Organic Carbon	SM 5310 B	mg/L	1.1	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106390-R1	LAWA-1C2-SW-B		Matrix: Samplewater				Sampled:	18-Mar-23	8:07	Received:	05-May-23
Total Organic Carbon	SM 5310 B	mg/L	1.05	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106391-R1	LAWA-1C3X-SW-1		Matrix: Samplewater				Sampled:	18-Mar-23	19:21	Received:	05-May-23
Total Organic Carbon	SM 5310 B	mg/L	1.17	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106392-R1	LAWA-1C3X-SW-20		Matrix: Samplewater				Sampled:	18-Mar-23	19:29	Received:	05-May-23
Total Organic Carbon	SM 5310 B	mg/L	1.28	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106393-R1	LAWA-1C3X-SW-40		Matrix: Samplewater				Sampled:	18-Mar-23	19:40	Received:	05-May-23
Total Organic Carbon	SM 5310 B	mg/L	1.13	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106394-R1	LAWA-1C3X-SW-B		Matrix: Samplewater				Sampled:	18-Mar-23	19:52	Received:	05-May-23
Total Organic Carbon	SM 5310 B	mg/L	0.984	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106395-R1	LAWA-1D1-SW-1		Matrix: Samplewater				Sampled:	19-Mar-23	2:31	Received:	05-May-23
Total Organic Carbon	SM 5310 B	mg/L	1.18	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106396-R1	LAWA-1D1-SW-20		Matrix: Samplewater				Sampled:	19-Mar-23	2:37	Received:	05-May-23
Total Organic Carbon	SM 5310 B	mg/L	1.25	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106397-R1	LAWA-1D1-SW-40		Matrix: Samplewater				Sampled:	19-Mar-23	2:46	Received:	05-May-23
Total Organic Carbon	SM 5310 B	mg/L	1.14	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106398-R1	LAWA-1D1-SW-B		Matrix: Samplewater				Sampled:	19-Mar-23	2:59	Received:	05-May-23
Total Organic Carbon	SM 5310 B	mg/L	0.994	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106399-R1	LAWA-1D2-SW-1		Matrix: Samplewater				Sampled:	19-Mar-23	0:28	Received:	05-May-23
Total Organic Carbon	SM 5310 B	mg/L	1.42	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23

Conventionals

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 106400-R1	LAWA-1D2-SW-1-FD		Matrix: Samplewater				Sampled: 19-Mar-23 0:36			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	1.18	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106401-R1	LAWA-1D2-SW-20		Matrix: Samplewater				Sampled: 19-Mar-23 0:43			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	1.23	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106402-R1	LAWA-1D2-SW-40		Matrix: Samplewater				Sampled: 19-Mar-23 0:52			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	1.15	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106403-R1	LAWA-1D2-SW-B		Matrix: Samplewater				Sampled: 19-Mar-23 1:05			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	0.991	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106404-R1	LAWA-1D3X-SW-1		Matrix: Samplewater				Sampled: 18-Mar-23 20:43			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	1.77	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106405-R1	LAWA-1D3X-SW-20		Matrix: Samplewater				Sampled: 18-Mar-23 20:51			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	1.28	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106406-R1	LAWA-1D3X-SW-40		Matrix: Samplewater				Sampled: 18-Mar-23 21:01			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	1.21	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106407-R1	LAWA-1D3X-SW-B		Matrix: Samplewater				Sampled: 18-Mar-23 21:14			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	1.28	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106408-R1	LAWA-3C1-SW-1		Matrix: Samplewater				Sampled: 17-Mar-23 16:43			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	1.04	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106409-R1	LAWA-3C1-SW-20		Matrix: Samplewater				Sampled: 17-Mar-23 16:50			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	1.8	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106410-R1	LAWA-3C1-SW-40		Matrix: Samplewater				Sampled: 17-Mar-23 17:00			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	1.03	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23

Conventionals

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 106411-R1	LAWA-3C1-SW-B		Matrix: Samplewater				Sampled:	17-Mar-23	17:13	Received:	05-May-23
Total Organic Carbon	SM 5310 B	mg/L	0.998	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106412-R1	LAWA-3C2-SW-1		Matrix: Samplewater				Sampled:	18-Mar-23	3:47	Received:	05-May-23
Total Organic Carbon	SM 5310 B	mg/L	1.04	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106413-R1	LAWA-3C2-SW-20		Matrix: Samplewater				Sampled:	18-Mar-23	3:04	Received:	05-May-23
Total Organic Carbon	SM 5310 B	mg/L	1.3	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106414-R1	LAWA-3C2-SW-40		Matrix: Samplewater				Sampled:	18-Mar-23	4:03	Received:	05-May-23
Total Organic Carbon	SM 5310 B	mg/L	1.34	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106415-R1	LAWA-3C2-SW-B		Matrix: Samplewater				Sampled:	18-Mar-23	4:15	Received:	05-May-23
Total Organic Carbon	SM 5310 B	mg/L	1.12	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106416-R1	LAWA-3C3-SW-1		Matrix: Samplewater				Sampled:	18-Mar-23	2:01	Received:	05-May-23
Total Organic Carbon	SM 5310 B	mg/L	1.46	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106417-R1	LAWA-3C3-SW-20		Matrix: Samplewater				Sampled:	18-Mar-23	2:08	Received:	05-May-23
Total Organic Carbon	SM 5310 B	mg/L	1.16	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106418-R1	LAWA-3C3-SW-40		Matrix: Samplewater				Sampled:	18-Mar-23	2:07	Received:	05-May-23
Total Organic Carbon	SM 5310 B	mg/L	1.11	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106419-R1	LAWA-3C3-SW-B		Matrix: Samplewater				Sampled:	18-Mar-23	2:33	Received:	05-May-23
Total Organic Carbon	SM 5310 B	mg/L	0.993	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106420-R1	LAWA-3D1X-SW-1		Matrix: Samplewater				Sampled:	17-Mar-23	12:21	Received:	05-May-23
Total Organic Carbon	SM 5310 B	mg/L	1.16	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106421-R1	LAWA-3D1X-SW-20		Matrix: Samplewater				Sampled:	17-Mar-23	12:29	Received:	05-May-23
Total Organic Carbon	SM 5310 B	mg/L	1.06	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23

Conventionals

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 106422-R1	LAWA-3D1X-SW-40		Matrix: Samplewater				Sampled: 17-Mar-23 12:39			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	1.19	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106423-R1	LAWA-3D1X-SW-B		Matrix: Samplewater				Sampled: 17-Mar-23 12:51			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	1.14	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106424-R1	LAWA-3D2-SW-1		Matrix: Samplewater				Sampled: 17-Mar-23 4:33			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	1.19	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106425-R1	LAWA-3D2-SW-1-FD		Matrix: Samplewater				Sampled: 17-Mar-23 4:41			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	1.25	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106426-R1	LAWA-3D2-SW-20		Matrix: Samplewater				Sampled: 17-Mar-23 4:48			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	1.13	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106427-R1	LAWA-3D2-SW-40		Matrix: Samplewater				Sampled: 17-Mar-23 4:58			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	0.837	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106428-R1	LAWA-3D2-SW-B		Matrix: Samplewater				Sampled: 17-Mar-23 5:10			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	1.08	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106429-R1	LAWA-3D3-SW-1		Matrix: Samplewater				Sampled: 17-Mar-23 3:38			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	0.999	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106430-R1	LAWA-3D3-SW-20		Matrix: Samplewater				Sampled: 17-Mar-23 3:49			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	0.886	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106431-R1	LAWA-3D3-SW-40		Matrix: Samplewater				Sampled: 17-Mar-23 3:59			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	0.978	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23
Sample ID: 106432-R1	LAWA-3D3-SW-B		Matrix: Samplewater				Sampled: 17-Mar-23 4:14			Received: 05-May-23	
Total Organic Carbon	SM 5310 B	mg/L	0.75	1	0.2	0.44	Total		O-37061	16-May-23	18-May-23

PHYSIS

QUALITY CONTROL REPORT

TERRA FUSION AQUA AURA
ENVIRONMENTAL LABORATORIES, INC.

Innovative Solutions for Nature

Conventionals

QUALITY CONTROL REPORT

SAMPLE ID	BATCH ID	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
		LIMITS									
Total Organic Carbon		Method: SM 5310 B		Fraction: Tot		Prepared: 16-May-23		Analyzed: 18-May-23			
106375-B1	QAQC Procedural Blank	O-37061	ND	1	0.2	0.44	mg/L				
106375-BS1	QAQC Procedural Blank	O-37061	9.45	1	0.2	0.44	mg/L	10	0	94	63 - 133% PASS
106375-BS2	QAQC Procedural Blank	O-37061	9.53	1	0.2	0.44	mg/L	10	0	95	63 - 133% PASS
106376-B1	QAQC Procedural Blank	O-37061	ND	1	0.2	0.44	mg/L				
106376-BS1	QAQC Procedural Blank	O-37061	9.45	1	0.2	0.44	mg/L	10	0	94	63 - 133% PASS
106376-BS2	QAQC Procedural Blank	O-37061	9.53	1	0.2	0.44	mg/L	10	0	95	63 - 133% PASS
106377-B1	QAQC Procedural Blank	O-37061	ND	1	0.2	0.44	mg/L				
106377-BS1	QAQC Procedural Blank	O-37061	9.45	1	0.2	0.44	mg/L	10	0	94	63 - 133% PASS
106377-BS2	QAQC Procedural Blank	O-37061	9.53	1	0.2	0.44	mg/L	10	0	95	63 - 133% PASS
106378-MS1	G4/43REF-SW-1	O-37061	10.5	1	0.2	0.44	mg/L	10	1.14	94	68 - 132% PASS
106378-MS2	G4/43REF-SW-1	O-37061	10.5	1	0.2	0.44	mg/L	10	1.14	94	68 - 132% PASS
106378-R2	G4/43REF-SW-1	O-37061	1.15	1	0.2	0.44	mg/L				
106388-MS1	LAWA-1C2-SW-20	O-37061	10.6	1	0.2	0.44	mg/L	10	1.26	93	68 - 132% PASS
106388-MS2	LAWA-1C2-SW-20	O-37061	10.7	1	0.2	0.44	mg/L	10	1.26	94	68 - 132% PASS
106388-R2	LAWA-1C2-SW-20	O-37061	1.24	1	0.2	0.44	mg/L				
106398-MS1	LAWA-1D1-SW-B	O-37061	10.7	1	0.2	0.44	mg/L	10	0.994	97	68 - 132% PASS
106398-MS2	LAWA-1D1-SW-B	O-37061	10.6	1	0.2	0.44	mg/L	10	0.994	96	68 - 132% PASS
106398-R2	LAWA-1D1-SW-B	O-37061	1.07	1	0.2	0.44	mg/L				
106408-MS1	LAWA-3C1-SW-1	O-37061	10.8	1	0.2	0.44	mg/L	10	1.04	98	68 - 132% PASS
106408-MS2	LAWA-3C1-SW-1	O-37061	10.9	1	0.2	0.44	mg/L	10	1.04	99	68 - 132% PASS
106408-R2	LAWA-3C1-SW-1	O-37061	1.04	1	0.2	0.44	mg/L				

Conventional

QUALITY CONTROL REPORT

SAMPLE ID	BATCH ID	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
106418-MS1	LAWA-3C3-SW-40	O-37061	10.3	1	0.2	0.44	mg/L	10	1.11	92	68 - 132% PASS
106418-MS2	LAWA-3C3-SW-40	O-37061	10.3	1	0.2	0.44	mg/L	10	1.11	92	68 - 132% PASS
106418-R2	LAWA-3C3-SW-40	O-37061	1.13	1	0.2	0.44	mg/L			2	30 PASS
106428-MS1	LAWA-3D2-SW-B	O-37061	10.3	1	0.2	0.44	mg/L	10	1.08	92	68 - 132% PASS
106428-MS2	LAWA-3D2-SW-B	O-37061	10.3	1	0.2	0.44	mg/L	10	1.08	92	68 - 132% PASS
106428-R2	LAWA-3D2-SW-B	O-37061	1.11	1	0.2	0.44	mg/L			3	30 PASS

CHAIN OF CUSTODY

TERRA FUSION AURA
ENVIRONMENTAL LABORATORIES, INC.

Innovative Solutions for Nature

General Notes:

Please report all results to the MDL, J-flag results between MDL and RL
Please report results and invoice separately for each Project ID
Please report results in pdf format with Excel EDD deliverable
Please report results on a dry weight basis.

Project	SampleID	Medium	Preservation	Date	Time	TOC (SM 5310 B)TOC (SM 5310 B)TOC (SM 5310 B)
T423.20	G4/43REF-SW-1	SW	COLD	23-Mar-23	10:11	1
T423.20	G4/43REF-SW-20	SW	COLD	23-Mar-23	10:17	1
T423.20	G4/43REF-SW-40	SW	COLD	23-Mar-23	10:25	1
T423.20	G4/43REF-SW-B	SW	COLD	23-Mar-23	10:37	1
T423.20	LAWA-1C1-SW-1	SW	COLD	18-Mar-23	4:36	1
T423.20	LAWA-1C1-SW-20	SW	COLD	18-Mar-23	4:44	1
T423.20	LAWA-1C1-SW-40	SW	COLD	18-Mar-23	4:56	1
T423.20	LAWA-1C1-SW-B	SW	COLD	18-Mar-23	5:08	1
T423.20	LAWA-1C1-SW-B-FD	SW	COLD	18-Mar-23	5:20	1
T423.20	LAWA-1C2-SW-1	SW	COLD	18-Mar-23	7:08	1
T423.20	LAWA-1C2-SW-20	SW	COLD	18-Mar-23	7:45	1
T423.20	LAWA-1C2-SW-40	SW	COLD	18-Mar-23	7:55	1
T423.20	LAWA-1C2-SW-B	SW	COLD	18-Mar-23	8:07	1
T423.20	LAWA-1C3X-SW-1	SW	COLD	18-Mar-23	19:21	1
T423.20	LAWA-1C3X-SW-20	SW	COLD	18-Mar-23	19:29	1
T423.20	LAWA-1C3X-SW-40	SW	COLD	18-Mar-23	19*:40	1
T423.20	LAWA-1C3X-SW-B	SW	COLD	18-Mar-23	19:52	1
T423.20	LAWA-1D1-SW-1	SW	COLD	19-Mar-23	2:31	1
T423.20	LAWA-1D1-SW-20	SW	COLD	19-Mar-23	2:37	1
T423.20	LAWA-1D1-SW-40	SW	COLD	19-Mar-23	2:46	1
T423.20	LAWA-1D1-SW-B	SW	COLD	19-Mar-23	2:59	1
T423.20	LAWA-1D2-SW-1	SW	COLD	19-Mar-23	0:28	1
T423.20	LAWA-1D2-SW-1-FD	SW	COLD	19-Mar-23	0:36	1
T423.20	LAWA-1D2-SW-20	SW	COLD	19-Mar-23	0:43	1
T423.20	LAWA-1D2-SW-40	SW	COLD	19-Mar-23	0:52	1
T423.20	LAWA-1D2-SW-B	SW	COLD	19-Mar-23	1:05	1
T423.20	LAWA-1D3X-SW-1	SW	COLD	18-Mar-23	20:43	1
T423.20	LAWA-1D3X-SW-20	SW	COLD	18-Mar-23	20:51	1
T423.20	LAWA-1D3X-SW-40	SW	COLD	18-Mar-23	21:01	1
T423.20	LAWA-1D3X-SW-B	SW	COLD	18-Mar-23	21:14	1
T423.20	LAWA-3C1-SW-1	SW	COLD	17-Mar-23	16:43	1
T423.20	LAWA-3C1-SW-20	SW	COLD	17-Mar-23	16:50	1

Relinquished by:

27 Mar 23

Relinquished by:

Received by:

[Signature]
5/5/23
0925

Received by:

General Notes:

Please report all results to the MDL, J-flag results between MDL and RL
Please report results and invoice separately for each Project ID
Please report results in pdf format with Excel EDD deliverable
Please report results on a dry weight basis.

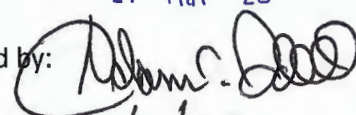
Project	SampleID	Medium	Preservation	Date	Time	TOC (SM 5310 B)TOC (SM 5310 B)TOC (SM 5310 B)
T423.20	LAWA-3C1-SW-40	SW	COLD	17-Mar-23	17:00	1
T423.20	LAWA-3C1-SW-B	SW	COLD	17-Mar-23	17:13	1
T423.20	LAWA-3C2-SW-1	SW	COLD	18-Mar-23	3:47	1
T423.20	LAWA-3C2-SW-20	SW	COLD	18-Mar-23	3:04	1
T423.20	LAWA-3C2-SW-40	SW	COLD	18-Mar-23	4:03	1
T423.20	LAWA-3C2-SW-B	SW	COLD	18-Mar-23	4:15	1
T423.20	LAWA-3C3-SW-1	SW	COLD	18-Mar-23	2:01	1
T423.20	LAWA-3C3-SW-20	SW	COLD	18-Mar-23	2:08	1
T423.20	LAWA-3C3-SW-40	SW	COLD	18-Mar-23	2:07	1
T423.20	LAWA-3C3-SW-B	SW	COLD	18-Mar-23	2:33	1
T423.20	LAWA-3D1X-SW-1	SW	COLD	17-Mar-23	12:21	1
T423.20	LAWA-3D1X-SW-20	SW	COLD	17-Mar-23	12:29	1
T423.20	LAWA-3D1X-SW-40	SW	COLD	17-Mar-23	12:39	1
T423.20	LAWA-3D1X-SW-B	SW	COLD	17-Mar-23	12:51	1
T423.20	LAWA-3D2-SW-1	SW	COLD	17-Mar-23	4:33	1
T423.20	LAWA-3D2-SW-1-FD	SW	COLD	17-Mar-23	4:41	1
T423.20	LAWA-3D2-SW-20	SW	COLD	17-Mar-23	4:48	1
T423.20	LAWA-3D2-SW-40	SW	COLD	17-Mar-23	4:58	1
T423.20	LAWA-3D2-SW-B	SW	COLD	17-Mar-23	5:10	1
T423.20	LAWA-3D3-SW-1	SW	COLD	17-Mar-23	3:38	1
T423.20	LAWA-3D3-SW-20	SW	COLD	17-Mar-23	3:49	1
T423.20	LAWA-3D3-SW-40	SW	COLD	17-Mar-23	3:59	1
T423.20	LAWA-3D3-SW-B	SW	COLD	17-Mar-23	4:14	1

Relinquished by:



Relinquished by:

Received by:


5/5/23
0925

Received by:

Project Iteration ID: 2107007-004
Client Name: Tetra Tech, Inc.
Project Name: T423.20
COC Page Number: 3 of 3
Bottle Label Color: NA

Sample Receipt Summary

Receiving Info

1. Initials Received By: [Signature]
2. Date Received: 5/5/23
3. Time Received: 0905
4. Client Name: Tetra Tech
5. Courier Information: (Please circle)
 - ☒ Client
 - ☐ UPS
 - ☐ Area Fast
 - ☐ DRS
 - ☒ FedEx
 - ☐ GSO/GLS
 - ☐ Ontrac
 - ☐ PAMS
 - ☐ PHYSIS Driver:
6. Container Information: (Please put the # of containers or circle none)
 - ☐ Cooler
 - ☒ Styrofoam Cooler
 - ☐ Boxes
 - ☐ None
 - ☐ Carboy(s)
 - ☐ Carboy Trash Can(s)
 - ☐ Carboy Cap(s)
 - ☐ Other
7. What type of ice was used: (Please circle any that apply)
 - ☐ Wet Ice
 - ☐ Blue Ice
 - ☒ Dry Ice
 - ☐ Water
 - ☐ None
8. Randomly Selected Samples Temperature (°C): -23 Used I/R Thermometer # 1-2

Inspection Info

1. Initials Inspected By: [Signature]

Sample Integrity Upon Receipt:

1. COC(s) included and completely filled out..... Yes / No
2. All sample containers arrived intact..... Yes / No
3. All samples listed on COC(s) are present..... Yes / No
4. Information on containers consistent with information on COC(s)..... Yes / No
5. Correct containers and volume for all analyses indicated..... Yes / No
6. All samples received within method holding time..... Yes / No
7. Correct preservation used for all analyses indicated..... Yes / No
8. Name of sampler included on COC(s)..... Yes / No

Notes:

Samples received Frozen

Sample LAWA - 3DIX-SW-B 3/17/23 1251 both vials received broken.

LAWA - 1D3X-SW-40 3/18/23 2101 one vial received broken

LAWA - 1D3X-SW-20 3/18/23 2051 one vial received broken.

~~LAWA - 1D1-SW-1 3/19/23 0231 both vials received broken. ADL~~

LAWA - 1D1-SW-B 3/19/23 0259 one vial received broken

LAWA - 3D3-SW-40 3/17/23 0359 one vial received broken

LAWA - 3DIX-SW-1 3/17/23 1222 one vial received broken

LAWA - 1C3X-SW-20 3/18/23 19:30 one vial received broken.
 LAWA - 3D1X-SW-40 3/17/23 12:39 one vial received broken.
 LAWA - 1D2 - ~~SW~~ - 1 3/19/23 ~~24:26~~ ^{12:49} one vial received broken
 LAWA - 3D3-SW-20 3/17/23 03:49am one vial received broken
 LAWA - 1D1-SW-40 3/19/23 02:46 one vial received broken
 LAWA - 1C1-SW-40 3/18/23 04:56 both vials received broken
 LAWA - 1D3X-SW-13 3/18/23 21:14 both vials received broken
 LAWA - 3D2-SW-40 3/17/23
 LAWA - 1C1-SW-20 3/18/23 04:58 one vial received broken
 LAWA - 1D3X-SW-1 3/18/23 04:44 both vials received broken
 LAWA - 3D3-SW-B 3/17/23 20:43 one vial received broken
 LAWA - 1C3X-SW-1 3/18/23 04:13 one vial received broken
 LAWA - 3C1-SW-B 3/18/23 19:21 one vial rec'd broken
 LAWA - 3C1-SW-1 3/18/23 05:08 one vial rec'd broken
 LAWA - 3C1-SW-1 3/17/23 16:43 one vial received broken
 LAWA - 1D2 - ~~SW~~ - B 3/19/23 01:04 one vial received broken
 LAWA - 3C5-SW-1 3/18/23 03:47 one vial received broken
 LAWA - 3D2-SW-40 3/18/23 04:03 one vial received broken
 LAWA - 3C2-SW-B 3/18/23 04:15 one vial received broken

Water so "Please report results on dry
 weight basis." is not an option.

July 02, 2023

Dr. Ted Donn

Tetra Tech, Inc.

3697 Mt. Diablo Blvd., Suite 150, Lafayette, CA 94549

RE: Submittal of laboratory analysis report for Project T423.20, DDPH Analysis of seawater

This covered letter is to submit laboratory analysis report for Project T423.20, DDPH Analysis of seawater service provided according to the UAE Quotation No. 2023-001895-R1 dated on February 27th, 2023.

It includes analysis results, chain of custody records, and case narrative for this service. Overall, the service is complete against customer's requirements on traceability, and quality control and assurance.

If you have any question concerning this report, please feel free to contact me.

Sincerely,



Piyapat Suttamanutwong

Laboratory and Research Development Manager

Ship to:
Piyapat S.
UAE Consultant Co., Ltd.
3 Soi Udomsuk 41, Sukhumvit Rd
Bangchak, Phrakhanong, Bangkok

CHAIN OF CUSTODY


Dr. Ted Donn
Tetra Tech Inc.
3697 Mt. Diablo Blvd., Suite 150
Lafayette, CA
ted.donn@tetrattech.com

General Notes:

Please report all results to the MDL, J-flag results between MDL and RL
Please report results and invoice separately for each Project ID
Please report results in pdf format with Excel EDD deliverable
LabDup, MS, MSD samples are for laboratory; Not to be billed to TetraTech

Project	SampleID	Medium	Preservation	Date	Time	DDPH
T423.20	G4/43REF-SW-1	SW	COLD	23-Mar-23	10:11	1
T423.20	G4/43REF-SW-20	SW	COLD	23-Mar-23	10:17	1
T423.20	G4/43REF-SW-40	SW	COLD	23-Mar-23	10:25	1
T423.20	G4/43REF-SW-B	SW	COLD	23-Mar-23	10:37	1
T423.20	LAWA-1C1-SW-1	SW	COLD	18-Mar-23	4:36	1
T423.20	LAWA-1C1-SW-20	SW	COLD	18-Mar-23	4:44	1
T423.20	LAWA-1C1-SW-40	SW	COLD	18-Mar-23	4:56	1
T423.20	LAWA-1C1-SW-B	SW	COLD	18-Mar-23	5:08	1
T423.20	LAWA-1C1-SW-B-FD	SW	COLD	18-Mar-23	5:20	1
T423.20	LAWA-1C2-SW-1	SW	COLD	18-Mar-23	7:38	1
T423.20	LAWA-1C2-SW-20	SW	COLD	18-Mar-23	7:45	1
T423.20	LAWA-1C2-SW-40	SW	COLD	18-Mar-23	7:55	1
T423.20	LAWA-1C2-SW-B	SW	COLD	18-Mar-23	8:07	1
T423.20	LAWA-1C3X-SW-1	SW	COLD	18-Mar-23	19:21	1
T423.20	LAWA-1C3X-SW-20	SW	COLD	18-Mar-23	19:30	1
T423.20	LAWA-1C3X-SW-40	SW	COLD	18-Mar-23	19:40	1
T423.20	LAWA-1C3X-SW-B	SW	COLD	18-Mar-23	19:52	1
T423.20	LAWA-1D1-SW-1	SW	COLD	19-Mar-23	2:31	1
T423.20	LAWA-1D1-SW-20	SW	COLD	19-Mar-23	2:37	1
T423.20	LAWA-1D1-SW-40	SW	COLD	19-Mar-23	2:46	1
T423.20	LAWA-1D1-SW-B	SW	COLD	19-Mar-23	2:59	1
T423.20	LAWA-1D2-SW-1	SW	COLD	19-Mar-23	0:28	1
T423.20	LAWA-1D2-SW-1-FD	SW	COLD	19-Mar-23	0:36	1
T423.20	LAWA-1D2-SW-20	SW	COLD	19-Mar-23	0:43	1
T423.20	LAWA-1D2-SW-40	SW	COLD	19-Mar-23	0:52	1
T423.20	LAWA-1D2-SW-B	SW	COLD	19-Mar-23	1:05	1
T423.20	LAWA-1D3X-SW-1	SW	COLD	18-Mar-23	20:43	1
T423.20	LAWA-1D3X-SW-20	SW	COLD	18-Mar-23	20:51	1
T423.20	LAWA-1D3X-SW-40	SW	COLD	18-Mar-23	21:01	1
T423.20	LAWA-1D3X-SW-B	SW	COLD	18-Mar-23	21:14	1
T423.20	LAWA-3C1-SW-1	SW	COLD	17-Mar-23	16:43	1
T423.20	LAWA-3C1-SW-20	SW	COLD	17-Mar-23	16:50	1
T423.20	LAWA-3C1-SW-40	SW	COLD	17-Mar-23	17:00	1
T423.20	LAWA-3C1-SW-B	SW	COLD	17-Mar-23	17:12	1
T423.20	LAWA-3C2-SW-1	SW	COLD	18-Mar-23	3:47	1
T423.20	LAWA-3C2-SW-20	SW	COLD	18-Mar-23	3:54	1
T423.20	LAWA-3C2-SW-40	SW	COLD	18-Mar-23	4:03	1
T423.20	LAWA-3C2-SW-B	SW	COLD	18-Mar-23	4:15	1
T423.20	LAWA-3C3-SW-1	SW	COLD	18-Mar-23	2:02	1
T423.20	LAWA-3C3-SW-20	SW	COLD	18-Mar-23	2:08	1

Relinquished by:


27 Mar 2023

Relinquished by:

Received by:


29 Mar 2023

Received by:

Ship to:
Piyapat S.
UAE Consultant Co., Ltd.
3 Soi Udomsuk 41, Sukhumvit Rd
Bangchak, Phrakhanong, Bangkok

CHAIN OF CUSTODY


Dr. Ted Donn
Tetra Tech Inc.
3697 Mt. Diablo Blvd., Suite 150
Lafayette, CA
ted.donn@tetrattech.com

General Notes:


Please report all results to the MDL, J-flag results between MDL and RL
Please report results and invoice separately for each Project ID
Please report results in pdf format with Excel EDD deliverable
LabDup, MS, MSD samples are for laboratory; Not to be billed to TetraTech

Project	SampleID	Medium	Preservation	Date	Time	DDPH
T423.20	LAWA-3C3-SW-40	SW	COLD	18-Mar-23	2:17	1
T423.20	LAWA-3C3-SW-B	SW	COLD	18-Mar-23	2:33	1
T423.20	LAWA-3D1X-SW-1	SW	COLD	17-Mar-23	12:22	1
T423.20	LAWA-3D1X-SW-20	SW	COLD	17-Mar-23	12:29	1
T423.20	LAWA-3D1X-SW-40	SW	COLD	17-Mar-23	12:39	1
T423.20	LAWA-3D1X-SW-B	SW	COLD	17-Mar-23	12:51	1
T423.20	LAWA-3D2-SW-1	SW	COLD	17-Mar-23	4:33	1
T423.20	LAWA-3D2-SW-1-FD	SW	COLD	17-Mar-23	4:41	1
T423.20	LAWA-3D2-SW-20	SW	COLD	17-Mar-23	4:48	1
T423.20	LAWA-3D2-SW-40	SW	COLD	17-Mar-23	4:58	1
T423.20	LAWA-3D2-SW-B	SW	COLD	17-Mar-23	5:10	1
T423.20	LAWA-3D3-SW-1	SW	COLD	17-Mar-23	3:38	1
T423.20	LAWA-3D3-SW-20	SW	COLD	17-Mar-23	3:49	1
T423.20	LAWA-3D3-SW-40	SW	COLD	17-Mar-23	3:59	1
T423.20	LAWA-3D3-SW-B	SW	COLD	17-Mar-23	4:13	1
T423.20	LAWA-EQ	SW	COLD	17-Mar-23	3:05	1
T423.20	LAWA-WB	SW	COLD	17-Mar-23	3:00	1

T423.18	MAWA-1C2-SW-1	SW	COLD	22-Mar-23	5:30	1
T423.18	MAWA-1C2-SW-20	SW	COLD	22-Mar-23	5:36	1
T423.18	MAWA-1C2-SW-40	SW	COLD	22-Mar-23	5:46	1
T423.18	MAWA-1C2-SW-B	SW	COLD	22-Mar-23	5:57	1
T423.18	MAWA-1CP2-SW-1	SW	COLD	22-Mar-23	12:26	1
T423.18	MAWA-1CP2-SW-20	SW	COLD	22-Mar-23	12:32	1
T423.18	MAWA-1CP2-SW-40	SW	COLD	22-Mar-23	12:41	1
T423.18	MAWA-1CP2-SW-B	SW	COLD	22-Mar-23	12:52	1
T423.18	MAWA-2B2X-SW-1	SW	COLD	22-Mar-23	3:52	1
T423.18	MAWA-2B2X-SW-20	SW	COLD	22-Mar-23	3:58	1
T423.18	MAWA-2B2X-SW-40	SW	COLD	22-Mar-23	4:07	1
T423.18	MAWA-2B2X-SW-B	SW	COLD	22-Mar-23	4:19	1
T423.18	MAWA-3B2-SW-1	SW	COLD	22-Mar-23	2:12	1
T423.18	MAWA-3B2-SW-20	SW	COLD	22-Mar-23	2:19	1
T423.18	MAWA-3B2-SW-20-FD	SW	COLD	22-Mar-23	2:26	1
T423.18	MAWA-3B2-SW-40	SW	COLD	22-Mar-23	2:35	1
T423.18	MAWA-3B2-SW-B	SW	COLD	22-Mar-23	2:48	1
T423.18	MAWA-3C2-SW-1	SW	COLD	22-Mar-23	0:21	1
T423.18	MAWA-3C2-SW-20	SW	COLD	22-Mar-23	0:27	1
T423.18	MAWA-3C2-SW-40	SW	COLD	22-Mar-23	0:36	1
T423.18	MAWA-3C2-SW-B	SW	COLD	22-Mar-23	0:47	1
T423.18	MAWA-4B2X-SW-1	SW	COLD	21-Mar-23	21:43	1

Relinquished by: 
27 Mar 2023

Relinquished by:

Received by: 
29 Mar 2023

Received by:


United Analyst and Engineering Consultant Co., Ltd.

3 Soi Udomsuk 41, Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260 Tel. : 0-2763-2828, Fax. : 0-2763-2800

 UNITED ANALYST AND ENGINEERING
CONSULTANT COMPANY LIMITED

 e-mail : lab@uaeconsultant.com <<mailto:lab@uaeconsultant.com>>

<http://www.uaeconsultant.com>
CHAIN-OF-CUSTODY

Number : 1


FOR CLIENT
FOR UAE

CLIENT : TETRA TECH INC.				ANALYSIS NO. : T23AF866-0001 - T23AF866-0241		PROJECT CODE : 23-00305		CLIENT ID : 16-00432	
ADDRESS : 77 SOI UDOMSUK 39/1 SUKHUMVIT 103 ROAD BANG CHAK BANGKOK 10260				QUOTATION NUMBER : 2023-001895-R1		SAMPLING BY : Customer			
TELEPHONE : +66 (0) 86-990-9863 FAX :				PAYMENT TERM : 1 / 1		WITNESS :			
CONTACT PERSON : Mr.SUKSAN JINANARONG SECTION :				UAE CONTACT : MissSUDARAT SONGKRATHOK		LOCATION :			
PROJECT NAME : Analysis of Seawater Quality 1st 2023				SECTION :					

ITEM	ANALYSIS NUMBER	SAMPLE NAME	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	SAMPLING METHOD	CONTAINER TYPE	QUANTITY	REQUIRED PARAMETER
1	T23AF866-0001	G4/43REF-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
2	T23AF866-0002	G4/43REF-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
3	T23AF866-0003	G4/43REF-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
4	T23AF866-0004	G4/43REF-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
5	T23AF866-0005	LAWA-1C1-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
6	T23AF866-0006	LAWA-1C1-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
7	T23AF866-0007	LAWA-1C1-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
8	T23AF866-0008	LAWA-1C1-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
9	T23AF866-0009	LAWA-1C1-SW-B-FD			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
10	T23AF866-0010	LAWA-1C2-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
11	T23AF866-0011	LAWA-1C2-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
12	T23AF866-0012	LAWA-1C2-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment

TRANSFER RECORD	NAME	SIGNATURE	DATE	TIME	CHECKMARK RELEASED	CHECKMARK RECEIVED	EXTERNAL SAMPLE CONDITION
1	นางสาว นก	[Signature]	3/4/66	14.16		[Signature]	<input checked="" type="radio"/> Complete <input type="radio"/> Incomplete
							<input type="radio"/> Complete <input type="radio"/> Incomplete
							<input type="radio"/> Complete <input type="radio"/> Incomplete

Analysis Method	Delivery Analysis	Sample Return	Remarks
<input type="radio"/> standard Method <input type="radio"/> Quation	<input type="radio"/> Mail/Messenger <input type="radio"/> Receive by Hand <input type="radio"/> Report	<input type="radio"/> Yes <input type="radio"/> No (Disposal sample afer send analysis report to customer 15 days)	


United Analyst and Engineering Consultant Co., Ltd.
CHAIN-OF-CUSTODY

 UNITED ANALYST AND ENGINEERING
CONSULTANT COMPANY LIMITED

3 Soi Udomsuk 41, Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260 Tel. : 0-2763-2828, Fax. : 0-2763-2800

Number : 1


FOR CLIENT
FOR UAE

CLIENT : TETRA TECH INC.				ANALYSIS NO. : T23AF866-0001 - T23AF866-0241		PROJECT CODE : 23-00305		CLIENT ID : 16-00432	
ADDRESS : 77 SOI UDOMSUK 39/1 SUKHUMVIT 103 ROAD BANG CHAK BANGKOK 10260				QUOTATION NUMBER : 2023-001895-R1		SAMPLING BY : Customer			
TELEPHONE : +66 (0) 86-990-9863 FAX :				PAYMENT TERM : 1 / 1		WITNESS :			
CONTACT PERSON : Mr.SUKSAN JINANARONG SECTION :				UAE CONTACT : MissSUDARAT SONGKRATHOK		LOCATION :			
PROJECT NAME : Analysis of Seawater Quality 1st 2023				SECTION :					

ITEM	ANALYSIS NUMBER	SAMPLE NAME	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	SAMPLING METHOD	CONTAINER TYPE	QUANTITY	REQUIRED PARAMETER
13	T23AF866-0013	LAWA-1C2-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
14	T23AF866-0014	LAWA-1C3X-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
15	T23AF866-0015	LAWA-1C3X-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
16	T23AF866-0016	LAWA-1C3X-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
17	T23AF866-0017	LAWA-1C3X-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
18	T23AF866-0018	LAWA-1D1-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
19	T23AF866-0019	LAWA-1D1-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
20	T23AF866-0020	LAWA-1D1-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
21	T23AF866-0021	LAWA-1D1-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
22	T23AF866-0022	LAWA-1D2-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
23	T23AF866-0023	LAWA-1D2-SW-1-FD			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
24	T23AF866-0024	LAWA-1D2-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment

TRANSFER RECORD	NAME	SIGNATURE	DATE	TIME	CHECKMARK RELEASED	CHECKMARK RECEIVED	EXTERNAL SAMPLE CONDITION
1	M. J. J.	[Signature]	3/4/66	14.16			<input checked="" type="radio"/> Complete <input type="radio"/> Incomplete
							<input type="radio"/> Complete <input type="radio"/> Incomplete
							<input type="radio"/> Complete <input type="radio"/> Incomplete

Analysis Method	Delivery Analysis	Sample Return	Remarks
<input type="radio"/> standard Method <input type="radio"/> Quotation	<input type="radio"/> Mail/Messenger <input type="radio"/> Receive by Hand <input type="radio"/> Report	<input type="radio"/> Yes <input type="radio"/> No (Disposal sample after send analysis report to customer 15 days)	


United Analyst and Engineering Consultant Co., Ltd.

3 Soi Udomsuk 41, Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260 Tel. : 0-2763-2828, Fax. : 0-2763-2800

 UNITED ANALYST AND ENGINEERING
CONSULTANT COMPANY LIMITED

 e-mail : lab@uaeconsultant.com <<mailto:lab@uaeconsultant.com>>

 <<http://www.uaeconsultant.com>>

CHAIN-OF-CUSTODY

Number : 1


FOR CLIENT
FOR UAE

CLIENT : TETRA TECH INC.					ANALYSIS NO. : T23AF866-0001 - T23AF866-0241		PROJECT CODE : 23-00305		CLIENT ID : 16-00432	
ADDRESS : 77 SOI UDOMSUK 39/1 SUKHUMVIT 103 ROAD BANG CHAK BANGKOK 10260					QUOTATION NUMBER : 2023-001895-R1		SAMPLING BY : Customer			
TELEPHONE : +66 (0) 86-990-9863 FAX :					PAYMENT TERM : 1 / 1		WITNESS :			
CONTACT PERSON : Mr.SUKSAN JINANARONG SECTION :					UAE CONTACT : MissSUDARAT SONGKRATHOK		LOCATION :			
PROJECT NAME : Analysis of Seawater Quality 1st 2023					SECTION :					

ITEM	ANALYSIS NUMBER	SAMPLE NAME	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	SAMPLING METHOD	CONTAINER TYPE	QUANTITY	REQUIRED PARAMETER
25	T23AF866-0025	LAWA-1D2-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
26	T23AF866-0026	LAWA-1D2-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
27	T23AF866-0027	LAWA-1D3X-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
28	T23AF866-0028	LAWA-1D3X-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
29	T23AF866-0029	LAWA-1D3X-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
30	T23AF866-0030	LAWA-1D3X-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
31	T23AF866-0031	LAWA-3C1-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
32	T23AF866-0032	LAWA-3C1-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
33	T23AF866-0033	LAWA-3C1-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
34	T23AF866-0034	LAWA-3C1-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
35	T23AF866-0035	LAWA-3C2-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
36	T23AF866-0036	LAWA-3C2-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment

TRANSFER RECORD	NAME	SIGNATURE	DATE	TIME	CHECKMARK RELEASED	CHECKMARK RECEIVED	EXTERNAL SAMPLE CONDITION
1	นางสาว		5/4/66	14.16			<input checked="" type="radio"/> Complete <input type="radio"/> Incomplete
							<input type="radio"/> Complete <input type="radio"/> Incomplete
							<input type="radio"/> Complete <input type="radio"/> Incomplete
Analysis Method		Delivery Analysis		Sample Return		Remarks	
<input type="radio"/> standard Method <input type="radio"/> Quation		<input type="radio"/> Mail/Messenger <input type="radio"/> Receive by Hand <input type="radio"/> Report		<input type="radio"/> Yes <input type="radio"/> No (Disposal sample afer send analysis report to customer 15 days)			


United Analyst and Engineering Consultant Co., Ltd.
CHAIN-OF-CUSTODY

 UNITED ANALYST AND ENGINEERING
CONSULTANT COMPANY LIMITED

3 Soi Udumsuk 41, Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260 Tel. : 0-2763-2828, Fax. : 0-2763-2800

Number : 1


 e-mail : lab@uaeconsultant.com <<mailto:lab@uaeconsultant.com>>

<http://www.uaeconsultant.com>
FOR CLIENT
FOR UAE

CLIENT : TETRA TECH INC.	ANALYSIS NO. : T23AF866-0001 - T23AF866-0241	PROJECT CODE : 23-00305	CLIENT ID : 16-00432
ADDRESS : 77 SOI UDOMSUK 39/1 SUKHUMVIT 103 ROAD BANG CHAK BANGKOK 10260	QUOTATION NUMBER : 2023-001895-R1	SAMPLING BY : Customer	
TELEPHONE : +66 (0) 86-990-9863 FAX :	PAYMENT TERM : 1 / 1	WITNESS :	
CONTACT PERSON : Mr.SUKSAN JINANARONG SECTION :	UAE. CONTACT : MissSUDARAT SONGKRATHOK	LOCATION :	
PROJECT NAME : Analysis of Seawater Quality 1st 2023	SECTION :		

ITEM	ANALYSIS NUMBER	SAMPLE NAME	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	SAMPLING METHOD	CONTAINER TYPE	QUANTITY	REQUIRED PARAMETER
37	T23AF866-0037	LAWA-3C2-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
38	T23AF866-0038	LAWA-3C2-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
39	T23AF866-0039	LAWA-3C3-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
40	T23AF866-0040	LAWA-3C3-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
41	T23AF866-0041	LAWA-3C3-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
42	T23AF866-0042	LAWA-3C3-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
43	T23AF866-0043	LAWA-3D1X-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
44	T23AF866-0044	LAWA-3D1X-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
45	T23AF866-0045	LAWA-3D1X-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
46	T23AF866-0046	LAWA-3D1X-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
47	T23AF866-0047	LAWA-3D2-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
48	T23AF866-0048	LAWA-3D2-SW-1-FD			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment

TRANSFER RECORD	NAME	SIGNATURE	DATE	TIME	CHECKMARK RELEASED	CHECKMARK RECEIVED	EXTERNAL SAMPLE CONDITION
1	นางสาว สกน	สกน	8/4/66	14.16		<input checked="" type="checkbox"/>	<input checked="" type="radio"/> Complete <input type="radio"/> Incomplete
						<input type="checkbox"/>	<input type="radio"/> Complete <input type="radio"/> Incomplete
						<input type="checkbox"/>	<input type="radio"/> Complete <input type="radio"/> Incomplete
Analysis Method	Delivery Analysis	Sample Return			Remarks		
<input type="radio"/> standard Method <input type="radio"/> Quotation	<input type="radio"/> Mail/Messenger <input type="radio"/> Receive by Hand <input type="radio"/> Report	<input type="radio"/> Yes <input type="radio"/> No (Disposal sample after send analysis report to customer 15 days)					


United Analyst and Engineering Consultant Co., Ltd.
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 <<http://www.uaeconsultant.com>>

FOR CLIENT
FOR UAE

CLIENT	: TETRA TECH INC.	ANALYSIS NO.	: T23AF866-0001 - T23AF866-0241	PROJECT CODE	: 23-00305	CLIENT ID	: 16-00432
ADDRESS	: 77 SOI UDOMSUK 39/1 SUKHUMVIT 103 ROAD BANG CHAK BANGKOK 10260	QUOTATION NUMBER	: 2023-001895-R1	SAMPLING BY	: Customer		
TELEPHONE	: +66 (0) 86-990-9863	FAX	:	PAYMENT TERM	: 1 / 1	WITNESS	:
CONTACT PERSON	: Mr.SUKSAN JINANARONG	SECTION	:	UAE CONTACT	: MissSUDARAT SONGKRATHOK	LOCATION	:
PROJECT NAME	: Analysis of Seawater Quality 1st 2023	SECTION	:				

ITEM	ANALYSIS NUMBER	SAMPLE NAME	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	SAMPLING METHOD	CONTAINER TYPE	QUANTITY	REQUIRED PARAMETER
49	T23AF866-0049	LAWA-3D2-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
50	T23AF866-0050	LAWA-3D2-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
51	T23AF866-0051	LAWA-3D2-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
52	T23AF866-0052	LAWA-3D3-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
53	T23AF866-0053	LAWA-3D3-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
54	T23AF866-0054	LAWA-3D3-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
55	T23AF866-0055	LAWA-3D3-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
56	T23AF866-0056	LAWA-EQ			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
57	T23AF866-0057	LAWA-WB			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
58	T23AF866-0058	MAWA-1C2-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
59	T23AF866-0059	MAWA-1C2-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
60	T23AF866-0060	MAWA-1C2-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment

TRANSFER RECORD	NAME	SIGNATURE	DATE	TIME	CHECKMARK RELEASED	CHECKMARK RECEIVED	EXTERNAL SAMPLE CONDITION
1	M2827 LMY	[Signature]	3/4/66	14.16		[Signature]	<input checked="" type="radio"/> Complete <input type="radio"/> Incomplete
							<input type="radio"/> Complete <input type="radio"/> Incomplete
							<input type="radio"/> Complete <input type="radio"/> Incomplete
Analysis Method	Delivery Analysis	Sample Return	Remarks				
<input type="radio"/> standard Method <input type="radio"/> Quation	<input type="radio"/> Mail/Messenger <input type="radio"/> Receive by Hand <input type="radio"/> Report	<input type="radio"/> Yes <input type="radio"/> No (Disposal sample afer send analysis report to customer 15 days)					

Attachment

CLIENT ID : 16-00432



COC ID : 1

2023-001895-R1

ITEM	SAMPLE NAME	REQUIRED PARAMETER
1	G4/43REF-SW-1	TPH
2	G4/43REF-SW-20	TPH
3	G4/43REF-SW-40	TPH
4	G4/43REF-SW-B	TPH
5	LAWA-1C1-SW-1	TPH
6	LAWA-1C1-SW-20	TPH
7	LAWA-1C1-SW-40	TPH
8	LAWA-1C1-SW-B	TPH
9	LAWA-1C1-SW-B-FD	TPH
10	LAWA-1C2-SW-1	TPH
11	LAWA-1C2-SW-20	TPH
12	LAWA-1C2-SW-40	TPH
13	LAWA-1C2-SW-B	TPH
14	LAWA-1C3X-SW-1	TPH
15	LAWA-1C3X-SW-20	TPH
16	LAWA-1C3X-SW-40	TPH
17	LAWA-1C3X-SW-B	TPH
18	LAWA-1D1-SW-1	TPH
19	LAWA-1D1-SW-20	TPH
20	LAWA-1D1-SW-40	TPH
21	LAWA-1D1-SW-B	TPH
22	LAWA-1D2-SW-1	TPH
23	LAWA-1D2-SW-1-FD	TPH
24	LAWA-1D2-SW-20	TPH
25	LAWA-1D2-SW-40	TPH
26	LAWA-1D2-SW-B	TPH
27	LAWA-1D3X-SW-1	TPH
28	LAWA-1D3X-SW-20	TPH
29	LAWA-1D3X-SW-40	TPH
30	LAWA-1D3X-SW-B	TPH
31	LAWA-3C1-SW-1	TPH
32	LAWA-3C1-SW-20	TPH
33	LAWA-3C1-SW-40	TPH
34	LAWA-3C1-SW-B	TPH
35	LAWA-3C2-SW-1	TPH
36	LAWA-3C2-SW-20	TPH
37	LAWA-3C2-SW-40	TPH
38	LAWA-3C2-SW-B	TPH
39	LAWA-3C3-SW-1	TPH
40	LAWA-3C3-SW-20	TPH
41	LAWA-3C3-SW-40	TPH
42	LAWA-3C3-SW-B	TPH

Attachment

CLIENT ID : 16-00432



COC ID : 1

2023-001895-R1

ITEM	SAMPLE NAME	REQUIRED PARAMETER
43	LAWA-3D1X-SW-1	TPH
44	LAWA-3D1X-SW-20	TPH
45	LAWA-3D1X-SW-40	TPH
46	LAWA-3D1X-SW-B	TPH
47	LAWA-3D2-SW-1	TPH
48	LAWA-3D2-SW-1-FD	TPH
49	LAWA-3D2-SW-20	TPH
50	LAWA-3D2-SW-40	TPH
51	LAWA-3D2-SW-B	TPH
52	LAWA-3D3-SW-1	TPH
53	LAWA-3D3-SW-20	TPH
54	LAWA-3D3-SW-40	TPH
55	LAWA-3D3-SW-B	TPH
56	LAWA-EQ	TPH
57	LAWA-WB	TPH
58	MAWA-1C2-SW-1	TPH
59	MAWA-1C2-SW-20	TPH
60	MAWA-1C2-SW-40	TPH
61	MAWA-1C2-SW-B	TPH
62	MAWA-1CP2-SW-1	TPH
63	MAWA-1CP2-SW-20	TPH
64	MAWA-1CP2-SW-40	TPH
65	MAWA-1CP2-SW-B	TPH
66	MAWA-1CP2-SW-1	TPH
67	MAWA-1CP2-SW-20	TPH
68	MAWA-1CP2-SW-40	TPH
69	MAWA-1CP2-SW-B	TPH
70	MAWA-3B2-SW-1	TPH
71	MAWA-3B2-SW-20	TPH
72	MAWA-3B2-SW-20-FD	TPH
73	MAWA-3B2-SW-40	TPH
74	MAWA-3B2-SW-B	TPH
75	MAWA-3C2-SW-1	TPH
76	MAWA-3C2-SW-20	TPH
77	MAWA-3C2-SW-40	TPH
78	MAWA-3C2-SW-B	TPH
79	MAWA-4B2X-SW-1	TPH
80	MAWA-4B2X-SW-20	TPH
81	MAWA-4B2X-SW-40	TPH
82	MAWA-4B2X-SW-B	TPH
83	MAWA-EQ	TPH
84	MAWA-WB	TPH

CASE NARRATIVE

Project T423.20 - :

All water samples were received and registered by United Analyst and Engineering Consultant Co, Ltd. on March 29, 2023 in a proper preservation condition; sealed cooler with a temperature of 5 °C. Sample conditions are ready for sample testing according to agreed standard test method.

The samples were prepared and analyzed by pre-concentration and fluorescence Spectrophotometric method in accordance with required international test method referred to Intergovernmental Oceanographic Commission (MARPOLMON-P). Analytical batches are in quality control status and trend. Analysis results are measured correctly and precisely against established acceptance criteria.

Overall, the analysis results is traceable, accurate and precise to meet customer's need and requirement. Non-compliance has not observed.

ANALYSIS REPORT

PROJECT NAME : CHEVRON ENVIRONMENTAL MONITORING CAMPAIGN DURING 6 MARCH - 28 MARCH 2023.

CUSTOMER NAME : TETRA TECH INC.

ADDRESS : 77 SOI UDOMSUK 39/1, SUKHUMVIT 103 ROAD, BANGCHAK, PRAKHANONG, BANGKOK 10260.
TEL. 0 2361 3767 FAX 0 2361 3768

SAMPLING SOURCE : -

SAMPLE TYPE : SEAWATER **RECEIVED DATE** : 29-03-2023

SAMPLING DATE : * **ANALYTICAL DATE** : 20-04-2023 - 27-04-2023

SAMPLING TIME : * **ANALYSIS NO.** : **

SAMPLING METHOD : - **WORK NO.** : LAB1895-R1/2023

ANALYZED BY : MR WEERAYUT SARAPAGDEE **REPORT NO.** : L2023-U040656

PROJECT	SAMPLE NAME	ANALYSIS NO.**	MATRIX	SAMPLING DATE*
T423.20	G4/43REF-SW-1	T23AF866-0001	SEAWATER	23-03-2023 10:11:00
T423.20	G4/43REF-SW-20	T23AF866-0002	SEAWATER	23-03-2023 10:17:00
T423.20	G4/43REF-SW-40	T23AF866-0003	SEAWATER	23-03-2023 10:25:00
T423.20	G4/43REF-SW-B	T23AF866-0004	SEAWATER	23-03-2023 10:37:00
T423.20	LAWA-1C1-SW-1	T23AF866-0005	SEAWATER	18-03-2023 04:36:00
T423.20	LAWA-1C1-SW-20	T23AF866-0006	SEAWATER	18-03-2023 04:44:00
T423.20	LAWA-1C1-SW-40	T23AF866-0007	SEAWATER	18-03-2023 04:56:00
T423.20	LAWA-1C1-SW-B	T23AF866-0008	SEAWATER	18-03-2023 05:08:00
T423.20	LAWA-1C1-SW-B-FD	T23AF866-0009	SEAWATER	18-03-2023 05:20:00
T423.20	LAWA-1C2-SW-1	T23AF866-0010	SEAWATER	18-03-2023 07:38:00
T423.20	LAWA-1C2-SW-20	T23AF866-0011	SEAWATER	18-03-2023 07:45:00
T423.20	LAWA-1C2-SW-40	T23AF866-0012	SEAWATER	18-03-2023 07:55:00
T423.20	LAWA-1C2-SW-B	T23AF866-0013	SEAWATER	18-03-2023 08:07:00
T423.20	LAWA-1C3X-SW-1	T23AF866-0014	SEAWATER	18-03-2023 19:21:00
T423.20	LAWA-1C3X-SW-20	T23AF866-0015	SEAWATER	18-03-2023 19:30:00
T423.20	LAWA-1C3X-SW-40	T23AF866-0016	SEAWATER	18-03-2023 19:39:00
T423.20	LAWA-1C3X-SW-B	T23AF866-0017	SEAWATER	18-03-2023 19:52:00
T423.20	LAWA-1D1-SW-1	T23AF866-0018	SEAWATER	19-03-2023 02:31:00
T423.20	LAWA-1D1-SW-20	T23AF866-0019	SEAWATER	19-03-2023 02:37:00
T423.20	LAWA-1D1-SW-40	T23AF866-0020	SEAWATER	19-03-2023 02:46:00
T423.20	LAWA-1D1-SW-B	T23AF866-0021	SEAWATER	19-03-2023 02:58:00
T423.20	LAWA-1D2-SW-1	T23AF866-0022	SEAWATER	19-03-2023 00:28:00
T423.20	LAWA-1D2-SW-1-FD	T23AF866-0023	SEAWATER	19-03-2023 00:36:00
T423.20	LAWA-1D2-SW-20	T23AF866-0024	SEAWATER	19-03-2023 00:43:00
T423.20	LAWA-1D2-SW-40	T23AF866-0025	SEAWATER	19-03-2023 00:52:00
T423.20	LAWA-1D2-SW-B	T23AF866-0026	SEAWATER	19-03-2023 01:04:00
T423.20	LAWA-1D3X-SW-1	T23AF866-0027	SEAWATER	18-03-2023 20:43:00

PROJECT	SAMPLE NAME	ANALYSIS NO.**	MATRIX	SAMPLING DATE*
T423.20	LAWA-1D3X-SW-20	T23AF866-0028	SEAWATER	18-03-2023 20:51:00
T423.20	LAWA-1D3X-SW-40	T23AF866-0029	SEAWATER	18-03-2023 21:01:00
T423.20	LAWA-1D3X-SW-B	T23AF866-0030	SEAWATER	18-03-2023 21:14:00
T423.20	LAWA-3C1-SW-1	T23AF866-0031	SEAWATER	17-03-2023 16:43:00
T423.20	LAWA-3C1-SW-20	T23AF866-0032	SEAWATER	17-03-2023 16:50:00
T423.20	LAWA-3C1-SW-40	T23AF866-0033	SEAWATER	17-03-2023 17:00:00
T423.20	LAWA-3C1-SW-B	T23AF866-0034	SEAWATER	17-03-2023 17:12:00
T423.20	LAWA-3C2-SW-1	T23AF866-0035	SEAWATER	18-03-2023 03:47:00
T423.20	LAWA-3C2-SW-20	T23AF866-0036	SEAWATER	18-03-2023 03:54:00
T423.20	LAWA-3C2-SW-40	T23AF866-0037	SEAWATER	18-03-2023 04:03:00
T423.20	LAWA-3C2-SW-B	T23AF866-0038	SEAWATER	18-03-2023 04:15:00
T423.20	LAWA-3C3-SW-1	T23AF866-0039	SEAWATER	18-03-2023 02:02:00
T423.20	LAWA-3C3-SW-20	T23AF866-0040	SEAWATER	18-03-2023 02:08:00
T423.20	LAWA-3C3-SW-40	T23AF866-0041	SEAWATER	18-03-2023 02:17:00
T423.20	LAWA-3C3-SW-B	T23AF866-0042	SEAWATER	18-03-2023 02:33:00
T423.20	LAWA-3D1X-SW-1	T23AF866-0043	SEAWATER	17-03-2023 12:22:00
T423.20	LAWA-3D1X-SW-20	T23AF866-0044	SEAWATER	17-03-2023 12:29:00
T423.20	LAWA-3D1X-SW-40	T23AF866-0045	SEAWATER	17-03-2023 12:39:00
T423.20	LAWA-3D1X-SW-B	T23AF866-0046	SEAWATER	17-03-2023 12:51:00
T423.20	LAWA-3D2-SW-1	T23AF866-0047	SEAWATER	17-03-2023 04:33:00
T423.20	LAWA-3D2-SW-1-FD	T23AF866-0048	SEAWATER	17-03-2023 04:41:00
T423.20	LAWA-3D2-SW-20	T23AF866-0049	SEAWATER	17-03-2023 04:48:00
T423.20	LAWA-3D2-SW-40	T23AF866-0050	SEAWATER	17-03-2023 04:58:00
T423.20	LAWA-3D2-SW-B	T23AF866-0051	SEAWATER	17-03-2023 05:10:00
T423.20	LAWA-3D3-SW-1	T23AF866-0052	SEAWATER	17-03-2023 03:38:00
T423.20	LAWA-3D3-SW-20	T23AF866-0053	SEAWATER	17-03-2023 03:49:00
T423.20	LAWA-3D3-SW-40	T23AF866-0054	SEAWATER	17-03-2023 03:59:00
T423.20	LAWA-3D3-SW-B	T23AF866-0055	SEAWATER	17-03-2023 04:13:00
T423.20	LAWA-EQ	T23AF866-0056	SEAWATER	17-03-2023 03:05:00
T423.20	LAWA-WB	T23AF866-0057	SEAWATER	17-03-2023 03:10:00



United Analyst and Engineering Consultant Co., Ltd.

3 Soi Udomsuk 41, Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260

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PROJECT T423.20

ANALYTE					METHOD				
DISSOLVED/DISPERSED PETROLEUM HYDROCARBON					IOC MARPOLMON-P				
SAMPLE NAME	ANALYSIS NO.	PREPARED	ANALYZED	BATCH	RESULT	MDL	RL	UNITS	DILUTION NOTES
G4/43REF-SW-1	T23AF866-0001	23-03-2023	27-04-2023	335285	0.20	0.04	0.10	ug/L as Chrysene	1
G4/43REF-SW-20	T23AF866-0002	23-03-2023	27-04-2023	335285	0.14	0.04	0.10	ug/L as Chrysene	1
G4/43REF-SW-40	T23AF866-0003	23-03-2023	27-04-2023	335285	0.18	0.04	0.10	ug/L as Chrysene	1
G4/43REF-SW-B	T23AF866-0004	23-03-2023	27-04-2023	335285	0.20	0.04	0.10	ug/L as Chrysene	1
LAWA-1C1-SW-1	T23AF866-0005	18-03-2023	24-04-2023	334611	0.48	0.04	0.10	ug/L as Chrysene	1
LAWA-1C1-SW-20	T23AF866-0006	18-03-2023	24-04-2023	334611	0.27	0.04	0.10	ug/L as Chrysene	1
LAWA-1C1-SW-40	T23AF866-0007	18-03-2023	24-04-2023	334611	0.28	0.04	0.10	ug/L as Chrysene	1
LAWA-1C1-SW-B	T23AF866-0008	18-03-2023	24-04-2023	334611	0.24	0.04	0.10	ug/L as Chrysene	1
LAWA-1C1-SW-B-FD	T23AF866-0009	18-03-2023	24-04-2023	334611	0.22	0.04	0.10	ug/L as Chrysene	1
LAWA-1C2-SW-1	T23AF866-0010	18-03-2023	24-04-2023	334611	0.23	0.04	0.10	ug/L as Chrysene	1
LAWA-1C2-SW-20	T23AF866-0011	18-03-2023	24-04-2023	334611	0.35	0.04	0.10	ug/L as Chrysene	1
LAWA-1C2-SW-40	T23AF866-0012	18-03-2023	24-04-2023	334611	0.38	0.04	0.10	ug/L as Chrysene	1
LAWA-1C2-SW-B	T23AF866-0013	18-03-2023	24-04-2023	334611	0.34	0.04	0.10	ug/L as Chrysene	1
LAWA-1C3X-SW-1	T23AF866-0014	18-03-2023	24-04-2023	334611	0.23	0.04	0.10	ug/L as Chrysene	1
LAWA-1C3X-SW-20	T23AF866-0015	18-03-2023	24-04-2023	334611	0.29	0.04	0.10	ug/L as Chrysene	1
LAWA-1C3X-SW-40	T23AF866-0016	18-03-2023	24-04-2023	334611	0.28	0.04	0.10	ug/L as Chrysene	1
LAWA-1C3X-SW-B	T23AF866-0017	18-03-2023	24-04-2023	334611	0.38	0.04	0.10	ug/L as Chrysene	1
LAWA-1D1-SW-1	T23AF866-0018	19-03-2023	24-04-2023	334611	0.22	0.04	0.10	ug/L as Chrysene	1
LAWA-1D1-SW-20	T23AF866-0019	19-03-2023	24-04-2023	334611	0.27	0.04	0.10	ug/L as Chrysene	1
LAWA-1D1-SW-40	T23AF866-0020	19-03-2023	24-04-2023	334611	0.49	0.04	0.10	ug/L as Chrysene	1
LAWA-1D1-SW-B	T23AF866-0021	19-03-2023	24-04-2023	334611	0.37	0.04	0.10	ug/L as Chrysene	1
LAWA-1D2-SW-1	T23AF866-0022	19-03-2023	24-04-2023	334612	0.31	0.04	0.10	ug/L as Chrysene	1
LAWA-1D2-SW-1-FD	T23AF866-0023	19-03-2023	24-04-2023	334612	0.31	0.04	0.10	ug/L as Chrysene	1
LAWA-1D2-SW-20	T23AF866-0024	19-03-2023	24-04-2023	334612	0.37	0.04	0.10	ug/L as Chrysene	1
LAWA-1D2-SW-40	T23AF866-0025	19-03-2023	24-04-2023	334612	0.31	0.04	0.10	ug/L as Chrysene	1
LAWA-1D2-SW-B	T23AF866-0026	19-03-2023	24-04-2023	334612	0.30	0.04	0.10	ug/L as Chrysene	1
LAWA-1D3X-SW-1	T23AF866-0027	18-03-2023	24-04-2023	334611	0.23	0.04	0.10	ug/L as Chrysene	1
LAWA-1D3X-SW-20	T23AF866-0028	18-03-2023	24-04-2023	334611	0.16	0.04	0.10	ug/L as Chrysene	1
LAWA-1D3X-SW-40	T23AF866-0029	18-03-2023	24-04-2023	334611	0.13	0.04	0.10	ug/L as Chrysene	1
LAWA-1D3X-SW-B	T23AF866-0030	18-03-2023	24-04-2023	334611	0.27	0.04	0.10	ug/L as Chrysene	1

PROJECT T423.20

ANALYTE	METHOD
DISSOLVED/DISPERSED PETROLEUM HYDROCARBON	IOC MARPOLMON-P

SAMPLE NAME	ANALYSIS NO.	PREPARED	ANALYZED	BATCH	RESULT	MDL	RL	UNITS	DILUTION	NOTES
LAWA-3C1-SW-1	T23AF866-0031	17-03-2023	20-04-2023	333959	0.50	0.04	0.10	ug/L as Chrysene	1	
LAWA-3C1-SW-20	T23AF866-0032	17-03-2023	20-04-2023	333959	0.38	0.04	0.10	ug/L as Chrysene	1	
LAWA-3C1-SW-40	T23AF866-0033	17-03-2023	20-04-2023	333959	0.40	0.04	0.10	ug/L as Chrysene	1	
LAWA-3C1-SW-B	T23AF866-0034	17-03-2023	20-04-2023	333959	0.59	0.04	0.10	ug/L as Chrysene	1	
LAWA-3C2-SW-1	T23AF866-0035	18-03-2023	20-04-2023	333965	1.10	0.04	0.10	ug/L as Chrysene	1	
LAWA-3C2-SW-20	T23AF866-0036	18-03-2023	20-04-2023	333965	0.42	0.04	0.10	ug/L as Chrysene	1	
LAWA-3C2-SW-40	T23AF866-0037	18-03-2023	20-04-2023	333965	1.09	0.04	0.10	ug/L as Chrysene	1	
LAWA-3C2-SW-B	T23AF866-0038	18-03-2023	20-04-2023	333965	0.64	0.04	0.10	ug/L as Chrysene	1	
LAWA-3C3-SW-1	T23AF866-0039	18-03-2023	20-04-2023	333965	0.54	0.04	0.10	ug/L as Chrysene	1	
LAWA-3C3-SW-20	T23AF866-0040	18-03-2023	20-04-2023	333965	0.48	0.04	0.10	ug/L as Chrysene	1	
LAWA-3C3-SW-40	T23AF866-0041	18-03-2023	20-04-2023	333965	0.42	0.04	0.10	ug/L as Chrysene	1	
LAWA-3C3-SW-B	T23AF866-0042	18-03-2023	20-04-2023	333965	0.58	0.04	0.10	ug/L as Chrysene	1	
LAWA-3D1X-SW-1	T23AF866-0043	17-03-2023	20-04-2023	333959	0.41	0.04	0.10	ug/L as Chrysene	1	
LAWA-3D1X-SW-20	T23AF866-0044	17-03-2023	20-04-2023	333959	0.32	0.04	0.10	ug/L as Chrysene	1	
LAWA-3D1X-SW-40	T23AF866-0045	17-03-2023	20-04-2023	333959	0.41	0.04	0.10	ug/L as Chrysene	1	
LAWA-3D1X-SW-B	T23AF866-0046	17-03-2023	20-04-2023	333959	0.51	0.04	0.10	ug/L as Chrysene	1	
LAWA-3D2-SW-1	T23AF866-0047	17-03-2023	20-04-2023	333965	0.49	0.04	0.10	ug/L as Chrysene	1	
LAWA-3D2-SW-1-FD	T23AF866-0048	17-03-2023	20-04-2023	333965	0.50	0.04	0.10	ug/L as Chrysene	1	
LAWA-3D2-SW-20	T23AF866-0049	17-03-2023	20-04-2023	333965	0.37	0.04	0.10	ug/L as Chrysene	1	
LAWA-3D2-SW-40	T23AF866-0050	17-03-2023	20-04-2023	333965	1.00	0.04	0.10	ug/L as Chrysene	1	
LAWA-3D2-SW-B	T23AF866-0051	17-03-2023	20-04-2023	333965	0.20	0.04	0.10	ug/L as Chrysene	1	
LAWA-3D3-SW-1	T23AF866-0052	17-03-2023	20-04-2023	333965	1.01	0.04	0.10	ug/L as Chrysene	1	
LAWA-3D3-SW-20	T23AF866-0053	17-03-2023	20-04-2023	333965	0.60	0.04	0.10	ug/L as Chrysene	1	
LAWA-3D3-SW-40	T23AF866-0054	17-03-2023	20-04-2023	333965	0.74	0.04	0.10	ug/L as Chrysene	1	
LAWA-3D3-SW-B	T23AF866-0055	17-03-2023	20-04-2023	333965	0.97	0.04	0.10	ug/L as Chrysene	1	
LAWA-EQ	T23AF866-0056	17-03-2023	20-04-2023	333965	ND	0.04	0.10	ug/L as Chrysene	1	
LAWA-WB	T23AF866-0057	17-03-2023	20-04-2023	333965	ND	0.04	0.10	ug/L as Chrysene	1	

QUALITY CONTROL

PROJECT T423.20

ANALYTE						METHOD							
DISSOLVED/DISPERSED PETROLEUM HYDROCARBON						IOC MARPOLMON-P							
BATCH 333959		PREPARED 14-03-2023			ANALYZED		20-04-2023						
QC TYPE	ANALYSIS NO.	RESULT	MDL	RL	UNITS	SOURCE RESULT	SPIKE LEVEL	%REC	%REC LIMITS	RPD	RPD LIMIT	NOTES	
Blank		ND	0.04	0.10	ug/L as Chrysene								
CCS		0.50	0.04	0.10	ug/L as Chrysene		0.50	100	90-110				
CCV		0.50	0.04	0.10	ug/L as Chrysene		0.50	100	90-110	0.00	20		
LCS		0.56	0.04	0.10	ug/L as Chrysene		0.59	95	80-120				
LCS Dup		0.56	0.04	0.10	ug/L as Chrysene		0.59	95	80-120	0.00	20		
Sample	T23AF866-0202	0.45	0.04	0.10	ug/L as Chrysene								
Sample LabDup	T23AF866-0202.1	0.46	0.04	0.10	ug/L as Chrysene					2.17	20		
Matrix Spike		1.18	0.04	0.10	ug/L as Chrysene	0.67	0.58	88	80-120				
Matrix Spike Dup		1.19	0.04	0.10	ug/L as Chrysene	T23AF866-0203	0.58	90	80-120	0.85	20		

BATCH 333965		PREPARED 17-03-2023			ANALYZED		20-04-2023						
QC TYPE	ANALYSIS NO.	RESULT	MDL	RL	UNITS	SOURCE RESULT	SPIKE LEVEL	%REC	%REC LIMITS	RPD	RPD LIMIT	NOTES	
Blank		ND	0.04	0.10	ug/L as Chrysene								
CCS		0.49	0.04	0.10	ug/L as Chrysene		0.50	99	90-110				
CCV		0.50	0.04	0.10	ug/L as Chrysene		0.50	100	90-110	2.00	20		
LCS		0.59	0.04	0.10	ug/L as Chrysene		0.59	100	80-120				
LCS Dup		0.59	0.04	0.10	ug/L as Chrysene		0.59	100	80-120	0.00	20		
Sample	T23AF866-0054	0.74	0.04	0.10	ug/L as Chrysene								
Sample LabDup	T23AF866-0054.1	0.76	0.04	0.10	ug/L as Chrysene					2.63	20		
Matrix Spike		0.99	0.04	0.10	ug/L as Chrysene	0.42	0.59	97	80-120				
Matrix Spike Dup		0.98	0.04	0.10	ug/L as Chrysene	T23AF866-0041	0.59	95	80-120	1.02	20		

QUALITY CONTROL

PROJECT T423.20

ANALYTE						METHOD							
DISSOLVED/DISPERSED PETROLEUM HYDROCARBON						IOC MARPOLMON-P							

BATCH 334611 PREPARED 18-03-2023 ANALYZED 24-04-2023

QC TYPE	ANALYSIS NO.	RESULT	MDL	RL	UNITS	SOURCE RESULT	SPIKE LEVEL	%REC	%REC LIMITS	RPD	RPD LIMIT	NOTES
Blank		ND	0.04	0.10	ug/L as Chrysene							
CCS		0.51	0.04	0.10	ug/L as Chrysene		0.50	102	90-110			
CCV		0.52	0.04	0.10	ug/L as Chrysene		0.50	104	90-110	1.92	20	
LCS		0.54	0.04	0.10	ug/L as Chrysene		0.58	93	80-120			
LCS Dup		0.54	0.04	0.10	ug/L as Chrysene		0.58	93	80-120	0.00	20	
Sample	T23AF866-0006	0.27	0.04	0.10	ug/L as Chrysene							
Sample LabDup	T23AF866-0006.1	0.25	0.04	0.10	ug/L as Chrysene					7.69	20	
Matrix Spike		0.87	0.04	0.10	ug/L as Chrysene	0.34	0.59	90	80-120			
Matrix Spike Dup		0.93	0.04	0.10	ug/L as Chrysene	T23AF866-0013	0.58	102	80-120	6.67	20	

BATCH 334612 PREPARED 18-03-2023 ANALYZED 24-04-2023

QC TYPE	ANALYSIS NO.	RESULT	MDL	RL	UNITS	SOURCE RESULT	SPIKE LEVEL	%REC	%REC LIMITS	RPD	RPD LIMIT	NOTES
Blank		ND	0.04	0.10	ug/L as Chrysene							
CCS		0.51	0.04	0.10	ug/L as Chrysene		0.50	102	90-110			
CCV		0.49	0.04	0.10	ug/L as Chrysene		0.50	99	90-110	4.00	20	
LCS		0.55	0.04	0.10	ug/L as Chrysene		0.59	93	80-120			
LCS Dup		0.54	0.04	0.10	ug/L as Chrysene		0.59	92	80-120	1.85	20	
Sample	T23AF866-0026	0.30	0.04	0.10	ug/L as Chrysene							
Sample LabDup	T23AF866-0026.1	0.29	0.04	0.10	ug/L as Chrysene					3.33	20	
Matrix Spike		0.67	0.04	0.10	ug/L as Chrysene	0.17	0.59	85	80-120			
Matrix Spike Dup		0.67	0.04	0.10	ug/L as Chrysene	T23AF866-0124	0.58	86	80-120	0.00	20	

QUALITY CONTROL

PROJECT T423.20

ANALYTE						METHOD							
DISSOLVED/DISPERSED PETROLEUM HYDROCARBON						IOC MARPOLMON-P							
BATCH 335285		PREPARED 23-03-2023			ANALYZED		27-04-2023						
QC TYPE	ANALYSIS NO.	RESULT	MDL	RL	UNITS	SOURCE RESULT	SPIKE LEVEL	%REC	%REC LIMITS	RPD	RPD LIMIT	NOTES	
Blank		ND	0.04	0.10	ug/L as Chrysene								
CCS		0.50	0.04	0.10	ug/L as Chrysene		0.50	100	90-110				
CCV		0.50	0.04	0.10	ug/L as Chrysene		0.50	100	90-110	0.00	20		
LCS		0.59	0.04	0.10	ug/L as Chrysene		0.59	100	80-120				
LCS Dup		0.58	0.04	0.10	ug/L as Chrysene		0.59	98	80-120	1.72	20		
Sample	T23AF866-0163	0.21	0.04	0.10	ug/L as Chrysene								
Sample LabDup	T23AF866-0163.1	0.21	0.04	0.10	ug/L as Chrysene					0.00	20		
Matrix Spike		0.84	0.04	0.10	ug/L as Chrysene	0.29	0.58	95	80-120				
Matrix Spike Dup		0.86	0.04	0.10	ug/L as Chrysene	T23AF866-0164	0.59	97	80-120	2.35	20		

NOTES AND DEFINITIONS :

ND Analyte NOT DETECTED at or above the MDL

Karnphong B.

(MR KARNPHONG BOONPUANG)

TECHNICAL MANAGEMENT

16-05-2023

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)

LABORATORY SUPERVISOR

16-05-2023

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REPORTED ANALYSIS REFERS TO SUBMITTED SAMPLE ONLY.



Analysis / Test Report

Report to : Tetra Tech Inc.

77 Soi Udomsuk 39/1, Sukhumvit 103, Bangchak, Prakanong, Bangkok Thailand 10260

P/O :

Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

Report Number : 2607230-1

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Summary Samples

Sample Location	ALS Sample ID	Sample Description	Sampling Date / Time	Received Date / Time
G4/43REF-SW-1	2335208-1	Seawater	Mar 23, 2023 10:11 AM	Mar 28, 2023 01:30 PM
G4/43REF-SW-20	2335208-2	Seawater	Mar 23, 2023 10:17 AM	Mar 28, 2023 01:30 PM
G4/43REF-SW-40	2335208-3	Seawater	Mar 23, 2023 10:25 AM	Mar 28, 2023 01:30 PM
G4/43REF-SW-B	2335208-4	Seawater	Mar 23, 2023 10:37 AM	Mar 28, 2023 01:30 PM
LAWA-1C1-SW-1	2335208-5	Seawater	Mar 18, 2023 04:36 AM	Mar 28, 2023 01:30 PM
LAWA-1C1-SW-20	2335208-6	Seawater	Mar 18, 2023 04:44 AM	Mar 28, 2023 01:30 PM
LAWA-1C1-SW-20-LabDup	2335208-7	Seawater	Mar 18, 2023 04:44 AM	Mar 28, 2023 01:30 PM
LAWA-1C1-SW-40	2335208-8	Seawater	Mar 18, 2023 04:56 AM	Mar 28, 2023 01:30 PM
LAWA-1C1-SW-B	2335208-9	Seawater	Mar 18, 2023 05:08 AM	Mar 28, 2023 01:30 PM
LAWA-1C1-SW-B-FD	2335208-10	Seawater	Mar 18, 2023 05:20 AM	Mar 28, 2023 01:30 PM
LAWA-1C2-SW-1	2335208-11	Seawater	Mar 18, 2023 07:08 AM	Mar 28, 2023 01:30 PM
LAWA-1C2-SW-20	2335208-12	Seawater	Mar 18, 2023 07:45 AM	Mar 28, 2023 01:30 PM
LAWA-1C2-SW-40	2335208-13	Seawater	Mar 18, 2023 07:55 AM	Mar 28, 2023 01:30 PM
LAWA-1C2-SW-B	2335208-14	Seawater	Mar 18, 2023 08:07 AM	Mar 28, 2023 01:30 PM
LAWA-1C3X-SW-1	2335208-15	Seawater	Mar 18, 2023 07:21 PM	Mar 28, 2023 01:30 PM
LAWA-1C3X-SW-20	2335208-16	Seawater	Mar 18, 2023 07:29 PM	Mar 28, 2023 01:30 PM
LAWA-1C3X-SW-40	2335208-17	Seawater	Mar 18, 2023 07:40 PM	Mar 28, 2023 01:30 PM
LAWA-1C3X-SW-B	2335208-18	Seawater	Mar 18, 2023 07:52 PM	Mar 28, 2023 01:30 PM
LAWA-1D1-SW-1	2335208-19	Seawater	Mar 19, 2023 02:31 AM	Mar 28, 2023 01:30 PM
LAWA-1D1-SW-20	2335208-20	Seawater	Mar 19, 2023 02:37 AM	Mar 28, 2023 01:30 PM
LAWA-1D1-SW-40	2335208-21	Seawater	Mar 19, 2023 02:46 AM	Mar 28, 2023 01:30 PM
LAWA-1D1-SW-B	2335208-22	Seawater	Mar 19, 2023 02:59 AM	Mar 28, 2023 01:30 PM
LAWA-1D2-SW-1	2335208-23	Seawater	Mar 19, 2023 12:28 AM	Mar 28, 2023 01:30 PM
LAWA-1D2-SW-1-FD	2335208-24	Seawater	Mar 19, 2023 12:36 AM	Mar 28, 2023 01:30 PM
LAWA-1D2-SW-20	2335208-25	Seawater	Mar 19, 2023 12:43 AM	Mar 28, 2023 01:30 PM
LAWA-1D2-SW-40	2335208-26	Seawater	Mar 19, 2023 12:52 AM	Mar 28, 2023 01:30 PM
LAWA-1D2-SW-B	2335208-27	Seawater	Mar 19, 2023 01:05 AM	Mar 28, 2023 01:30 PM
LAWA-1D2-SW-B-LabDup	2335208-58	Seawater	Mar 19, 2023 01:05 AM	Mar 28, 2023 01:30 PM
LAWA-1D3X-SW-1	2335208-28	Seawater	Mar 18, 2023 08:43 PM	Mar 28, 2023 01:30 PM
LAWA-1D3X-SW-20	2335208-29	Seawater	Mar 18, 2023 08:51 PM	Mar 28, 2023 01:30 PM
LAWA-1D3X-SW-40	2335208-30	Seawater	Mar 18, 2023 09:01 PM	Mar 28, 2023 01:30 PM
LAWA-1D3X-SW-B	2335208-31	Seawater	Mar 18, 2023 09:14 PM	Mar 28, 2023 01:30 PM
LAWA-3C1-SW-1	2335208-32	Seawater	Mar 17, 2023 04:43 PM	Mar 28, 2023 01:30 PM
LAWA-3C1-SW-20	2335208-33	Seawater	Mar 17, 2023 04:50 PM	Mar 28, 2023 01:30 PM
LAWA-3C1-SW-40	2335208-34	Seawater	Mar 17, 2023 05:00 PM	Mar 28, 2023 01:30 PM
LAWA-3C1-SW-B	2335208-35	Seawater	Mar 17, 2023 05:13 PM	Mar 28, 2023 01:30 PM
LAWA-3C2-SW-1	2335208-36	Seawater	Mar 18, 2023 03:47 AM	Mar 28, 2023 01:30 PM
LAWA-3C2-SW-20	2335208-37	Seawater	Mar 18, 2023 03:04 AM	Mar 28, 2023 01:30 PM
LAWA-3C2-SW-40	2335208-38	Seawater	Mar 18, 2023 04:03 AM	Mar 28, 2023 01:30 PM
LAWA-3C2-SW-B	2335208-39	Seawater	Mar 18, 2023 04:15 AM	Mar 28, 2023 01:30 PM
LAWA-3C3-SW-1	2335208-40	Seawater	Mar 18, 2023 02:01 AM	Mar 28, 2023 01:30 PM
LAWA-3C3-SW-20	2335208-41	Seawater	Mar 18, 2023 02:08 AM	Mar 28, 2023 01:30 PM
LAWA-3C3-SW-40	2335208-42	Seawater	Mar 18, 2023 02:07 AM	Mar 28, 2023 01:30 PM
LAWA-3C3-SW-B	2335208-43	Seawater	Mar 18, 2023 02:33 AM	Mar 28, 2023 01:30 PM

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Approved by

Siriluk P.

Siriluk Puengpang
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Analysis / Test Report

Report to : Tetra Tech Inc.

77 Soi Udomsuk 39/1, Sukhumvit 103, Bangchak, Prakanhong, Bangkok Thailand 10260

P/O :

Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

Report Number : 2607230-1

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Summary Samples

Sample Location	ALS Sample ID	Sample Description	Sampling Date / Time	Received Date / Time
LAWA-3D1X-SW-1	2335208-44	Seawater	Mar 17, 2023 12:21 PM	Mar 28, 2023 01:30 PM
LAWA-3D1X-SW-20	2335208-45	Seawater	Mar 17, 2023 12:29 PM	Mar 28, 2023 01:30 PM
LAWA-3D1X-SW-40	2335208-46	Seawater	Mar 17, 2023 12:39 PM	Mar 28, 2023 01:30 PM
LAWA-3D1X-SW-B	2335208-47	Seawater	Mar 17, 2023 12:51 PM	Mar 28, 2023 01:30 PM
LAWA-3D2-SW-1	2335208-48	Seawater	Mar 17, 2023 04:33 AM	Mar 28, 2023 01:30 PM
LAWA-3D2-SW-1-FD	2335208-49	Seawater	Mar 17, 2023 04:41 AM	Mar 28, 2023 01:30 PM
LAWA-3D2-SW-20	2335208-50	Seawater	Mar 17, 2023 04:48 AM	Mar 28, 2023 01:30 PM
LAWA-3D2-SW-40	2335208-51	Seawater	Mar 17, 2023 04:58 AM	Mar 28, 2023 01:30 PM
LAWA-3D2-SW-B	2335208-52	Seawater	Mar 17, 2023 05:10 AM	Mar 28, 2023 01:30 PM
LAWA-3D3-SW-1	2335208-53	Seawater	Mar 17, 2023 03:38 AM	Mar 28, 2023 01:30 PM
LAWA-3D3-SW-20	2335208-54	Seawater	Mar 17, 2023 03:49 AM	Mar 28, 2023 01:30 PM
LAWA-3D3-SW-40	2335208-55	Seawater	Mar 17, 2023 03:59 AM	Mar 28, 2023 01:30 PM
LAWA-3D3-SW-40-Labdup	2335208-57	Seawater	Mar 17, 2023 03:59 AM	Mar 28, 2023 01:30 PM
LAWA-3D3-SW-B	2335208-56	Seawater	Mar 17, 2023 04:14 AM	Mar 28, 2023 01:30 PM

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Analysis / Test Report

Report to : Tetra Tech Inc.

77 Soi Udomsuk 39/1, Sukhumvit 103, Bangchak, Prakanong, Bangkok Thailand 10260

P/O :

Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

Report Number : 2607230-1

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General Comments

Analysis Test Report contains Summary samples, General Comments and Analytical Results. Quality Control Report will be found in the following separate attachments. The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where the LOD and LOQ of a reported result differs from standard, this may be due to high moisture content or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

LOD : Limit of detection.

LOQ : Limit of Quantitation.

ND : The result is not detected.

U : Indicates the result is less than LOD.

J : Indicates an estimated value, The reported value was obtained from a reading that was less than the LOQ but greater than or equal to the LOD.

The samples received on Mar 28, 2023 were intact, on-ice within 10 sealed cooler at

Cooler 1	: Temperature	2.1	degree C
Cooler 2	: Temperature	4.2	degree C
Cooler 3	: Temperature	3.2	degree C
Cooler 4	: Temperature	1.4	degree C
Cooler 5	: Temperature	3.3	degree C
Cooler 6	: Temperature	2.9	degree C
Cooler 7	: Temperature	3.0	degree C
Cooler 8	: Temperature	3.1	degree C
Cooler 9	: Temperature	2.5	degree C
Cooler 10	: Temperature	3.2	degree C

Sample Preparation and Analysis

Total suspended solids

A well-mixed sample is filtered through a weighed 1.2 µm pore size glass fibre filter paper and the residue retained on the filter is dried at 103-105 degree C. The increase in the weight of the filter paper represents the total suspended solids.

COD

Samples are digested with an acidic potassium dichromate (a known excess) solution using silver sulfate as a catalyst. The chromium is used to oxidise almost all types of organic compounds and most inorganic reducing agents and reduced from the Cr(VI) oxidation state to the Cr(III) state. Both of these chromium species are coloured and absorb in the visible region of the spectrum. The dichromate ion absorbs strongly in the 400nm region, where the chromic ion (Cr3+) absorption is much less. The chromic ion absorbs strongly in the 600 nm region, where the dichromate has nearly zero absorption. The oxidisable organic matter can be calculated in terms of oxygen equivalents

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Analysis / Test Report

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77 Soi Udomsuk 39/1, Sukhumvit 103, Bangchak, Prakanong, Bangkok Thailand 10260

P/O :

Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

Report Number : 2607230-1

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Reference Number 2335208-1
Sampling Date Mar 23, 2023 10:11 AM
Sample Description Seawater
Location G4/43REF-SW-1
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	72	10	50	mg/L	1	WL23/08306	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08325	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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P/O :

Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-2
Sampling Date Mar 23, 2023 10:17 AM
Sample Description Seawater
Location G4/43REF-SW-20
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	52	10	50	mg/L	1	WL23/08306	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08325	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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P/O :

Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-3
Sampling Date Mar 23, 2023 10:25 AM
Sample Description Seawater
Location G4/43REF-SW-40
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	65	10	50	mg/L	1	WL23/08306	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08325	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-4
Sampling Date Mar 23, 2023 10:37 AM
Sample Description Seawater
Location G4/43REF-SW-B
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	85	10	50	mg/L	1	WL23/08306	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08325	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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P/O :

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Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-5
Sampling Date Mar 18, 2023 4:36 AM
Sample Description Seawater
Location LAWA-1C1-SW-1
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	104	10	50	mg/L	1	WL23/08306	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08325	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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P/O :

Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-6
Sampling Date Mar 18, 2023 4:44 AM
Sample Description Seawater
Location LAWA-1C1-SW-20
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	46	10	50	mg/L	1	WL23/08306	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	J
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08325	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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P/O :

Project Name : T423.20

Project Location :

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-7
Sampling Date Mar 18, 2023 4:44 AM
Sample Description Seawater
Location LAWA-1C1-SW-20-LabDup
Condition of Sample Contained in two plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08325	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-8
Sampling Date Mar 18, 2023 4:56 AM
Sample Description Seawater
Location LAWA-1C1-SW-40
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	52	10	50	mg/L	1	WL23/08306	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08325	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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P/O :

Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-9
Sampling Date Mar 18, 2023 5:08 AM
Sample Description Seawater
Location LAWA-1C1-SW-B
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	52	10	50	mg/L	1	WL23/08306	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08325	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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P/O :

Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-10
Sampling Date Mar 18, 2023 5:20 AM
Sample Description Seawater
Location LAWA-1C1-SW-B-FD
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	59	10	50	mg/L	1	WL23/08306	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08325	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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P/O :

Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-11
Sampling Date Mar 18, 2023 7:08 AM
Sample Description Seawater
Location LAWA-1C2-SW-1
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	78	10	50	mg/L	1	WL23/08306	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08326	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-12
Sampling Date Mar 18, 2023 7:45 AM
Sample Description Seawater
Location LAWA-1C2-SW-20
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	65	10	50	mg/L	1	WL23/08307	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08326	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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P/O :

Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-13
Sampling Date Mar 18, 2023 7:55 AM
Sample Description Seawater
Location LAWA-1C2-SW-40
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	65	10	50	mg/L	1	WL23/08307	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08326	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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P/O :

Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-14
Sampling Date Mar 18, 2023 8:07 AM
Sample Description Seawater
Location LAWA-1C2-SW-B
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	59	10	50	mg/L	1	WL23/08307	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08326	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

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Reference Number 2335208-15
Sampling Date Mar 18, 2023 7:21 PM
Sample Description Seawater
Location LAWA-1C3X-SW-1
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	78	10	50	mg/L	1	WL23/08307	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08326	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-16
Sampling Date Mar 18, 2023 7:29 PM
Sample Description Seawater
Location LAWA-1C3X-SW-20
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	78	10	50	mg/L	1	WL23/08307	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08326	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

Report Number : 2607230-1

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Reference Number 2335208-17
Sampling Date Mar 18, 2023 7:40 PM
Sample Description Seawater
Location LAWA-1C3X-SW-40
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	65	10	50	mg/L	1	WL23/08307	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08326	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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P/O :

Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-18
Sampling Date Mar 18, 2023 7:52 PM
Sample Description Seawater
Location LAWA-1C3X-SW-B
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	78	10	50	mg/L	1	WL23/08307	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08326	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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P/O :

Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-19
Sampling Date Mar 19, 2023 2:31 AM
Sample Description Seawater
Location LAWA-1D1-SW-1
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	72	10	50	mg/L	1	WL23/08307	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08326	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-20
Sampling Date Mar 19, 2023 2:37 AM
Sample Description Seawater
Location LAWA-1D1-SW-20
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	72	10	50	mg/L	1	WL23/08307	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08326	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-21
Sampling Date Mar 19, 2023 2:46 AM
Sample Description Seawater
Location LAWA-1D1-SW-40
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	72	10	50	mg/L	1	WL23/08307	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08327	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-22
Sampling Date Mar 19, 2023 2:59 AM
Sample Description Seawater
Location LAWA-1D1-SW-B
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	85	10	50	mg/L	1	WL23/08308	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08327	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-23
Sampling Date Mar 19, 2023 12:28 AM
Sample Description Seawater
Location LAWA-1D2-SW-1
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	72	10	50	mg/L	1	WL23/08308	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08327	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-24
Sampling Date Mar 19, 2023 12:36 AM
Sample Description Seawater
Location LAWA-1D2-SW-1-FD
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	85	10	50	mg/L	1	WL23/08308	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08327	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-25
Sampling Date Mar 19, 2023 12:43 AM
Sample Description Seawater
Location LAWA-1D2-SW-20
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	72	10	50	mg/L	1	WL23/08308	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08327	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-26
Sampling Date Mar 19, 2023 12:52 AM
Sample Description Seawater
Location LAWA-1D2-SW-40
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	65	10	50	mg/L	1	WL23/08308	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08327	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-27
Sampling Date Mar 19, 2023 1:05 AM
Sample Description Seawater
Location LAWA-1D2-SW-B
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	111	10	50	mg/L	1	WL23/08308	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	0.3	0.3	1	mg/L	1	WL23/08327	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	J

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Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-28
Sampling Date Mar 18, 2023 8:43 PM
Sample Description Seawater
Location LAWA-1D3X-SW-1
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	117	10	50	mg/L	1	WL23/08308	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08327	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-29
Sampling Date Mar 18, 2023 8:51 PM
Sample Description Seawater
Location LAWA-1D3X-SW-20
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	91	10	50	mg/L	1	WL23/08308	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08327	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-30
Sampling Date Mar 18, 2023 9:01 PM
Sample Description Seawater
Location LAWA-1D3X-SW-40
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	65	10	50	mg/L	1	WL23/08308	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08327	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-31
Sampling Date Mar 18, 2023 9:14 PM
Sample Description Seawater
Location LAWA-1D3X-SW-B
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	85	10	50	mg/L	1	WL23/08308	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	0.3	0.3	1	mg/L	1	WL23/08328	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	J

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Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-32
Sampling Date Mar 17, 2023 4:43 PM
Sample Description Seawater
Location LAWA-3C1-SW-1
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	52	10	50	mg/L	1	WL23/08309	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08328	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

Report Number : 2607230-1

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Reference Number 2335208-33
Sampling Date Mar 17, 2023 4:50 PM
Sample Description Seawater
Location LAWA-3C1-SW-20
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	78	10	50	mg/L	1	WL23/08309	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	0.3	0.3	1	mg/L	1	WL23/08328	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	J

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Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-34
Sampling Date Mar 17, 2023 5:00 PM
Sample Description Seawater
Location LAWA-3C1-SW-40
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	65	10	50	mg/L	1	WL23/08309	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08328	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-35
Sampling Date Mar 17, 2023 5:13 PM
Sample Description Seawater
Location LAWA-3C1-SW-B
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	65	10	50	mg/L	1	WL23/08309	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08328	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-36
Sampling Date Mar 18, 2023 3:47 AM
Sample Description Seawater
Location LAWA-3C2-SW-1
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	65	10	50	mg/L	1	WL23/08309	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08328	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

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Reference Number 2335208-37
Sampling Date Mar 18, 2023 3:04 AM
Sample Description Seawater
Location LAWA-3C2-SW-20
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	78	10	50	mg/L	1	WL23/08309	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08328	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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P/O :

Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-38
Sampling Date Mar 18, 2023 4:03 AM
Sample Description Seawater
Location LAWA-3C2-SW-40
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	52	10	50	mg/L	1	WL23/08309	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08328	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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P/O :

Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-39
Sampling Date Mar 18, 2023 4:15 AM
Sample Description Seawater
Location LAWA-3C2-SW-B
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	59	10	50	mg/L	1	WL23/08309	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	0.4	0.3	1	mg/L	1	WL23/08328	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	J

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P/O :

Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-40
Sampling Date Mar 18, 2023 2:01 AM
Sample Description Seawater
Location LAWA-3C3-SW-1
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	104	10	50	mg/L	1	WL23/08309	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08328	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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P/O :

Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-41
Sampling Date Mar 18, 2023 2:08 AM
Sample Description Seawater
Location LAWA-3C3-SW-20
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	104	10	50	mg/L	1	WL23/08309	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08329	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

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Reference Number 2335208-42
Sampling Date Mar 18, 2023 2:07 AM
Sample Description Seawater
Location LAWA-3C3-SW-40
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	98	10	50	mg/L	1	WL23/08310	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08329	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

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Reference Number 2335208-43
Sampling Date Mar 18, 2023 2:33 AM
Sample Description Seawater
Location LAWA-3C3-SW-B
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	91	10	50	mg/L	1	WL23/08310	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08329	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-44
Sampling Date Mar 17, 2023 12:21 PM
Sample Description Seawater
Location LAWA-3D1X-SW-1
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	104	10	50	mg/L	1	WL23/08310	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08329	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-45
Sampling Date Mar 17, 2023 12:29 PM
Sample Description Seawater
Location LAWA-3D1X-SW-20
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	72	10	50	mg/L	1	WL23/08310	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08329	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-46
Sampling Date Mar 17, 2023 12:39 PM
Sample Description Seawater
Location LAWA-3D1X-SW-40
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	78	10	50	mg/L	1	WL23/08310	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08329	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-47
Sampling Date Mar 17, 2023 12:51 PM
Sample Description Seawater
Location LAWA-3D1X-SW-B
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	117	10	50	mg/L	1	WL23/08310	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	0.4	0.3	1	mg/L	1	WL23/08329	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	J

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Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-48
Sampling Date Mar 17, 2023 4:33 AM
Sample Description Seawater
Location LAWA-3D2-SW-1
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	33	10	50	mg/L	1	WL23/08310	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	J
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08329	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-49
Sampling Date Mar 17, 2023 4:41 AM
Sample Description Seawater
Location LAWA-3D2-SW-1-FD
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	98	10	50	mg/L	1	WL23/08310	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08329	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335208-50
Sampling Date Mar 17, 2023 4:48 AM
Sample Description Seawater
Location LAWA-3D2-SW-20
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	85	10	50	mg/L	1	WL23/08310	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08329	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

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Reference Number 2335208-51
Sampling Date Mar 17, 2023 4:58 AM
Sample Description Seawater
Location LAWA-3D2-SW-40
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	78	10	50	mg/L	1	WL23/08310	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08330	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

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Reference Number 2335208-52
Sampling Date Mar 17, 2023 5:10 AM
Sample Description Seawater
Location LAWA-3D2-SW-B
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	85	10	50	mg/L	1	WL23/08311	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08330	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

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Reference Number 2335208-53
Sampling Date Mar 17, 2023 3:38 AM
Sample Description Seawater
Location LAWA-3D3-SW-1
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	104	10	50	mg/L	1	WL23/08311	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08330	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

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Reference Number 2335208-54
Sampling Date Mar 17, 2023 3:49 AM
Sample Description Seawater
Location LAWA-3D3-SW-20
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	91	10	50	mg/L	1	WL23/08311	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08330	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

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Reference Number 2335208-55
Sampling Date Mar 17, 2023 3:59 AM
Sample Description Seawater
Location LAWA-3D3-SW-40
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	98	10	50	mg/L	1	WL23/08311	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08330	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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P/O :

Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

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Reference Number 2335208-56
Sampling Date Mar 17, 2023 4:14 AM
Sample Description Seawater
Location LAWA-3D3-SW-B
Condition of Sample Contained in three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
COD	65	10	50	mg/L	1	WL23/08356	Mar 30, 2023	Mar 29, 2023	APHA (2017) ,5220 C	
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08361	Mar 30, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.20

Project Location :

Lot ID: 2335208

Date Received : Mar 28, 2023

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Reference Number 2335208-57
Sampling Date Mar 17, 2023 3:59 AM
Sample Description Seawater
Location LAWA-3D3-SW-40-Labdup
Condition of Sample Contained in two plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08361	Mar 30, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Analysis / Test Report

Report to : Tetra Tech Inc.

77 Soi Udomsuk 39/1, Sukhumvit 103, Bangchak, Prakanong, Bangkok Thailand 10260

P/O :

Project Name : T423.20

Project Location :

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

Report Number : 2607230-1

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Reference Number 2335208-58
Sampling Date Mar 19, 2023 1:05 AM
Sample Description Seawater
Location LAWA-1D2-SW-B-LabDup
Condition of Sample Contained in two plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08361	Mar 30, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Siriluk P.

Siriluk Puengpang
Supervisor



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77 Soi Udomsuk 39/1, Sukhumvit 103, Bangchak, Prakanong, Bangkok Thailand 10260

P/O :

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Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Apr 19, 2023

Report Number : 2607230-1

Page 1 of 3

Quality Control Data

QC Type	Parent	Result	LOD	LOQ	Unit	Parent Result	Spike Level	%Rec	%Rec Limit	%RPD	%RPD Limit	Note
Water Testing : WL23/08306 : COD												
Blank		ND	10	50	mg/L							U
Duplicate	2335208-11	78	10	50	mg/L	78				0	10	
Matrix Spike	2335208-11	98	10	50	mg/L	78	20.00	100.0	90 - 110			
Matrix Spike Dup	2335208-11	100	10	50	mg/L	78	20.00	110.0	90 - 110	2.02	10	
LCS		212	10	50	mg/L		200	106.0	90 - 110			
LCS LOW		20	10	50	mg/L	ND	20.00	100.0	90 - 110	n/a		J
Water Testing : WL23/08307 : COD												
Blank		ND	10	50	mg/L							U
Duplicate	2335208-21	72	10	50	mg/L	72				0	10	
Matrix Spike	2335208-21	91	10	50	mg/L	72	20.00	95.0	90 - 110			
Matrix Spike Dup	2335208-21	93	10	50	mg/L	72	20.00	105.0	90 - 110	2.17	10	
LCS		212	10	50	mg/L		200	106.0	90 - 110			
LCS LOW		22	10	50	mg/L	ND	20.00	110.0	90 - 110	n/a		J
Water Testing : WL23/08308 : COD												
Blank		ND	10	50	mg/L							U
Duplicate	2335208-31	91	10	50	mg/L	85				6.82	10	
Matrix Spike	2335208-31	104	10	50	mg/L	85	20.00	95.0	90 - 110			
Matrix Spike Dup	2335208-31	107	10	50	mg/L	85	20.00	110.0	90 - 110	2.84	10	
LCS		212	10	50	mg/L		200	106.0	90 - 110			
LCS LOW		20	10	50	mg/L	ND	20.00	100.0	90 - 110	n/a		J
Water Testing : WL23/08309 : COD												
Blank		ND	10	50	mg/L							U
Duplicate	2335208-41	104	10	50	mg/L	104				0	10	
Matrix Spike	2335208-41	124	10	50	mg/L	104	20.00	100.0	90 - 110			
Matrix Spike Dup	2335208-41	124	10	50	mg/L	104	20.00	100.0	90 - 110	0	10	
LCS		212	10	50	mg/L		200	106.0	90 - 110			
LCS LOW		20	10	50	mg/L	ND	20.00	100.0	90 - 110	n/a		J

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Approved by

Siriluk P.

Siriluk Puengpang
Supervisor

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Analysis / Test Report

Report to : Tetra Tech Inc.

77 Soi Udomsuk 39/1, Sukhumvit 103, Bangchak, Prakanong, Bangkok Thailand 10260

P/O :

Project Name : T423.20

Project Location : T423.20

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Apr 19, 2023

Report Number : 2607230-1

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Quality Control Data

QC Type	Parent	Result	LOD	LOQ	Unit	Parent Result	Spike Level	%Rec	%Rec Limit	%RPD	%RPD Limit	Note
Water Testing : WL23/08310 : COD												
Blank		ND	10	50	mg/L							U
Duplicate	2335208-51	78	10	50	mg/L	78				0	10	
Matrix Spike	2335208-51	98	10	50	mg/L	78	20.00	100.0	90 - 110			
Matrix Spike Dup	2335208-51	97	10	50	mg/L	78	20.00	95.0	90 - 110	1.03	10	
LCS		212	10	50	mg/L		200	106.0	90 - 110			
LCS LOW		22	10	50	mg/L	ND	20.00	110.0	90 - 110	n/a		J
Water Testing : WL23/08311 : COD												
Blank		ND	10	50	mg/L							U
LCS		212	10	50	mg/L		200	106.0	90 - 110			
LCS LOW		20	10	50	mg/L	ND	20.00	100.0	90 - 110	n/a		J
Duplicate	2335208-55	98	10	50	mg/L	98				0	10	
Matrix Spike	2335208-55	117	10	50	mg/L	98	20.00	95.0	90 - 110			
Matrix Spike Dup	2335208-55	117	10	50	mg/L	98	20.00	95.0	90 - 110	0	10	
Water Testing : WL23/08325 : Total Suspended Solids												
Blank		ND	0.3	1	mg/L							U
Duplicate	2335208-10	ND	0.3	1	mg/L	ND				n/a	5	U
LCS		99.6	0.3	1	mg/L		100	99.6	90 - 110			
Water Testing : WL23/08326 : Total Suspended Solids												
Blank		ND	0.3	1	mg/L							U
Duplicate	2335208-20	ND	0.3	1	mg/L	ND				n/a	5	U
LCS		98	0.3	1	mg/L		100	98.0	90 - 110			
Water Testing : WL23/08327 : Total Suspended Solids												
Blank		ND	0.3	1	mg/L							U
Duplicate	2335208-30	ND	0.3	1	mg/L	ND				n/a	5	U
LCS		98.8	0.3	1	mg/L		100	98.8	90 - 110			
Water Testing : WL23/08328 : Total Suspended Solids												
Blank		ND	0.3	1	mg/L							U
Duplicate	2335208-40	ND	0.3	1	mg/L	ND				n/a	5	U
LCS		96.8	0.3	1	mg/L		100	96.8	90 - 110			

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P/O :

Project Name : T423.20

Project Location :

Lot ID: 2335208

Date Received : Mar 28, 2023

Date Reported : Apr 19, 2023

Report Number : 2607230-1

Page 3 of 3

Quality Control Data

QC Type	Parent	Result	LOD	LOQ	Unit	Parent Result	Spike Level	%Rec	%Rec Limit	%RPD	%RPD Limit	Note
Water Testing : WL23/08329 : Total Suspended Solids												
Blank		ND	0.3	1	mg/L							U
Duplicate	2335208-50	ND	0.3	1	mg/L	ND				n/a	5	U
LCS		97.6	0.3	1	mg/L		100	97.6	90 - 110			
Water Testing : WL23/08330 : Total Suspended Solids												
Blank		ND	0.3	1	mg/L							U
Duplicate	2335209-5	ND	0.3	1	mg/L	ND				n/a	5	U
LCS		98.4	0.3	1	mg/L		100	98.4	90 - 110			
Water Testing : WL23/08356 : COD												
Blank		ND	10	50	mg/L							U
LCS LOW		22	10	50	mg/L	ND	20.00	110.0	90 - 110	n/a		J
Duplicate	2335208-56	65	10	50	mg/L	65				0	10	
Matrix Spike	2335208-56	85	10	50	mg/L	65	20.00	100.0	90 - 110			
Matrix Spike Dup	2335208-56	85	10	50	mg/L	65	20.00	100.0	90 - 110	0	10	
LCS		212	10	50	mg/L		200	106.0	90 - 110			
Water Testing : WL23/08361 : Total Suspended Solids												
Blank		ND	0.3	1	mg/L							U
Duplicate	2335208-58	ND	0.3	1	mg/L	ND				n/a	5	U
LCS		100	0.3	1	mg/L		100	100.0	90 - 110			
Blank		ND	0.3	1	mg/L							U
Duplicate	2322757-1	82	0.3	1	mg/L	78				5	5	
LCS		98	0.3	1	mg/L		100	98.0	90 - 110			

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Approved by

Siriluk P.

Siriluk Puengpang
Supervisor

APPENDIX A

SEDIMENT ANALYTICAL LABORATORY REPORTS

ANALYTICAL REPORT

PREPARED FOR

Attn: Ted Donn
Tetra Tech, Inc.
3697 Mt. Diablo Blvd.
Suite 150
Lafayette, California 94549

Generated 6/15/2023 11:55:18 AM

JOB DESCRIPTION

Gulf of Thailand - 2023

JOB NUMBER

580-126682-6

Eurofins Seattle

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



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6/15/2023 11:55:18 AM

Authorized for release by
Lilly-Anna LaCount, Project Manager
Lilly-Anna.Lacount@et.eurofinsus.com
(253)922-2310

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Case Narrative

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Job ID: 580-126682-6

Laboratory: Eurofins Seattle

Narrative

Job Narrative 580-126682-6

Receipt

The samples were received on 5/2/2023 9:40 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 17 coolers at receipt time were -28.8°C, -23.9°C, -23.8°C, -20.9°C, -18.8°C, -18.5°C, -17.1°C, -16.9°C, -16.8°C, -16.0°C, -15.3°C, -14.8°C, -14.6°C, -10.8°C, -6.7°C, -3.9°C and 2.7°C

Metals

Method 1631B: The continuing calibration blank (CCB) for analytical batch 580-428562 contained Mercury above the reporting limit (RL). All reported samples associated with this CCB contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Qualifiers

Metals

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-1C1

Lab Sample ID: 580-126682-1

Date Collected: 03/19/23 04:40

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	47	H H3	0.10	0.10	%			06/07/23 16:25	1
Percent Solids (SM Moisture - 2540)	53	H H3	0.10	0.10	%			06/07/23 16:25	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-1C1
Date Collected: 03/19/23 04:40
Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-1
Matrix: Solid
Percent Solids: 52.7

Method: EPA 1631B - Mercury, Low Level (CVAFS)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Mercury	23	B	1.8	0.20	ng/g	☼	06/08/23 17:03	06/09/23 18:37	20	

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-1C2

Lab Sample ID: 580-126682-2

Date Collected: 03/19/23 05:44

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	61	H H3	0.10	0.10	%			06/07/23 16:25	1
Percent Solids (SM Moisture - 2540)	39	H H3	0.10	0.10	%			06/07/23 16:25	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-1C2
Date Collected: 03/19/23 05:44
Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-2
Matrix: Solid
Percent Solids: 39.4

Method: EPA 1631B - Mercury, Low Level (CVAFS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	27	B	2.5	0.27	ng/g	☼	06/08/23 17:03	06/09/23 18:41	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-1C2-FD

Lab Sample ID: 580-126682-3

Date Collected: 03/19/23 05:55

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	54	H H3	0.10	0.10	%			06/07/23 16:25	1
Percent Solids (SM Moisture - 2540)	46	H H3	0.10	0.10	%			06/07/23 16:25	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-1C2-FD
Date Collected: 03/19/23 05:55
Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-3
Matrix: Solid
Percent Solids: 46.5

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	26	B	2.1	0.23	ng/g	☼	06/08/23 17:03	06/09/23 19:10	20

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-1C3X

Lab Sample ID: 580-126682-4

Date Collected: 03/19/23 07:33

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	55	H H3	0.10	0.10	%			06/07/23 16:25	1
Percent Solids (SM Moisture - 2540)	45	H H3	0.10	0.10	%			06/07/23 16:25	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-1C3X

Lab Sample ID: 580-126682-4

Date Collected: 03/19/23 07:33

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 44.5

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	B	2.1	0.23	ng/g	☼	06/08/23 17:03	06/09/23 19:14	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-1D1

Lab Sample ID: 580-126682-5

Date Collected: 03/18/23 11:03

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	52	H H3	0.10	0.10	%			06/07/23 16:25	1
Percent Solids (SM Moisture - 2540)	48	H H3	0.10	0.10	%			06/07/23 16:25	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-1D1
Date Collected: 03/18/23 11:03
Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-5
Matrix: Solid
Percent Solids: 47.6

Method: EPA 1631B - Mercury, Low Level (CVAFS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	25	B	2.1	0.23	ng/g	☼	06/08/23 17:03	06/09/23 19:19	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-1D2

Lab Sample ID: 580-126682-6

Date Collected: 03/18/23 22:49

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	61	H H3	0.10	0.10	%			06/07/23 16:25	1
Percent Solids (SM Moisture - 2540)	39	H H3	0.10	0.10	%			06/07/23 16:25	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-1D2
Date Collected: 03/18/23 22:49
Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-6
Matrix: Solid
Percent Solids: 39.3

Method: EPA 1631B - Mercury, Low Level (CVAFS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	25	B	2.3	0.26	ng/g	☼	06/08/23 17:03	06/09/23 19:23	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-1D3X

Lab Sample ID: 580-126682-7

Date Collected: 03/18/23 22:13

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	65	H H3	0.10	0.10	%			06/07/23 16:25	1
Percent Solids (SM Moisture - 2540)	35	H H3	0.10	0.10	%			06/07/23 16:25	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-1D3X
Date Collected: 03/18/23 22:13
Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-7
Matrix: Solid
Percent Solids: 35.0

Method: EPA 1631B - Mercury, Low Level (CVAFS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	23	B	2.7	0.29	ng/g	☼	06/08/23 17:03	06/09/23 19:27	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-3C1

Lab Sample ID: 580-126682-8

Date Collected: 03/17/23 19:07

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	59	H H3	0.10	0.10	%			06/07/23 16:25	1
Percent Solids (SM Moisture - 2540)	41	H H3	0.10	0.10	%			06/07/23 16:25	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-3C1

Lab Sample ID: 580-126682-8

Date Collected: 03/17/23 19:07

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 40.7

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	30	B	2.4	0.27	ng/g	☼	06/08/23 17:03	06/09/23 19:31	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-3C2

Lab Sample ID: 580-126682-9

Date Collected: 03/17/23 19:55

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	56	H H3	0.10	0.10	%			06/07/23 16:25	1
Percent Solids (SM Moisture - 2540)	44	H H3	0.10	0.10	%			06/07/23 16:25	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-3C2
Date Collected: 03/17/23 19:55
Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-9
Matrix: Solid
Percent Solids: 44.4

Method: EPA 1631B - Mercury, Low Level (CVAFS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	35	B	2.2	0.24	ng/g	☼	06/08/23 17:03	06/09/23 19:35	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-3C3

Lab Sample ID: 580-126682-10

Date Collected: 03/17/23 20:23

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	59	H H3	0.10	0.10	%			06/07/23 16:25	1
Percent Solids (SM Moisture - 2540)	41	H H3	0.10	0.10	%			06/07/23 16:25	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-3C3

Lab Sample ID: 580-126682-10

Date Collected: 03/17/23 20:23

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 40.9

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	24	B	2.3	0.25	ng/g	☼	06/08/23 17:03	06/09/23 19:40	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-3D1X

Lab Sample ID: 580-126682-11

Date Collected: 03/17/23 22:15

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	53	H H3	0.10	0.10	%			06/07/23 16:25	1
Percent Solids (SM Moisture - 2540)	47	H H3	0.10	0.10	%			06/07/23 16:25	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-3D1X

Lab Sample ID: 580-126682-11

Date Collected: 03/17/23 22:15

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 46.6

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	16	B	2.0	0.22	ng/g	☼	06/08/23 17:03	06/09/23 19:44	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-3D2

Lab Sample ID: 580-126682-12

Date Collected: 03/17/23 23:06

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	59	H H3	0.10	0.10	%			06/07/23 16:25	1
Percent Solids (SM Moisture - 2540)	41	H H3	0.10	0.10	%			06/07/23 16:25	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-3D2

Lab Sample ID: 580-126682-12

Date Collected: 03/17/23 23:06

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 41.1

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	24	B	2.2	0.25	ng/g	☼	06/08/23 17:03	06/09/23 19:48	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-3D3

Lab Sample ID: 580-126682-13

Date Collected: 03/18/23 01:00

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	58	H H3	0.10	0.10	%			06/07/23 16:25	1
Percent Solids (SM Moisture - 2540)	42	H H3	0.10	0.10	%			06/07/23 16:25	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-3D3

Lab Sample ID: 580-126682-13

Date Collected: 03/18/23 01:00

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 41.9

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	24	B ^2	2.3	0.26	ng/g	☼	06/08/23 17:03	06/09/23 20:00	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: G4/43 Ref-A

Lab Sample ID: 580-126682-108

Date Collected: 03/23/23 12:46

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	52	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	48	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: G4/43 Ref-A

Lab Sample ID: 580-126682-108

Date Collected: 03/23/23 12:46

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 48.4

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	19	B	1.9	0.21	ng/g	☼	06/08/23 17:19	06/12/23 21:31	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: G4/43 Ref-B

Lab Sample ID: 580-126682-109

Date Collected: 03/23/23 13:07

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	50	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	50	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: G4/43 Ref-B

Lab Sample ID: 580-126682-109

Date Collected: 03/23/23 13:07

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 49.8

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	17	B	1.9	0.21	ng/g	☼	06/08/23 17:19	06/12/23 21:35	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: G4/43 Ref-C

Lab Sample ID: 580-126682-110

Date Collected: 03/23/23 13:16

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	53	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	47	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: G4/43 Ref-C
Date Collected: 03/23/23 13:16
Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-110
Matrix: Solid
Percent Solids: 47.3

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	19	B	1.9	0.21	ng/g	☼	06/08/23 17:19	06/12/23 21:39	20

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Method: 1631B - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 580-428179/1-A

Matrix: Solid

Analysis Batch: 428562

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 428179

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.410	J	1.0	0.11	ng/g		06/08/23 17:03	06/09/23 16:03	20

Lab Sample ID: MB 580-428179/2-A

Matrix: Solid

Analysis Batch: 428562

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 428179

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.412	J	1.0	0.11	ng/g		06/08/23 17:03	06/09/23 16:07	20

Lab Sample ID: MB 580-428179/3-A

Matrix: Solid

Analysis Batch: 428562

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 428179

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.387	J	1.0	0.11	ng/g		06/08/23 17:03	06/09/23 16:11	20

Lab Sample ID: LCS 580-428179/4-A

Matrix: Solid

Analysis Batch: 428562

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 428179

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	396	360		ng/g		91	75 - 125

Lab Sample ID: LCSD 580-428179/5-A

Matrix: Solid

Analysis Batch: 428562

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 428179

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	396	363		ng/g		92	75 - 125	1	24

Lab Sample ID: 580-126682-1 MS

Matrix: Solid

Analysis Batch: 428562

Client Sample ID: LAWA-1C1

Prep Type: Total/NA

Prep Batch: 428179

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	23	B	744	717		ng/g	✱	93	71 - 125

Lab Sample ID: 580-126682-1 MSD

Matrix: Solid

Analysis Batch: 428562

Client Sample ID: LAWA-1C1

Prep Type: Total/NA

Prep Batch: 428179

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	23	B	684	646		ng/g	✱	91	71 - 125	10	24

Lab Sample ID: 580-126682-2 MS

Matrix: Solid

Analysis Batch: 428562

Client Sample ID: LAWA-1C2

Prep Type: Total/NA

Prep Batch: 428179

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	27	B	914	882		ng/g	✱	94	71 - 125

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Method: 1631B - Mercury, Low Level (CVAFS)

Lab Sample ID: 580-126682-2 MSD

Matrix: Solid

Analysis Batch: 428562

Client Sample ID: LAWA-1C2

Prep Type: Total/NA

Prep Batch: 428179

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	27	B	956	936		ng/g	☆	95	71 - 125	6	24

Lab Sample ID: MB 580-428195/1-A

Matrix: Solid

Analysis Batch: 428772

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 428195

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.127	J	1.0	0.11	ng/g		06/08/23 17:19	06/12/23 16:02	20

Lab Sample ID: MB 580-428195/2-A

Matrix: Solid

Analysis Batch: 428772

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 428195

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.11	ng/g		06/08/23 17:19	06/12/23 16:06	20

Lab Sample ID: MB 580-428195/3-A

Matrix: Solid

Analysis Batch: 428772

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 428195

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.11	ng/g		06/08/23 17:19	06/12/23 16:10	20

Lab Sample ID: LCS 580-428195/4-A

Matrix: Solid

Analysis Batch: 428772

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 428195

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	396	397		ng/g		100	75 - 125

Lab Sample ID: LCSD 580-428195/5-A

Matrix: Solid

Analysis Batch: 428772

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 428195

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	396	404		ng/g		102	75 - 125	2	24

Method: Moisture - 2540 - Percent Moisture

Lab Sample ID: 580-126682-1 DU

Matrix: Solid

Analysis Batch: 428197

Client Sample ID: LAWA-1C1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	47	H H3	48		%		2	20
Percent Solids	53	H H3	52		%		2	20

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Method: Moisture - 2540 - Percent Moisture (Continued)

Lab Sample ID: 580-126682-2 DU
Matrix: Solid
Analysis Batch: 428197

Client Sample ID: LAWA-1C2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	61	H H3	59		%		2	20
Percent Solids	39	H H3	41		%		3	20

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-1C1

Date Collected: 03/19/23 04:40

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428197	CL	EET SEA	06/07/23 16:25

Client Sample ID: LAWA-1C1

Date Collected: 03/19/23 04:40

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-1

Matrix: Solid

Percent Solids: 52.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428179	CL	EET SEA	06/08/23 17:03
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 18:37

Client Sample ID: LAWA-1C2

Date Collected: 03/19/23 05:44

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428197	CL	EET SEA	06/07/23 16:25

Client Sample ID: LAWA-1C2

Date Collected: 03/19/23 05:44

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-2

Matrix: Solid

Percent Solids: 39.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428179	CL	EET SEA	06/08/23 17:03
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 18:41

Client Sample ID: LAWA-1C2-FD

Date Collected: 03/19/23 05:55

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428197	CL	EET SEA	06/07/23 16:25

Client Sample ID: LAWA-1C2-FD

Date Collected: 03/19/23 05:55

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-3

Matrix: Solid

Percent Solids: 46.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428179	CL	EET SEA	06/08/23 17:03
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 19:10

Client Sample ID: LAWA-1C3X

Date Collected: 03/19/23 07:33

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428197	CL	EET SEA	06/07/23 16:25

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-1C3X

Lab Sample ID: 580-126682-4

Date Collected: 03/19/23 07:33

Matrix: Solid

Date Received: 05/02/23 09:20

Percent Solids: 44.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428179	CL	EET SEA	06/08/23 17:03
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 19:14

Client Sample ID: LAWA-1D1

Lab Sample ID: 580-126682-5

Date Collected: 03/18/23 11:03

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428197	CL	EET SEA	06/07/23 16:25

Client Sample ID: LAWA-1D1

Lab Sample ID: 580-126682-5

Date Collected: 03/18/23 11:03

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 47.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428179	CL	EET SEA	06/08/23 17:03
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 19:19

Client Sample ID: LAWA-1D2

Lab Sample ID: 580-126682-6

Date Collected: 03/18/23 22:49

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428197	CL	EET SEA	06/07/23 16:25

Client Sample ID: LAWA-1D2

Lab Sample ID: 580-126682-6

Date Collected: 03/18/23 22:49

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 39.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428179	CL	EET SEA	06/08/23 17:03
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 19:23

Client Sample ID: LAWA-1D3X

Lab Sample ID: 580-126682-7

Date Collected: 03/18/23 22:13

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428197	CL	EET SEA	06/07/23 16:25

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-1D3X

Date Collected: 03/18/23 22:13

Date Received: 05/02/23 09:20

Lab Sample ID: 580-126682-7

Matrix: Solid

Percent Solids: 35.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428179	CL	EET SEA	06/08/23 17:03
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 19:27

Client Sample ID: LAWA-3C1

Date Collected: 03/17/23 19:07

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428197	CL	EET SEA	06/07/23 16:25

Client Sample ID: LAWA-3C1

Date Collected: 03/17/23 19:07

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-8

Matrix: Solid

Percent Solids: 40.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428179	CL	EET SEA	06/08/23 17:03
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 19:31

Client Sample ID: LAWA-3C2

Date Collected: 03/17/23 19:55

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428197	CL	EET SEA	06/07/23 16:25

Client Sample ID: LAWA-3C2

Date Collected: 03/17/23 19:55

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-9

Matrix: Solid

Percent Solids: 44.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428179	CL	EET SEA	06/08/23 17:03
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 19:35

Client Sample ID: LAWA-3C3

Date Collected: 03/17/23 20:23

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428197	CL	EET SEA	06/07/23 16:25

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-3C3

Date Collected: 03/17/23 20:23

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-10

Matrix: Solid

Percent Solids: 40.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428179	CL	EET SEA	06/08/23 17:03
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 19:40

Client Sample ID: LAWA-3D1X

Date Collected: 03/17/23 22:15

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428197	CL	EET SEA	06/07/23 16:25

Client Sample ID: LAWA-3D1X

Date Collected: 03/17/23 22:15

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-11

Matrix: Solid

Percent Solids: 46.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428179	CL	EET SEA	06/08/23 17:03
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 19:44

Client Sample ID: LAWA-3D2

Date Collected: 03/17/23 23:06

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428197	CL	EET SEA	06/07/23 16:25

Client Sample ID: LAWA-3D2

Date Collected: 03/17/23 23:06

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-12

Matrix: Solid

Percent Solids: 41.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428179	CL	EET SEA	06/08/23 17:03
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 19:48

Client Sample ID: LAWA-3D3

Date Collected: 03/18/23 01:00

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-13

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428197	CL	EET SEA	06/07/23 16:25

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: LAWA-3D3

Lab Sample ID: 580-126682-13

Date Collected: 03/18/23 01:00

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 41.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428179	CL	EET SEA	06/08/23 17:03
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 20:00

Client Sample ID: G4/43 Ref-A

Lab Sample ID: 580-126682-108

Date Collected: 03/23/23 12:46

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428216	AJD	EET SEA	06/08/23 17:31

Client Sample ID: G4/43 Ref-A

Lab Sample ID: 580-126682-108

Date Collected: 03/23/23 12:46

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 48.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428195	AJD	EET SEA	06/08/23 17:19
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 21:31

Client Sample ID: G4/43 Ref-B

Lab Sample ID: 580-126682-109

Date Collected: 03/23/23 13:07

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428216	AJD	EET SEA	06/08/23 17:31

Client Sample ID: G4/43 Ref-B

Lab Sample ID: 580-126682-109

Date Collected: 03/23/23 13:07

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 49.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428195	AJD	EET SEA	06/08/23 17:19
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 21:35

Client Sample ID: G4/43 Ref-C

Lab Sample ID: 580-126682-110

Date Collected: 03/23/23 13:16

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428216	AJD	EET SEA	06/08/23 17:31

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Client Sample ID: G4/43 Ref-C

Lab Sample ID: 580-126682-110

Date Collected: 03/23/23 13:16

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 47.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428195	AJD	EET SEA	06/08/23 17:19
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 21:39

Laboratory References:

EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Laboratory: Eurofins Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
ANAB	Dept. of Defense ELAP	L2236	01-19-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
ANAB	Dept. of Energy	L2236	01-19-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
ANAB	ISO/IEC 17025	L2236	01-19-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
California	State	2954	07-07-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	1631B CAR Prep	Solid	Mercury
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
Florida	NELAP	E87575	06-30-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
Louisiana (All)	NELAP	03073	06-30-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
Maine	State	WA01273	05-02-24

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Laboratory: Eurofins Seattle (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	1631B CAR Prep	Solid	Mercury
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
Montana (UST)	State	NA	04-14-27
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	1631B CAR Prep	Solid	Mercury
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
New Jersey	NELAP	WA014	06-30-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	1631B CAR Prep	Solid	Mercury
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
New York	NELAP	11662	03-31-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	1631B CAR Prep	Solid	Mercury
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
Oregon	NELAP	4167	07-07-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
Moisture - 2540		Solid	Percent Solids
US Fish & Wildlife	US Federal Programs	A20571	06-30-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	1631B CAR Prep	Solid	Mercury
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
USDA	US Federal Programs	525-23-4-22573	01-04-26
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	1631B CAR Prep	Solid	Mercury
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-6

Laboratory: Eurofins Seattle (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1631B	1631B CAR Prep	Solid	Mercury
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids

Wisconsin	State	399133460	08-31-23
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

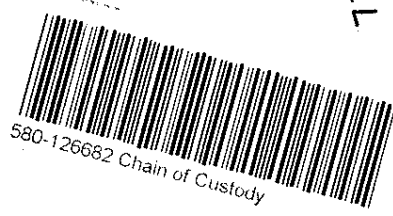
Job ID: 580-126682-6

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-126682-1	LAWA-1C1	Solid	03/19/23 04:40	05/02/23 09:40
580-126682-2	LAWA-1C2	Solid	03/19/23 05:44	05/02/23 09:40
580-126682-3	LAWA-1C2-FD	Solid	03/19/23 05:55	05/02/23 09:40
580-126682-4	LAWA-1C3X	Solid	03/19/23 07:33	05/02/23 09:40
580-126682-5	LAWA-1D1	Solid	03/18/23 11:03	05/02/23 09:40
580-126682-6	LAWA-1D2	Solid	03/18/23 22:49	05/02/23 09:40
580-126682-7	LAWA-1D3X	Solid	03/18/23 22:13	05/02/23 09:40
580-126682-8	LAWA-3C1	Solid	03/17/23 19:07	05/02/23 09:40
580-126682-9	LAWA-3C2	Solid	03/17/23 19:55	05/02/23 09:40
580-126682-10	LAWA-3C3	Solid	03/17/23 20:23	05/02/23 09:40
580-126682-11	LAWA-3D1X	Solid	03/17/23 22:15	05/02/23 09:40
580-126682-12	LAWA-3D2	Solid	03/17/23 23:06	05/02/23 09:40
580-126682-13	LAWA-3D3	Solid	03/18/23 01:00	05/02/23 09:40
580-126682-108	G4/43 Ref-A	Solid	03/23/23 12:46	05/02/23 09:40
580-126682-109	G4/43 Ref-B	Solid	03/23/23 13:07	05/02/23 09:40
580-126682-110	G4/43 Ref-C	Solid	03/23/23 13:16	05/02/23 09:40

CHAIN OF CUSTODY

Ship To:
Patrick Garcia-Strickland
Eurofins Specialty Metals Testing
5755 8th St. E
Fife, WA 98424
USA

Dr. Ted Donn
Tetra Tech Inc.
3697 Mt. Diablo Blvd., Suite 150
Lafayette, CA
ted.donn@tetratech.com



General Notes:

Program: Gulf of Thailand (2020-2023)
Please report all results to the MDL, J-flag results between MDL and
Please report results and invoice separately for each Project ID
Please report results in pdf format with Excel EDD deliverable
Please report results on a dry weight basis.

1720 0847 3120

Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.20	LAWA-1C1	SED	FREEZE	19-Mar-23	4:40	1	1	1		
T423.20	LAWA-1C2	SED	FREEZE	19-Mar-23	5:44	1	1	1		
T423.20	LAWA-1C2-FD	SED	FREEZE	19-Mar-23	5:55	1	1	1		
T423.20	LAWA-1C3X	SED	FREEZE	19-Mar-23	7:33	1	1	1		
T423.20	LAWA-1D1	SED	FREEZE	18-Mar-23	11:03	1	1	1		
T423.20	LAWA-1D2	SED	FREEZE	18-Mar-23	22:49	1	1	1		
T423.20	LAWA-1D3X	SED	FREEZE	18-Mar-23	22:13	1	1	1		
T423.20	LAWA-3C1	SED	FREEZE	17-Mar-23	19:07	1	1	1		
T423.20	LAWA-3C2	SED	FREEZE	17-Mar-23	19:55	1	1	1		
T423.20	LAWA-3C3	SED	FREEZE	17-Mar-23	20:23	1	1	1		
T423.20	LAWA-3D1X	SED	FREEZE	17-Mar-23	22:15	1	1	1		
T423.20	LAWA-3D2	SED	FREEZE	17-Mar-23	23:06	1	1	1		
T423.20	LAWA-3D3	SED	FREEZE	18-Mar-23	1:00	1	1	1		

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T423.20	G4/43REF-SW-1	SW	FREEZE	23-Mar-23	10:11				1	1
T423.20	G4/43REF-SW-20	SW	FREEZE	23-Mar-23	10:17				1	1
T423.20	G4/43REF-SW-40	SW	FREEZE	23-Mar-23	10:25				1	1
T423.20	G4/43REF-SW-B	SW	FREEZE	23-Mar-23	10:37				1	1
T423.20	LAWA-1C1-SW-1	SW	FREEZE	18-Mar-23	4:36				1	
T423.20	LAWA-1C1-SW-20	SW	FREEZE	18-Mar-23	4:44				1	
T423.20	LAWA-1C1-SW-40	SW	FREEZE	18-Mar-23	4:56				1	
T423.20	LAWA-1C1-SW-B	SW	FREEZE	18-Mar-23	5:08				1	
T423.20	LAWA-1C1-SW-B-FD	SW	FREEZE	18-Mar-23	5:20				1	
T423.20	LAWA-1C2-SW-1	SW	FREEZE	18-Mar-23	7:08				1	
T423.20	LAWA-1C2-SW-20	SW	FREEZE	18-Mar-23	7:45				1	

Relinquished by:

2522 5/5/23

Received by:

Relinquished by:

Received by:

6/15/2023

CHAIN OF CUSTODY

Ship To:
Patrick Garcia-Strickland
Eurofins Specialty Metals Testing
5755 8th St. E
Fife, WA 98424
USA

Dr. Ted Donn
Tetra Tech Inc.
3697 Mt. Diablo Blvd., Suite 150
Lafayette, CA
ted.donn@tetratech.com

General Notes:
Program: Gulf of Thailand (2020-2023)
Please report all results to the MDL, J-flag results between MDL and RL
Please report results and invoice separately for each Project ID
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Please report results on a dry weight basis.

Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.20	LAWA-1C2-SW-40	SW	FREEZE	18-Mar-23	7:55				1	1
T423.20	LAWA-1C2-SW-B	SW	FREEZE	18-Mar-23	8:07				1	1
T423.20	LAWA-1C3X-SW-1	SW	FREEZE	18-Mar-23	19:21				1	1
T423.20	LAWA-1C3X-SW-20	SW	FREEZE	18-Mar-23	19:29				1	1
T423.20	LAWA-1C3X-SW-40	SW	FREEZE	18-Mar-23	19:40				1	1
T423.20	LAWA-1C3X-SW-B	SW	FREEZE	18-Mar-23	19:52				1	1
T423.20	LAWA-1D1-SW-1	SW	FREEZE	19-Mar-23	2:31				1	1
T423.20	LAWA-1D1-SW-20	SW	FREEZE	19-Mar-23	2:37				1	1
T423.20	LAWA-1D1-SW-40	SW	FREEZE	19-Mar-23	2:46				1	1
T423.20	LAWA-1D1-SW-B	SW	FREEZE	19-Mar-23	2:59				1	1
T423.20	LAWA-1D2-SW-1	SW	FREEZE	19-Mar-23	0:28				1	1
T423.20	LAWA-1D2-SW-1-FD	SW	FREEZE	19-Mar-23	0:36				1	1
T423.20	LAWA-1D2-SW-20	SW	FREEZE	19-Mar-23	0:43				1	1
T423.20	LAWA-1D2-SW-40	SW	FREEZE	19-Mar-23	0:52				1	1
T423.20	LAWA-1D2-SW-B	SW	FREEZE	19-Mar-23	1:05				1	1
T423.20	LAWA-1D3X-SW-1	SW	FREEZE	18-Mar-23	20:43				1	1
T423.20	LAWA-1D3X-SW-20	SW	FREEZE	18-Mar-23	20:51				1	1
T423.20	LAWA-1D3X-SW-40	SW	FREEZE	18-Mar-23	21:01				1	1
T423.20	LAWA-1D3X-SW-B	SW	FREEZE	18-Mar-23	21:14				1	1
T423.20	LAWA-3C1-SW-1	SW	FREEZE	17-Mar-23	16:43				1	1
T423.20	LAWA-3C1-SW-20	SW	FREEZE	17-Mar-23	16:50				1	1
T423.20	LAWA-3C1-SW-40	SW	FREEZE	17-Mar-23	17:00				1	1
T423.20	LAWA-3C1-SW-B	SW	FREEZE	17-Mar-23	17:13				1	1
T423.20	LAWA-3C2-SW-1	SW	FREEZE	18-Mar-23	3:47				1	1
T423.20	LAWA-3C2-SW-20	SW	FREEZE	18-Mar-23	3:04				1	1

Relinquished by:

Received by:


5/5/23

CHAIN OF CUSTODY

Ship To:
Patrick Garcia-Strickland
Eurofins Specialty Metals Testing
5755 8th St. E
Fife, WA 98424
USA

Dr. Ted Donn
Tetra Tech Inc.
3697 Mt. Diablo Blvd., Suite 150
Lafayette, CA
ted.donn@tetratech.com

General Notes:
Program: Gulf of Thailand (2020-2023)
Please report all results to the MDL, J-flag results between MDL and RL
Please report results and invoice separately for each Project ID
Please report results in pdf format with Excel EDD deliverable
Please report results on a dry weight basis.

Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.20	LAWA-3C2-SW-40	SW	FREEZE	18-Mar-23	4:03				1	1
T423.20	LAWA-3C2-SW-B	SW	FREEZE	18-Mar-23	4:15				1	1
T423.20	LAWA-3C3-SW-1	SW	FREEZE	18-Mar-23	2:01				1	1
T423.20	LAWA-3C3-SW-20	SW	FREEZE	18-Mar-23	2:08				1	1
T423.20	LAWA-3C3-SW-40	SW	FREEZE	18-Mar-23	2:07				1	1
T423.20	LAWA-3C3-SW-B	SW	FREEZE	18-Mar-23	2:33				1	1
T423.20	LAWA-3D1X-SW-1	SW	FREEZE	17-Mar-23	12:21				1	1
T423.20	LAWA-3D1X-SW-20	SW	FREEZE	17-Mar-23	12:29				1	1
T423.20	LAWA-3D1X-SW-40	SW	FREEZE	17-Mar-23	12:39				1	1
T423.20	LAWA-3D1X-SW-B	SW	FREEZE	17-Mar-23	12:51				1	1
T423.20	LAWA-3D2-SW-1	SW	FREEZE	17-Mar-23	4:33				1	1
T423.20	LAWA-3D2-SW-1-FD	SW	FREEZE	17-Mar-23	4:41				1	1
T423.20	LAWA-3D2-SW-20	SW	FREEZE	17-Mar-23	4:48				1	1
T423.20	LAWA-3D2-SW-40	SW	FREEZE	17-Mar-23	4:58				1	1
T423.20	LAWA-3D2-SW-B	SW	FREEZE	17-Mar-23	5:10				1	1
T423.20	LAWA-3D3-SW-1	SW	FREEZE	17-Mar-23	3:38				1	1
T423.20	LAWA-3D3-SW-20	SW	FREEZE	17-Mar-23	3:49				1	1
T423.20	LAWA-3D3-SW-40	SW	FREEZE	17-Mar-23	3:59				1	1
T423.20	LAWA-3D3-SW-B	SW	FREEZE	17-Mar-23	4:14				1	1
T423.20	LAWA-EQ	SW	FREEZE	17-Mar-23	3:25				1	1
T423.20	LAWA-WB	SW	FREEZE	17-Mar-23	3:30				1	1

T423.18	MAWA-1C2	SED	FREEZE	22-Mar-23	7:27	1	1	1		
T423.18	MAWA-1CP2	SED	FREEZE	22-Mar-23	13:29	1	1	1		
T423.18	MAWA-2B2X	SED	FREEZE	22-Mar-23	4:35	1	1	1		

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CHAIN OF CUSTODY

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.18	MAWA-3B2	SED	FREEZE	21-Mar-23	23:28	1	1	1	1	
T423.18	MAWA-3C2	SED	FREEZE	21-Mar-23	23:07	1	1	1	1	
T423.18	MAWA-4B2X	SED	FREEZE	21-Mar-23	22:45	1	1	1	1	
T423.18	MAWB-1B2X	SED	FREEZE	21-Mar-23	3:53	1	1	1	1	
T423.18	MAWB-1C2X	SED	FREEZE	21-Mar-23	4:06	1	1	1	1	
T423.18	MAWB-2B2X	SED	FREEZE	21-Mar-23	1:50	1	1	1	1	
T423.18	MAWB-3B2X	SED	FREEZE	20-Mar-23	23:15	1	1	1	1	
T423.18	MAWB-3C2	SED	FREEZE	20-Mar-23	22:52	1	1	1	1	
T423.18	MAWB-4B2X	SED	FREEZE	20-Mar-23	21:37	1	1	1	1	
T423.18	MAWC-1B2X	SED	FREEZE	20-Mar-23	3:53	1	1	1	1	
T423.18	MAWC-1C2	SED	FREEZE	20-Mar-23	5:16	1	1	1	1	
T423.18	MAWC-1C2-FD	SED	FREEZE	20-Mar-23	5:27	1	1	1	1	
T423.18	MAWC-2B2X	SED	FREEZE	20-Mar-23	1:41	1	1	1	1	
T423.18	MAWC-3B2X	SED	FREEZE	19-Mar-23	23:32	1	1	1	1	
T423.18	MAWC-3C2	SED	FREEZE	19-Mar-23	23:18	1	1	1	1	
T423.18	MAWC-4B2X	SED	FREEZE	19-Mar-23	23:01	1	1	1	1	
T423.18	MAWD-1B2X	SED	FREEZE	23-Mar-23	1:09	1	1	1	1	
T423.18	MAWD-1C2	SED	FREEZE	23-Mar-23	3:36	1	1	1	1	
T423.18	MAWD-2C2X	SED	FREEZE	23-Mar-23	5:07	1	1	1	1	
T423.18	MAWD-3B2	SED	FREEZE	22-Mar-23	23:16	1	1	1	1	
T423.18	MAWD-3C2X	SED	FREEZE	22-Mar-23	23:29	1	1	1	1	
T423.18	MAWD-3C2X-FD	SED	FREEZE	22-Mar-23	23:38	1	1	1	1	
T423.18	MAWD-4B2X	SED	FREEZE	22-Mar-23	22:57	1	1	1	1	

T423.18	MAWA-1C2-SW-1	SW	COLD	22-Mar-23	5:30				1	1
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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.18	MAWA-1C2-SW-20	SW	COLD	22-Mar-23	5:36				1	1
T423.18	MAWA-1C2-SW-40	SW	COLD	22-Mar-23	5:46				1	1
T423.18	MAWA-1C2-SW-B	SW	COLD	22-Mar-23	5:57				1	1
T423.18	MAWA-1CP2-SW-1	SW	COLD	22-Mar-23	12:26				1	1
T423.18	MAWA-1CP2-SW-20	SW	COLD	22-Mar-23	12:32				1	1
T423.18	MAWA-1CP2-SW-40	SW	COLD	22-Mar-23	12:41				1	1
T423.18	MAWA-1CP2-SW-B	SW	COLD	22-Mar-23	12:52				1	1
T423.18	MAWA-2B2X-SW-1	SW	COLD	22-Mar-23	3:52				1	1
T423.18	MAWA-2B2X-SW-20	SW	COLD	22-Mar-23	3:58				1	1
T423.18	MAWA-2B2X-SW-40	SW	COLD	22-Mar-23	4:07				1	1
T423.18	MAWA-2B2X-SW-B	SW	COLD	22-Mar-23	4:19				1	1
T423.18	MAWA-3B2-SW-1	SW	COLD	22-Mar-23	2:12				1	1
T423.18	MAWA-3B2-SW-20	SW	COLD	22-Mar-23	2:19				1	1
T423.18	MAWA-3B2-SW-20-FD	SW	COLD	22-Mar-23	2:26				1	1
T423.18	MAWA-3B2-SW-40	SW	COLD	22-Mar-23	2:35				1	1
T423.18	MAWA-3B2-SW-B	SW	COLD	22-Mar-23	2:48				1	1
T423.18	MAWA-3C2-SW-1	SW	COLD	22-Mar-23	0:21				1	1
T423.18	MAWA-3C2-SW-20	SW	COLD	22-Mar-23	0:27				1	1
T423.18	MAWA-3C2-SW-40	SW	COLD	22-Mar-23	0:36				1	1
T423.18	MAWA-3C2-SW-B	SW	COLD	22-Mar-23	0:47				1	1
T423.18	MAWA-4B2X-SW-1	SW	COLD	21-Mar-23	21:43				1	1
T423.18	MAWA-4B2X-SW-20	SW	COLD	21-Mar-23	21:49				1	1
T423.18	MAWA-4B2X-SW-40	SW	COLD	21-Mar-23	21:57				1	1
T423.18	MAWA-4B2X-SW-B	SW	COLD	21-Mar-23	22:09				1	1
T423.18	MAWA-EQ	SW	COLD	21-Mar-23	21:33				1	1

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.18	MAWB-WB	SW	COLD	21-Mar-23	21:28				1	1
T423.18	MAWB-1B2X-SW-1	SW	FREEZE	21-Mar-23	3:08				1	1
T423.18	MAWB-1B2X-SW-1-FD	SW	FREEZE	21-Mar-23	3:13				1	1
T423.18	MAWB-1B2X-SW-20	SW	FREEZE	21-Mar-23	3:19				1	1
T423.18	MAWB-1B2X-SW-40	SW	FREEZE	21-Mar-23	3:27				1	1
T423.18	MAWB-1B2X-SW-B	SW	FREEZE	21-Mar-23	3:38				1	1
T423.18	MAWB-1C2X-SW-1	SW	FREEZE	20-Mar-23	16:42				1	1
T423.18	MAWB-1C2X-SW-20	SW	FREEZE	20-Mar-23	16:48				1	1
T423.18	MAWB-1C2X-SW-40	SW	FREEZE	20-Mar-23	16:59				1	1
T423.18	MAWB-1C2X-SW-B	SW	FREEZE	20-Mar-23	17:11				1	1
T423.18	MAWB-2B2X-SW-1	SW	FREEZE	21-Mar-23	1:06				1	1
T423.18	MAWB-2B2X-SW-20	SW	FREEZE	21-Mar-23	1:11				1	1
T423.18	MAWB-2B2X-SW-20-FD	SW	FREEZE	21-Mar-23	1:18				1	1
T423.18	MAWB-2B2X-SW-40	SW	FREEZE	21-Mar-23	1:26				1	1
T423.18	MAWB-2B2X-SW-B	SW	FREEZE	21-Mar-23	1:37				1	1
T423.18	MAWB-3B2X-SW-1	SW	FREEZE	20-Mar-23	19:17				1	1
T423.18	MAWB-3B2X-SW-20	SW	FREEZE	20-Mar-23	19:23				1	1
T423.18	MAWB-3B2X-SW-40	SW	FREEZE	20-Mar-23	19:31				1	1
T423.18	MAWB-3B2X-SW-B	SW	FREEZE	20-Mar-23	19:43				1	1
T423.18	MAWB-3C2-SW-1	SW	FREEZE	20-Mar-23	10:55				1	1
T423.18	MAWB-3C2-SW-20	SW	FREEZE	20-Mar-23	11:00				1	1
T423.18	MAWB-3C2-SW-40	SW	FREEZE	20-Mar-23	11:13				1	1
T423.18	MAWB-3C2-SW-B	SW	FREEZE	20-Mar-23	11:24				1	1
T423.18	MAWB-4B2X-SW-1	SW	FREEZE	20-Mar-23	20:25				1	1
T423.18	MAWB-4B2X-SW-20	SW	FREEZE	20-Mar-23	20:30				1	1

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.18	MAWB-4B2X-SW-40	SW	FREEZE	20-Mar-23	20:39				1	1
T423.18	MAWB-4B2X-SW-B	SW	FREEZE	20-Mar-23	20:50				1	1
T423.18	MAWB-4B2X-SW-B-FD	SW	FREEZE	20-Mar-23	21:03				1	1
T423.18	MAWC-1B2X-SW-1	SW	FREEZE	20-Mar-23	2:37				1	1
T423.18	MAWC-1B2X-SW-20	SW	FREEZE	20-Mar-23	2:43				1	1
T423.18	MAWC-1B2X-SW-40	SW	FREEZE	20-Mar-23	2:52				1	1
T423.18	MAWC-1B2X-SW-B	SW	FREEZE	20-Mar-23	3:04				1	1
T423.18	MAWC-1C2-SW-1	SW	FREEZE	20-Mar-23	4:37				1	1
T423.18	MAWC-1C2-SW-20	SW	FREEZE	20-Mar-23	4:43				1	1
T423.18	MAWC-1C2-SW-40	SW	FREEZE	20-Mar-23	4:52				1	1
T423.18	MAWC-1C2-SW-B	SW	FREEZE	20-Mar-23	5:04				1	1
T423.18	MAWC-2B2X-SW-1	SW	FREEZE	20-Mar-23	1:02				1	1
T423.18	MAWC-2B2X-SW-20	SW	FREEZE	20-Mar-23	1:08				1	1
T423.18	MAWC-2B2X-SW-40	SW	FREEZE	20-Mar-23	1:17				1	1
T423.18	MAWC-2B2X-SW-B	SW	FREEZE	20-Mar-23	1:28				1	1
T423.18	MAWC-3B2X-SW-1	SW	FREEZE	19-Mar-23	20:13				1	1
T423.18	MAWC-3B2X-SW-20	SW	FREEZE	19-Mar-23	20:23				1	1
T423.18	MAWC-3B2X-SW-40	SW	FREEZE	19-Mar-23	20:32				1	1
T423.18	MAWC-3B2X-SW-B	SW	FREEZE	19-Mar-23	20:43				1	1
T423.18	MAWC-3C2-SW-1	SW	FREEZE	19-Mar-23	19:09				1	1
T423.18	MAWC-3C2-SW-20	SW	FREEZE	19-Mar-23	19:26				1	1
T423.18	MAWC-3C2-SW-40	SW	FREEZE	19-Mar-23	19:04				1	1
T423.18	MAWC-3C2-SW-B	SW	FREEZE	19-Mar-23	19:46				1	1
T423.18	MAWC-4B2X-SW-1	SW	FREEZE	19-Mar-23	21:02				1	1
T423.18	MAWC-4B2X-SW-20	SW	FREEZE	19-Mar-23	21:52				1	1

Page 57 of 65

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T423.18	MAWC-4B2X-SW-40	SW	FREEZE	19-Mar-23	22:01				1	1
T423.18	MAWC-4B2X-SW-B	SW	FREEZE	19-Mar-23	22:12				1	1
T423.18	MAWC-4B2X-SW-B-FD	SW	FREEZE	19-Mar-23	22:25				1	1
T423.18	MAWC-EQ	SW	FREEZE	19-Mar-23	9:07				1	1
T423.18	MAWC-WB	SW	FREEZE	19-Mar-23	19:00				1	1
T423.18	MAWD-1B2X-SW-1	SW	COLD	23-Mar-23	0:50				1	1
T423.18	MAWD-1B2X-SW-20	SW	COLD	23-Mar-23	0:56				1	1
T423.18	MAWD-1B2X-SW-40	SW	COLD	23-Mar-23	1:05				1	1
T423.18	MAWD-1B2X-SW-B	SW	COLD	23-Mar-23	1:17				1	1
T423.18	MAWD-1C2-SW-1	SW	COLD	23-Mar-23	2:22				1	1
T423.18	MAWD-1C2-SW-20	SW	COLD	23-Mar-23	2:28				1	1
T423.18	MAWD-1C2-SW-40	SW	COLD	23-Mar-23	2:37				1	1
T423.18	MAWD-1C2-SW-B	SW	COLD	23-Mar-23	2:48				1	1
T423.18	MAWD-2C2X-SW-1	SW	COLD	23-Mar-23	4:27				1	1
T423.18	MAWD-2C2X-SW-20	SW	COLD	23-Mar-23	4:34				1	1
T423.18	MAWD-2C2X-SW-40	SW	COLD	23-Mar-23	4:43				1	1
T423.18	MAWD-2C2X-SW-B	SW	COLD	23-Mar-23	4:55				1	1
T423.18	MAWD-3B2-SW-1	SW	COLD	22-Mar-23	20:25				1	1
T423.18	MAWD-3B2-SW-20	SW	COLD	22-Mar-23	20:31				1	1
T423.18	MAWD-3B2-SW-40	SW	COLD	22-Mar-23	20:42				1	1
T423.18	MAWD-3B2-SW-B	SW	COLD	22-Mar-23	20:54				1	1
T423.18	MAWD-3C2X-SW-1	SW	COLD	22-Mar-23	19:15				1	1
T423.18	MAWD-3C2X-SW-20	SW	COLD	22-Mar-23	19:24				1	1
T423.18	MAWD-3C2X-SW-40	SW	COLD	22-Mar-23	19:33				1	1
T423.18	MAWD-3C2X-SW-B	SW	COLD	22-Mar-23	19:44				1	1

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T423.18	MAWD-4B2X-SW-1	SW	COLD	22-Mar-23	22:18				1	1
T423.18	MAWD-4B2X-SW-20	SW	COLD	22-Mar-23	22:24				1	1
T423.18	MAWD-4B2X-SW-40	SW	COLD	22-Mar-23	22:33				1	1
T423.18	MAWD-4B2X-SW-B	SW	COLD	22-Mar-23	22:44				1	1
T423.19	Control-3-A	SED	FREEZE	23-Mar-23		1	1	1		
T423.19	Control-3-B	SED	FREEZE	23-Mar-23		1	1	1		
T423.19	Control-3-C	SED	FREEZE	23-Mar-23		1	1	1		
T423.19	MAWG-1B1X	SED	FREEZE	21-Mar-23	18:15	1	1	1		
T423.19	MAWG-1B2X	SED	FREEZE	21-Mar-23	17:14	1	1	1		
T423.19	MAWG-1B3X	SED	FREEZE	21-Mar-23	19:04	1	1	1		
T423.19	MAWG-1C1	SED	FREEZE	21-Mar-23	19:44	1	1	1		
T423.19	MAWG-1C2	SED	FREEZE	21-Mar-23	19:09	1	1	1		
T423.19	MAWG-1C3	SED	FREEZE	21-Mar-23	19:15	1	1	1		
T423.19	MAWG-1D1	SED	FREEZE	21-Mar-23	20:12	1	1	1		
T423.19	MAWG-1D2	SED	FREEZE	21-Mar-23	20:32	1	1	1		
T423.19	MAWG-1D3	SED	FREEZE	21-Mar-23	20:50	1	1	1		
T423.19	MAWG-2B2X	SED	FREEZE	21-Mar-23	13:25	1	1	1		
T423.19	MAWG-2B2X-FD	SED	FREEZE	21-Mar-23	13:35	1	1	1		
T423.19	MAWG-2C2	SED	FREEZE	21-Mar-23	13:08	1	1	1		
T423.19	MAWG-3B1X	SED	FREEZE	21-Mar-23	8:02	1	1	1		
T423.19	MAWG-3B2X	SED	FREEZE	21-Mar-23	8:08	1	1	1		
T423.19	MAWG-3B3X	SED	FREEZE	21-Mar-23	8:52	1	1	1		
T423.19	MAWG-3C1	SED	FREEZE	21-Mar-23	10:28	1	1	1		
T423.19	MAWG-3C2	SED	FREEZE	21-Mar-23	9:00	1	1	1		
T423.19	MAWG-3C2-FD	SED	FREEZE	21-Mar-23	9:45	1	1	1		

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T423.19	MAWG-3C3	SED	FREEZE	21-Mar-23	9:11	1	1	1		
T423.19	MAWG-3D1	SED	FREEZE	21-Mar-23	11:02	1	1	1		
T423.19	MAWG-3D2	SED	FREEZE	21-Mar-23	11:26	1	1	1		
T423.19	MAWG-3D3	SED	FREEZE	21-Mar-23	11:48	1	1	1		
T423.19	MAWG-4B2X	SED	FREEZE	21-Mar-23	12:46	1	1	1		
T423.19	MAWG-4C2	SED	FREEZE	21-Mar-23	12:28	1	1	1		
T423.19	Control-3-SW-1	SW	COLD	23-Mar-23	19:18				1	1
T423.19	Control-3-SW-20	SW	COLD	23-Mar-23	19:27				1	1
T423.19	Control-3-SW-40	SW	COLD	23-Mar-23	19:39				1	1
T423.19	Control-3-SW-B	SW	COLD	23-Mar-23	19:50				1	1
T423.19	MAWG-1B2X-SW-1	SW	COLD	21-Mar-23	15:44				1	1
T423.19	MAWG-1B2X-SW-20	SW	COLD	21-Mar-23	15:50				1	1
T423.19	MAWG-1B2X-SW-40	SW	COLD	21-Mar-23	16:01				1	1
T423.19	MAWG-1B2X-SW-B	SW	COLD	21-Mar-23	16:16				1	1
T423.19	MAWG-3B2X-SW-1	SW	COLD	21-Mar-23	5:13				1	1
T423.19	MAWG-3B2X-SW-1-FD	SW	COLD	21-Mar-23	5:18				1	1
T423.19	MAWG-3B2X-SW-20	SW	COLD	21-Mar-23	5:24				1	1
T423.19	MAWG-3B2X-SW-40	SW	COLD	21-Mar-23	5:39				1	1
T423.19	MAWG-3B2X-SW-B	SW	COLD	21-Mar-23	5:50				1	1
T423.19	MAWG-EQ	SW	COLD	21-Mar-23	4:05				1	1
T423.19	MAWG-WB	SW	COLD	21-Mar-23	5:00				1	1
T423.21	TFPSO-1B2	SED	FREEZE	25-Mar-23	4:33	1	1	1		
T423.21	TFPSO-1C2	SED	FREEZE	25-Mar-23	2:39	1	1	1		

Relinquished by:  5/5/23

Relieved by:  5/5/23

General Notes:
Program: Gulf of Thailand (2020-2023)
Please report all results to the MDL, J-flag results between MDL and RL
Please report results and invoice separately for each Project ID
Please report results in pdf format with Excel EDD deliverable
Please report results on a dry weight basis.

Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.21	TFPSO-1CP2	SED	FREEZE	25-Mar-23	2:19	1	1	1		
T423.21	TFPSO-1D2	SED	FREEZE	25-Mar-23	1:48	1	1	1		
T423.21	TFPSO-1D2-FD	SED	FREEZE	25-Mar-23	2:00	1	1	1		
T423.21	TFPSO-2B2	SED	FREEZE	25-Mar-23	7:42	1	1	1		
T423.21	TFPSO-2CP2	SED	FREEZE	25-Mar-23	7:19	1	1	1		
T423.21	TFPSO-3B2	SED	FREEZE	25-Mar-23	8:01	1	1	1		
T423.21	TFPSO-3CP2	SED	FREEZE	25-Mar-23	8:47	1	1	1		
T423.21	TFPSO-4B2	SED	FREEZE	25-Mar-23	8:20	1	1	1		
T423.21	TFPSO-4CP2	SED	FREEZE	25-Mar-23	9:10	1	1	1		
T423.21	YAREF-A2	SED	FREEZE	25-Mar-23	12:54	1	1	1		
T423.21	YAREF-B2	SED	FREEZE	25-Mar-23	13:04	1	1	1		
T423.21	YAREF-C2	SED	FREEZE	25-Mar-23	13:14	1	1	1		
T423.21	TFPSO-1B2-SW-1	SW	COLD	25-Mar-23	2:57				1	1
T423.21	TFPSO-1B2-SW-20	SW	COLD	25-Mar-23	3:04				1	1
T423.21	TFPSO-1B2-SW-20-FD	SW	COLD	25-Mar-23	3:10				1	1
T423.21	TFPSO-1B2-SW-40	SW	COLD	25-Mar-23	3:17				1	1
T423.21	TFPSO-1B2-SW-B	SW	COLD	25-Mar-23	3:28				1	1
T423.21	TFPSO-3B2-SW-1	SW	COLD	25-Mar-23	4:51				1	1
T423.21	TFPSO-3B2-SW-20	SW	COLD	25-Mar-23	4:57				1	1
T423.21	TFPSO-3B2-SW-40	SW	COLD	25-Mar-23	5:05				1	1
T423.21	TFPSO-3B2-SW-B	SW	COLD	25-Mar-23	5:21				1	1
T423.21	TFPSO-EQ	SW	COLD	25-Mar-23	1:00				1	1
T423.21	TFPSO-WB	SW	COLD	25-Mar-23	1:05				1	1
T423.21	YAREF-SW-1	SW	COLD	25-Mar-23	12:16				1	1

Relinquished by:

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Recieved by:

 5/5/23

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.21	YAREF-SW-20	SW	COLD	25-Mar-23	12:23				1	1
T423.21	YAREF-SW-40	SW	COLD	25-Mar-23	12:31				1	1
T423.21	YAREF-SW-B	SW	COLD	25-Mar-23	12:42				1	1
T423.17	CBREF-A	SED	FREEZE	25-Mar-23	19:20	1	1	1		
T423.17	CBREF-B	SED	FREEZE	25-Mar-23	19:30	1	1	1		
T423.17	CBREF-C	SED	FREEZE	25-Mar-23	19:39	1	1	1		
T423.17	YUWA-1B1X	SED	FREEZE	16-Mar-23	17:20	1	1	1		
T423.17	YUWA-1B2X	SED	FREEZE	16-Mar-23	16:50	1	1	1		
T423.17	YUWA-1B3X	SED	FREEZE	16-Mar-23	17:03	1	1	1		
T423.17	YUWA-1C1	SED	FREEZE	16-Mar-23	19:30	1	1	1		
T423.17	YUWA-1C2	SED	FREEZE	16-Mar-23	19:43	1	1	1		
T423.17	YUWA-1C3	SED	FREEZE	16-Mar-23	19:55	1	1	1		
T423.17	YUWA-1D1	SED	FREEZE	16-Mar-23	20:13	1	1	1		
T423.17	YUWA-1D2	SED	FREEZE	16-Mar-23	20:19	1	1	1		
T423.17	YUWA-1D3	SED	FREEZE	16-Mar-23	20:44	1	1	1		
T423.17	YUWA-2B2X	SED	FREEZE	16-Mar-23	18:57	1	1	1		
T423.17	YUWA-2C2	SED	FREEZE	16-Mar-23	19:13	1	1	1		
T423.17	YUWA-3B1X	SED	FREEZE	16-Mar-23	10:09	1	1	1		
T423.17	YUWA-3B1X-FD	SED	FREEZE	16-Mar-23	10:19	1	1	1		
T423.17	YUWA-3B2X	SED	FREEZE	16-Mar-23	9:07	1	1	1		
T423.17	YUWA-3B3X	SED	FREEZE	16-Mar-23	10:49	1	1	1		
T423.17	YUWA-3C1	SED	FREEZE	16-Mar-23	13:00	1	1	1		
T423.17	YUWA-3C1-FD	SED	FREEZE	16-Mar-23	13:09	1	1	1		
T423.17	YUWA-3C2	SED	FREEZE	16-Mar-23	12:03	1	1	1		

Relinquished by: Relinquished by:

Recieved by:  5/15/23 Recieved by:

CHAIN OF CUSTODY

Ship To:

Patrick Garcia-Strickland

Eurofins Specialty Metals Testing

5755 8th St. E

Fife, WA 98424

USA

Dr. Ted Donn

Tetra Tech Inc.

3697 Mt. Diablo Blvd., Suite 150

Lafayette, CA

ted.donn@tetratech.com

General Notes:
Program: Gulf of Thailand (2020-2023)
Please report all results to the MDL, J-flag results between MDL and RL
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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.17	YUWA-3C3	SED	FREEZE	16-Mar-23	11:19	1	1	1		
T423.17	YUWA-3D1	SED	FREEZE	16-Mar-23	13:34	1	1	1		
T423.17	YUWA-3D2	SED	FREEZE	16-Mar-23	13:04	1	1	1		
T423.17	YUWA-3D3	SED	FREEZE	16-Mar-23	14:17	1	1	1		
T423.17	YUWA-4B2X	SED	FREEZE	16-Mar-23	6:03	1	1	1		
T423.17	YUWA-4C2	SED	FREEZE	16-Mar-23	6:24	1	1	1		
T423.17	CBREF-SW-1	SW	FREEZE	25-Mar-23	17:03				1	1
T423.17	CBREF-SW-20	SW	FREEZE	25-Mar-23	17:10				1	1
T423.17	CBREF-SW-40	SW	FREEZE	25-Mar-23	17:18				1	1
T423.17	CBREF-SW-B	SW	FREEZE	25-Mar-23	17:30				1	1
T423.17	YUWA-1B2X-SW-1	SW	FREEZE	16-Mar-23	15:09				1	1
T423.17	YUWA-1B2X-SW-20	SW	FREEZE	16-Mar-23	15:16				1	1
T423.17	YUWA-1B2X-SW-40	SW	FREEZE	16-Mar-23	15:04				1	1
T423.17	YUWA-1B2X-SW-40-FD	SW	FREEZE	16-Mar-23	15:34				1	1
T423.17	YUWA-1B2X-SW-B	SW	FREEZE	16-Mar-23	15:45				1	1
T423.17	YUWA-3B2X-SW-1	SW	FREEZE	16-Mar-23	7:04				1	1
T423.17	YUWA-3B2X-SW-20	SW	FREEZE	16-Mar-23	7:58				1	1
T423.17	YUWA-3B2X-SW-40	SW	FREEZE	16-Mar-23	8:19				1	1
T423.17	YUWA-3B2X-SW-B	SW	FREEZE	16-Mar-23	8:33				1	1
T423.17	YUWA-EQ	SW	FREEZE	16-Mar-23	5:55				1	1
T423.17	YUWA-WB	SW	FREEZE	16-Mar-23	6:00				1	1

Relinquished by: Relinquished by:

Recieved by:  5/5/20

Recieved by:

Ship To:
Patrick Garcia-Strickland
Eurofins Specialty Metals Testing
5755 8th St. E
Fife, WA 98424
USA

CHAIN OF CUSTODY

Dr. Ted Donn
Tetra Tech Inc.
3697 Mt. Diablo Blvd., Suite 150
Lafayette, CA
ted.donn@tetratech.com

General Notes:
Program: Gulf of Thailand (2020-2023)
Please report all results to the MDL, J-flag results between MDL and RL
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Please report results on a dry weight basis.

Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.21	YAREF-SW-20	SW	COLD	25-Mar-23	12:23				1	1
T423.21	YAREF-SW-40	SW	COLD	25-Mar-23	12:31				1	1
T423.21	YAREF-SW-B	SW	COLD	25-Mar-23	12:42				1	1

Page 64 of 65

T423.17	CBREF-A	SED	FREEZE	25-Mar-23	19:20	1	1	1		
T423.17	CBREF-B	SED	FREEZE	25-Mar-23	19:30	1	1	1		
T423.17	CBREF-C	SED	FREEZE	25-Mar-23	19:39	1	1	1		
T423.17	YUWA-1B1X	SED	FREEZE	16-Mar-23	17:20	1	1	1		
T423.17	YUWA-1B2X	SED	FREEZE	16-Mar-23	16:50	1	1	1		
T423.17	YUWA-1B3X	SED	FREEZE	16-Mar-23	17:03	1	1	1		
T423.17	YUWA-1C1	SED	FREEZE	16-Mar-23	19:30	1	1	1		
T423.17	YUWA-1C2	SED	FREEZE	16-Mar-23	19:43	1	1	1		
T423.17	YUWA-1C3	SED	FREEZE	16-Mar-23	19:55	1	1	1		
T423.17	YUWA-1D1	SED	FREEZE	16-Mar-23	20:13	1	1	1		
T423.17	YUWA-1D2	SED	FREEZE	16-Mar-23	20:19	1	1	1		
T423.17	YUWA-1D3	SED	FREEZE	16-Mar-23	20:44	1	1	1		
T423.17	YUWA-2B2X	SED	FREEZE	16-Mar-23	18:57	1	1	1		
T423.17	YUWA-2C2	SED	FREEZE	16-Mar-23	19:13	1	1	1		
T423.17	YUWA-3B1X	SED	FREEZE	16-Mar-23	10:09	1	1	1		
T423.17	YUWA-3B1X-FD	SED	FREEZE	16-Mar-23	10:19	1	1	1		
T423.17	YUWA-3B2X	SED	FREEZE	16-Mar-23	9:07	1	1	1		
T423.17	YUWA-3B3X	SED	FREEZE	16-Mar-23	10:49	1	1	1		
T423.17	YUWA-3C1	SED	FREEZE	16-Mar-23	13:00	1	1	1		
T423.17	YUWA-3C1-FD	SED	FREEZE	16-Mar-23	13:09	1	1	1		
T423.17	YUWA-3C2	SED	FREEZE	16-Mar-23	12:03	1	1	1		

Relinquished by:

Relinquished by:

Received by:  5/15/23

Received by:

6/15/2023

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 580-126682-6

Login Number: 126682

List Source: Eurofins Seattle

List Number: 1

Creator: Groden, Kyle J

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number: 483906
Report Level: II
Report Date: 06/13/2023

Analytical Report *prepared for:*

Ted Donn
Tetra Tech, Inc.
3697 Mt. Diablo Blvd.
Suite 150
Lafayette, CA 94549

Project: COTL - T423.20 - Gulf of Thailand

Authorized for release by:

Miguel Gamboa, Project Coordinator
miguel.gamboa@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105

Sample Summary

Ted Donn
 Tetra Tech, Inc.
 3697 Mt. Diablo Blvd.
 Suite 150
 Lafayette, CA 94549

Lab Job #: 483906
 Project No: COTL
 Location: T423.20 - Gulf of Thailand
 Date Received: 05/05/23

Sample ID	Lab ID	Collected	Matrix
G4/43REF-A	483906-001	03/23/23 12:46	Soil
G4/43REF-B	483906-002	03/23/23 13:06	Soil
G4/43REF-C	483906-003	03/23/23 13:16	Soil
LAWA-1C1	483906-004	03/19/23 04:40	Soil
LAWA-1C2	483906-005	03/19/23 05:44	Soil
LAWA-1C2-FD	483906-006	03/19/23 05:55	Soil
LAWA-1C3X	483906-007	03/19/23 07:33	Soil
LAWA-1D1	483906-008	03/18/23 11:03	Soil
LAWA-1D2	483906-009	03/18/23 22:49	Soil
LAWA-1D3X	483906-010	03/18/23 22:13	Soil
LAWA-3C1	483906-011	03/17/23 19:07	Soil
LAWA-3C2	483906-012	03/17/23 19:55	Soil
LAWA-3C3	483906-013	03/17/23 20:23	Soil
LAWA-3D1X	483906-014	03/17/23 22:15	Soil
LAWA-3D2	483906-015	03/17/23 23:06	Soil
LAWA-3D3	483906-016	03/18/23 01:00	Soil

Case Narrative

Tetra Tech, Inc.
3697 Mt. Diablo Blvd.
Suite 150
Lafayette, CA 94549
Ted Donn

Lab Job Number: 483906
Project No: COTL
Location: T423.20 - Gulf of Thailand
Date Received: 05/05/23

This data package contains sample and QC results for sixteen soil samples, requested for the above referenced project on 05/05/23. The samples were received cold and intact.

TPH-Extractables by GC (EPA 8015M):

- ORO C28-C44 was detected between the MDL and the RL in the method blank for batch 313703; this analyte was not detected in samples at or above the RL.
- No other analytical problems were encountered.

Moisture (ASTM D2216):

No analytical problems were encountered.

General Notes:

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Project	SampleID	Medium	Preservation	Date	PH TEMP A	015 M)	C10	C14 C14- 22-1- 2023	C14- 22-1- 2023
T423.20	G4/43REF-A	SED	FREEZE	23-Mar-23	12:46	1	1	1	1
T423.20	G4/43REF-B	SED	FREEZE	23-Mar-23	13:06	1	1	1	1
T423.20	G4/43REF-C	SED	FREEZE	23-Mar-23	13:16	1	1	1	1
T423.20	LAWA-1C1	SED	FREEZE	19-Mar-23	4:40	1	1	1	1
T423.20	LAWA-1C2	SED	FREEZE	19-Mar-23	5:44	1	1	1	1
T423.20	LAWA-1C2-FD	SED	FREEZE	19-Mar-23	5:55	1	1	1	1
T423.20	LAWA-1C3X	SED	FREEZE	19-Mar-23	7:33	1	1	1	1
T423.20	LAWA-1D1	SED	FREEZE	18-Mar-23	11:03	1	1	1	1
T423.20	LAWA-1D2	SED	FREEZE	18-Mar-23	22:49	1	1	1	1
T423.20	LAWA-1D3X	SED	FREEZE	18-Mar-23	22:13	1	1	1	1
T423.20	LAWA-3C1	SED	FREEZE	17-Mar-23	19:07	1	1	1	1
T423.20	LAWA-3C2	SED	FREEZE	17-Mar-23	19:55	1	1	1	1
T423.20	LAWA-3C3	SED	FREEZE	17-Mar-23	20:23	1	1	1	1
T423.20	LAWA-3D1X	SED	FREEZE	17-Mar-23	22:15	1	1	1	1
T423.20	LAWA-3D2	SED	FREEZE	17-Mar-23	23:06	1	1	1	1
T423.20	LAWA-3D3	SED	FREEZE	18-Mar-23	1:00	1	1	1	1

T423.18	MAWA-1C2	SED	FREEZE	22-Mar-23	7:27	1	1	1	1
T423.18	MAWA-1CP2	SED	FREEZE	22-Mar-23	13:29	1	1	1	1
T423.18	MAWA-2B2X	SED	FREEZE	22-Mar-23	4:35	1	1	1	1
T423.18	MAWA-3B2	SED	FREEZE	21-Mar-23	23:28	1	1	1	1
T423.18	MAWA-3C2	SED	FREEZE	21-Mar-23	23:07	1	1	1	1
T423.18	MAWA-4B2X	SED	FREEZE	21-Mar-23	22:45	1	1	1	1
T423.18	MAWB-1B2X	SED	FREEZE	21-Mar-23	3:53	1	1	1	1
T423.18	MAWB-1C2X	SED	FREEZE	21-Mar-23	4:06	1	1	1	1
T423.18	MAWB-2B2X	SED	FREEZE	21-Mar-23	1:50	1	1	1	1
T423.18	MAWB-3B2X	SED	FREEZE	20-Mar-23	23:15	1	1	1	1
T423.18	MAWB-3C2	SED	FREEZE	20-Mar-23	22:52	1	1	1	1
T423.18	MAWB-4B2X	SED	FREEZE	20-Mar-23	21:37	1	1	1	1
T423.18	MAWC-1B2X	SED	FREEZE	20-Mar-23	3:53	1	1	1	1
T423.18	MAWC-1C2	SED	FREEZE	20-Mar-23	5:16	1	1	1	1
T423.18	MAWC-1C2-FD	SED	FREEZE	20-Mar-23	5:27	1	1	1	1
T423.18	MAWC-2B2X	SED	FREEZE	20-Mar-23	1:41	1	1	1	1
T423.18	MAWC-3B2X	SED	FREEZE	19-Mar-23	23:32	1	1	1	1
T423.18	MAWC-3C2	SED	FREEZE	19-Mar-23	23:18	1	1	1	1
T423.18	MAWC-4B2X	SED	FREEZE	19-Mar-23	23:01	1	1	1	1
T423.18	MAWD-1B2X	SED	FREEZE	23-Mar-23	1:09	1	1	1	1
T423.18	MAWD-1C2	SED	FREEZE	23-Mar-23	3:36	1	1	1	1
T423.18	MAWD-2C2X	SED	FREEZE	23-Mar-23	5:07	1	1	1	1
T423.18	MAWD-3B2	SED	FREEZE	22-Mar-23	23:16	1	1	1	1
T423.18	MAWD-3C2X	SED	FREEZE	22-Mar-23	23:29	1	1	1	1
T423.18	MAWD-3C2X-FD	SED	FREEZE	22-Mar-23	23:38	1	1	1	1
T423.18	MAWD-4B2X	SED	FREEZE	22-Mar-23	22:57	1	1	1	1

T423.19	Control-3-A	SED	FREEZE	23-Mar-23	20:24	1	1	1	1
T423.19	Control-3-B	SED	FREEZE	23-Mar-23	20:37	1	1	1	1
T423.19	Control-3-C	SED	FREEZE	23-Mar-23	20:54	1	1	1	1
T423.19	MAWG-1B1X	SED	FREEZE	21-Mar-23	18:15	1	1	1	1
T423.19	MAWG-1B2X	SED	FREEZE	21-Mar-23	17:14	1	1	1	1
T423.19	MAWG-1B3X	SED	FREEZE	21-Mar-23	19:04	1	1	1	1

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483901

T423.19	MAWG-1C1	SED	FREEZE	21-Mar-23	19:44	1	1
T423.19	MAWG-1C2	SED	FREEZE	21-Mar-23	19:09	1	1
T423.19	MAWG-1C3	SED	FREEZE	21-Mar-23	19:15	1	1
T423.19	MAWG-1D1	SED	FREEZE	21-Mar-23	20:12	1	1
T423.19	MAWG-1D2	SED	FREEZE	21-Mar-23	20:32	1	1
T423.19	MAWG-1D3	SED	FREEZE	21-Mar-23	20:50	1	1
T423.19	MAWG-2B2X	SED	FREEZE	21-Mar-23	13:25	1	1
T423.19	MAWG-2B2X-FD	SED	FREEZE	21-Mar-23	13:35	1	1
T423.19	MAWG-2C2	SED	FREEZE	21-Mar-23	13:08	1	1
T423.19	MAWG-3B1X	SED	FREEZE	21-Mar-23	8:02	1	1
T423.19	MAWG-3B2X	SED	FREEZE	21-Mar-23	8:08	1	1
T423.19	MAWG-3B3X	SED	FREEZE	21-Mar-23	8:52	1	1
T423.19	MAWG-3C1	SED	FREEZE	21-Mar-23	10:28	1	1
T423.19	MAWG-3C2	SED	FREEZE	21-Mar-23	9:00	1	1
T423.19	MAWG-3C2-FD	SED	FREEZE	21-Mar-23	9:45	1	1
T423.19	MAWG-3C3	SED	FREEZE	21-Mar-23	9:11	1	1
T423.19	MAWG-3D1	SED	FREEZE	21-Mar-23	11:02	1	1
T423.19	MAWG-3D2	SED	FREEZE	21-Mar-23	11:26	1	1
T423.19	MAWG-3D3	SED	FREEZE	21-Mar-23	11:48	1	1
T423.19	MAWG-4B2X	SED	FREEZE	21-Mar-23	12:46	1	1
T423.19	MAWG-4C2	SED	FREEZE	21-Mar-23	12:28	1	1

483907

T423.21	TFPSO-1B2	SED	FREEZE	25-Mar-23	4:33	1	1
T423.21	TFPSO-1C2	SED	FREEZE	25-Mar-23	2:39	1	1
T423.21	TFPSO-1CP2	SED	FREEZE	25-Mar-23	2:19	1	1
T423.21	TFPSO-1D2	SED	FREEZE	25-Mar-23	1:48	1	1
T423.21	TFPSO-1D2-FD	SED	FREEZE	25-Mar-23	2:00	1	1
T423.21	TFPSO-2B2	SED	FREEZE	25-Mar-23	7:42	1	1
T423.21	TFPSO-2CP2	SED	FREEZE	25-Mar-23	7:19	1	1
T423.21	TFPSO-3B2	SED	FREEZE	25-Mar-23	8:01	1	1
T423.21	TFPSO-3CP2	SED	FREEZE	25-Mar-23	8:47	1	1
T423.21	TFPSO-4B2	SED	FREEZE	25-Mar-23	8:20	1	1
T423.21	TFPSO-4CP2	SED	FREEZE	25-Mar-23	9:10	1	1
T423.21	YAREF-A2	SED	FREEZE	25-Mar-23	12:54	1	1
T423.21	YAREF-B2	SED	FREEZE	25-Mar-23	13:04	1	1
T423.21	YAREF-C2	SED	FREEZE	25-Mar-23	13:14	1	1

483904

T423.17	CBREF-A	SED	FREEZE	25-Mar-23	19:20	1	1
T423.17	CBREF-B	SED	FREEZE	25-Mar-23	19:30	1	1
T423.17	CBREF-C	SED	FREEZE	25-Mar-23	19:39	1	1
T423.17	YUWA-1B1X	SED	FREEZE	16-Mar-23	17:20	1	1
T423.17	YUWA-1B2X	SED	FREEZE	16-Mar-23	16:50	1	1
T423.17	YUWA-1B3X	SED	FREEZE	16-Mar-23	17:03	1	1
T423.17	YUWA-1C1	SED	FREEZE	16-Mar-23	19:30	1	1
T423.17	YUWA-1C2	SED	FREEZE	16-Mar-23	19:43	1	1
T423.17	YUWA-1C3	SED	FREEZE	16-Mar-23	19:55	1	1
T423.17	YUWA-1D1	SED	FREEZE	16-Mar-23	20:13	1	1
T423.17	YUWA-1D2	SED	FREEZE	16-Mar-23	20:19	1	1
T423.17	YUWA-1D3	SED	FREEZE	16-Mar-23	20:44	1	1
T423.17	YUWA-2B2X	SED	FREEZE	16-Mar-23	18:57	1	1
T423.17	YUWA-2C2	SED	FREEZE	16-Mar-23	19:13	1	1
T423.17	YUWA-3B1X	SED	FREEZE	16-Mar-23	10:09	1	1
T423.17	YUWA-3B1X-FD	SED	FREEZE	16-Mar-23	10:19	1	1
T423.17	YUWA-3B2X	SED	FREEZE	16-Mar-23	9:07	1	1
T423.17	YUWA-3B3X	SED	FREEZE	16-Mar-23	10:49	1	1
T423.17	YUWA-3C1	SED	FREEZE	16-Mar-23	13:00	1	1
T423.17	YUWA-3C1-FD	SED	FREEZE	16-Mar-23	13:09	1	1

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48304

T423.17	YUWA-3C2	SED	FREEZE		16-Mar-23	12:03	1	1
T423.17	YUWA-3C3	SED	FREEZE		16-Mar-23	11:19	1	1
T423.17	YUWA-3D1	SED	FREEZE		16-Mar-23	13:34	1	1
T423.17	YUWA-3D2	SED	FREEZE		16-Mar-23	13:04	1	1
T423.17	YUWA-3D3	SED	FREEZE		16-Mar-23	14:17	1	1
T423.17	YUWA-4B2X	SED	FREEZE		16-Mar-23	6:03	1	1
T423.17	YUWA-4C2	SED	FREEZE		16-Mar-23	6:24	1	1

Received: *fl* 5/5/23 1009



ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: Tetra Tech, Inc.

Project: T423.21 - Gulf of Thailand

Date Received: 05/05/23

Sampler's Name Present: ☐ Yes ☒ No

Section 2

Sample(s) received in a cooler? ☒ Yes, How many? 2 ☐ No (skip section 2) Sample Temp (°C) (No Cooler): _____

Sample Temp (°C), One from each cooler: #1: -14.1 #2: -8.3 #3: _____ #4: _____

(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)

Shipping Information: _____

Section 3

Was the cooler packed with: ☐ Ice ☐ Ice Packs ☐ Bubble Wrap ☐ Styrofoam
☐ Paper ☐ None ☒ Other Dry Ice

Cooler Temp (°C): #1: -21.1 #2: -14.4 #3: _____ #4: _____

Section 4

	YES	NO	N/A
Was a COC received?		<input checked="" type="checkbox"/>	
Are sample IDs present?			
Are sampling dates & times present?			
Is a relinquished signature present?			
Are the tests required clearly indicated on the COC?			
Are custody seals present?		<input checked="" type="checkbox"/>	
If custody seals are present, were they intact?			<input checked="" type="checkbox"/>
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			<input checked="" type="checkbox"/>
Did all samples arrive intact? If no, indicate in Section 4 below.	<input checked="" type="checkbox"/>		
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>		
Were the samples collected in the correct containers for the required tests?	<input checked="" type="checkbox"/>		
Are the containers labeled with the correct preservatives?			<input checked="" type="checkbox"/>
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			<input checked="" type="checkbox"/>
Was a sufficient amount of sample submitted for the requested tests?	<input checked="" type="checkbox"/>		

Section 5 Explanations/Comments

COCs not received.

Section 6

For discrepancies, how was the Project Manager notified? ☐ Verbal PIM Initials: _____ Date/Time: _____
☐ Email (email sent to/on): _____ / _____

Project Manager's response: _____

Completed By: _____

Date: 5/5/23

ORIGIN ID: CCRA (925) 283-3771
BARBARA MAGOON
TETRA TECH, INC
3897 MT. DIABLO BLVD #150

LAFAYETTE, CA 94549
UNITED STATES US

SHIP DATE: 04MAY23
ACTWGT: 35.00 LB
CAD: 250618822/INET4610
DIMS: 23x12x13 IN
DRY ICE: 0.91 KG
BILL SENDER

TO **ENTHALPY**
ENTHALPY
931 W. BARKLEY AVE.

ORANGE CA 92868

(714) 771-6900

INV:
PO:

REF: TED - T41423

DEPT:

INSPECTOR BY ORIGIN
DG ORIGINALIST
EMP # 3727598



FedEx
Express



2 of 3

MPS# 7720 0864 6718

Mstr# 7720 0864 7688

92 APVA

FRI - 05 MAY 10:30A
PRIORITY OVERNIGHT

0201

ICE
92868
CA-US SNA



-21.1/-14.1

ORIGIN ID:CCRA (925) 283-3771
BARBARA MAGOON
TETRA TECH, INC
3897 MT. DIABLO BLVD #150

LAFAYETTE, CA 94549
UNITED STATES US

SHIP DATE: 04MAY23
ACTWGT: 35.00 LB
CAD: 250616822/NET4810
DIMS: 23x12x13 IN
DRY ICE: 0.91 KG
BILL SENDER

RT **229** 1 10:30 **D**
FZ 7688 05.05

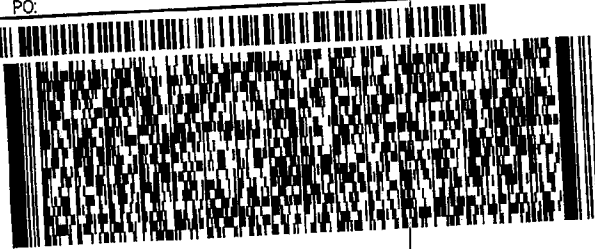
TO **ENTHALPY**
ENTHALPY
931 W. BARKLEY AVE.

ORANGE CA 92868

(714) 771-6900
INV:
PO:

REF: TED - T41428

DEPT:

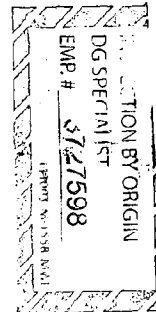


1 of 3
TRK# **7720 0864 7688**
0201
MASTER

92 APVA

FRI - 05 MAY 10:30A
PRIORITY OVERNIGHT

ICE
92868
CA-US **SNA**



-14.4 / -8.3

Extractable Carbon Chain

Lab #: 483906

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.20 - Gulf of Thailand

Field ID: G4/43REF-A

Moisture: 52%

Prepared: 05/11/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/12/23

Lab ID: 483906-001

Batch#: 313703

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/23/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: TJW

483906-001 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	21	2.2	mg/Kg
TPH (C14-C24)	ND	21	2.2	mg/Kg
ORO C28-C44	ND	41	2.2	mg/Kg
483906-001 Surrogate	%REC		Limits	
n-Triacontane	89		70-130	

Field ID: G4/43REF-B

Moisture: 51%

Prepared: 05/11/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/12/23

Lab ID: 483906-002

Batch#: 313703

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/23/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: TJW

483906-002 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	20	2.2	mg/Kg
TPH (C14-C24)	ND	20	2.2	mg/Kg
ORO C28-C44	ND	41	2.2	mg/Kg
483906-002 Surrogate	%REC		Limits	
n-Triacontane	87		70-130	

Field ID: G4/43REF-C

Moisture: 53%

Prepared: 05/11/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/12/23

Lab ID: 483906-003

Batch#: 313703

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/23/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: TJW

483906-003 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	21	2.3	mg/Kg
TPH (C14-C24)	ND	21	2.3	mg/Kg
ORO C28-C44	ND	42	2.3	mg/Kg
483906-003 Surrogate	%REC		Limits	
n-Triacontane	86		70-130	

Extractable Carbon Chain

Lab #: 483906

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.20 - Gulf of Thailand

Field ID: LAWA-1C1

Moisture: 53%

Prepared: 05/11/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/12/23

Lab ID: 483906-004

Batch#: 313703

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/19/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: TJW

483906-004 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	21	2.3	mg/Kg
TPH (C14-C24)	ND	21	2.3	mg/Kg
ORO C28-C44	ND	42	2.3	mg/Kg
483906-004 Surrogate	%REC		Limits	
n-Triacontane	85		70-130	

Field ID: LAWA-1C2

Moisture: 55%

Prepared: 05/11/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/12/23

Lab ID: 483906-005

Batch#: 313703

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/19/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: TJW

483906-005 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	22	2.4	mg/Kg
TPH (C14-C24)	ND	22	2.4	mg/Kg
ORO C28-C44	ND	44	2.4	mg/Kg
483906-005 Surrogate	%REC		Limits	
n-Triacontane	91		70-130	

Field ID: LAWA-1C2-FD

Moisture: 57%

Prepared: 05/11/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/12/23

Lab ID: 483906-006

Batch#: 313703

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/19/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: TJW

483906-006 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	23	2.5	mg/Kg
TPH (C14-C24)	ND	23	2.5	mg/Kg
ORO C28-C44	ND	46	2.5	mg/Kg
483906-006 Surrogate	%REC		Limits	
n-Triacontane	90		70-130	

Extractable Carbon Chain

Lab #: 483906

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.20 - Gulf of Thailand

Field ID: LAWA-1C3X

Moisture: 55%

Prepared: 05/11/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/12/23

Lab ID: 483906-007

Batch#: 313703

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/19/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: TJW

483906-007 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	22	2.4	mg/Kg
TPH (C14-C24)	ND	22	2.4	mg/Kg
ORO C28-C44	ND	44	2.4	mg/Kg
483906-007 Surrogate	%REC			Limits
n-Triacontane	87			70-130

Field ID: LAWA-1D1

Moisture: 53%

Prepared: 05/11/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/12/23

Lab ID: 483906-008

Batch#: 313703

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/18/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: TJW

483906-008 Analyte	Result	RL	MDL	Units	Qual
TPH (C10-C14)	ND	21	2.5	mg/Kg	
TPH (C14-C24)	ND	21	2.5	mg/Kg	
ORO C28-C44	3.1 J	42	2.5	mg/Kg	B
483906-008 Surrogate	%REC			Limits	
n-Triacontane	101			70-130	

Field ID: LAWA-1D2

Moisture: 55%

Prepared: 05/11/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/12/23

Lab ID: 483906-009

Batch#: 313703

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/18/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: TJW

483906-009 Analyte	Result	RL	MDL	Units	Qual
TPH (C10-C14)	ND	22	2.6	mg/Kg	
TPH (C14-C24)	ND	22	2.6	mg/Kg	
ORO C28-C44	3.3 J	44	2.6	mg/Kg	B
483906-009 Surrogate	%REC			Limits	
n-Triacontane	101			70-130	

Extractable Carbon Chain

Lab #: 483906

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.20 - Gulf of Thailand

Field ID: LAWA-1D3X

Moisture: 59%

Prepared: 05/11/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/12/23

Lab ID: 483906-010

Batch#: 313703

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/18/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: TJW

483906-010 Analyte	Result	RL	MDL	Units	Qual
TPH (C10-C14)	ND	24	2.9	mg/Kg	
TPH (C14-C24)	ND	24	2.9	mg/Kg	
ORO C28-C44	4.4 J	48	2.9	mg/Kg	B
483906-010 Surrogate	%REC			Limits	
n-Triacontane	101			70-130	

Field ID: LAWA-3C1

Moisture: 51%

Prepared: 05/11/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/12/23

Lab ID: 483906-011

Batch#: 313703

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/17/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: TJW

483906-011 Analyte	Result	RL	MDL	Units	Qual
TPH (C10-C14)	ND	20	2.4	mg/Kg	
TPH (C14-C24)	ND	20	2.4	mg/Kg	
ORO C28-C44	3.0 J	41	2.4	mg/Kg	B
483906-011 Surrogate	%REC			Limits	
n-Triacontane	95			70-130	

Field ID: LAWA-3C2

Moisture: 49%

Prepared: 05/11/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/12/23

Lab ID: 483906-012

Batch#: 313703

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/17/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: TJW

483906-012 Analyte	Result	RL	MDL	Units	Qual
TPH (C10-C14)	ND	20	2.3	mg/Kg	
TPH (C14-C24)	ND	20	2.3	mg/Kg	
ORO C28-C44	3.2 J	39	2.3	mg/Kg	B
483906-012 Surrogate	%REC			Limits	
n-Triacontane	103			70-130	

Extractable Carbon Chain

Lab #: 483906

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.20 - Gulf of Thailand

Field ID: LAWA-3C3

Moisture: 56%

Prepared: 05/11/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/12/23

Lab ID: 483906-013

Batch#: 313703

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/17/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: TJW

483906-013 Analyte	Result	RL	MDL	Units	Qual
TPH (C10-C14)	ND	23	2.7	mg/Kg	
TPH (C14-C24)	ND	23	2.7	mg/Kg	
ORO C28-C44	3.7 J	45	2.7	mg/Kg	B

483906-013 Surrogate	%REC	Limits
n-Triacontane	102	70-130

Field ID: LAWA-3D1X

Moisture: 53%

Prepared: 05/11/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/12/23

Lab ID: 483906-014

Batch#: 313703

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/17/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: TJW

483906-014 Analyte	Result	RL	MDL	Units	Qual
TPH (C10-C14)	ND	21	2.5	mg/Kg	
TPH (C14-C24)	ND	21	2.5	mg/Kg	
ORO C28-C44	3.9 J	42	2.5	mg/Kg	B

483906-014 Surrogate	%REC	Limits
n-Triacontane	100	70-130

Field ID: LAWA-3D2

Moisture: 52%

Prepared: 05/11/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/12/23

Lab ID: 483906-015

Batch#: 313703

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/17/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: TJW

483906-015 Analyte	Result	RL	MDL	Units	Qual
TPH (C10-C14)	ND	21	2.4	mg/Kg	
TPH (C14-C24)	ND	21	2.4	mg/Kg	
ORO C28-C44	2.6 J	42	2.4	mg/Kg	B

483906-015 Surrogate	%REC	Limits
n-Triacontane	100	70-130

Extractable Carbon Chain

Lab #: 483906

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.20 - Gulf of Thailand

Field ID: LAWA-3D3

Moisture: 57%

Prepared: 05/11/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/12/23

Lab ID: 483906-016

Batch#: 313703

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/18/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: TJW

483906-016 Analyte	Result	RL	MDL	Units	Qual
TPH (C10-C14)	ND	23	2.7	mg/Kg	
TPH (C14-C24)	ND	23	2.7	mg/Kg	
ORO C28-C44	3.7 J	46	2.7	mg/Kg	B

483906-016 Surrogate	%REC	Limits
n-Triacontane	102	70-130

Type: BLANK

Batch#: 313703

Analysis: EPA 8015M

Lab ID: QC1064955

Prepared: 05/11/23

Analyst: TJW

Matrix: Soil

Analyzed: 05/12/23

Diln Fac: 1.000

Prep: EPA 3580M

QC1064955 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	10	1.1	mg/Kg
TPH (C14-C24)	ND	10	1.1	mg/Kg
ORO C28-C44	1.3 J	20	1.1	mg/Kg

QC1064955 Surrogate	%REC	Limits
n-Triacontane	90	70-130

Legend

B: Contamination found in associated Method Blank

J: Estimated value

MDL: Method Detection Limit

ND: Not Detected at or above MDL

RL: Reporting Limit

Extractable Carbon Chain: Batch QC

Lab #: 483906

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.20 - Gulf of Thailand

Type: LCS

Batch#: 313703

Analysis: EPA 8015M

Lab ID: QC1064956

Prepared: 05/11/23

Analyst: TJW

Matrix: Soil

Analyzed: 05/12/23

Diln Fac: 1.000

Prep: EPA 3580M

QC1064956 Analyte	Spiked	Result	%REC	Limits	Units
Diesel C10-C28	250.0	213.6	85	76-122	mg/Kg
QC1064956 Surrogate			%REC	Limits	
n-Triacontane			85	70-130	

Extractable Carbon Chain: Batch QC

Lab #: 483906

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.20 - Gulf of Thailand

Field ID: G4/43REF-A

Basis: as received

Prepared: 05/11/23

Type: MS

Diln Fac: 1.000

Analyzed: 05/12/23

MSS Lab ID: 483906-001

Batch#: 313703

Prep: EPA 3580M

Lab ID: QC1064957

Sampled: 03/23/23

Analysis: EPA 8015M

Matrix: Soil

Received: 05/05/23

Analyst: TJW

QC1064957 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Diesel C10-C28	1.074	248.3	213.5	86	62-126	mg/Kg
QC1064957 Surrogate				%REC	Limits	
n-Triacontane				86	70-130	

Field ID: G4/43REF-A

Basis: as received

Prepared: 05/11/23

Type: MSD

Diln Fac: 1.000

Analyzed: 05/12/23

MSS Lab ID: 483906-001

Batch#: 313703

Prep: EPA 3580M

Lab ID: QC1064958

Sampled: 03/23/23

Analysis: EPA 8015M

Matrix: Soil

Received: 05/05/23

Analyst: TJW

QC1064958 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
Diesel C10-C28	249.3	215.7	86	62-126	mg/Kg	1	35
QC1064958 Surrogate				%REC	Limits		
n-Triacontane				85	70-130		

Legend

RPD: Relative Percent Difference

Moisture

Lab #: 483906

Client: Tetra Tech, Inc.

Project#: COTL

Location: T423.20 - Gulf of Thailand

Field ID: G4/43REF-A

Lab ID: 483906-001

Matrix: Soil

Diln Fac: 1.000

Batch#: 314672

Sampled: 03/23/23

Received: 05/05/23

Prepared: 05/24/23

Analyzed: 05/24/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483906-001 Analyte

Moisture, Percent

Result RL Units

52 1 %

Field ID: G4/43REF-B

Lab ID: 483906-002

Matrix: Soil

Diln Fac: 1.000

Batch#: 314672

Sampled: 03/23/23

Received: 05/05/23

Prepared: 05/24/23

Analyzed: 05/24/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483906-002 Analyte

Moisture, Percent

Result RL Units

51 1 %

Field ID: G4/43REF-C

Lab ID: 483906-003

Matrix: Soil

Diln Fac: 1.000

Batch#: 314672

Sampled: 03/23/23

Received: 05/05/23

Prepared: 05/24/23

Analyzed: 05/24/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483906-003 Analyte

Moisture, Percent

Result RL Units

53 1 %

Field ID: LAWA-1C1

Lab ID: 483906-004

Matrix: Soil

Diln Fac: 1.000

Batch#: 314672

Sampled: 03/19/23

Received: 05/05/23

Prepared: 05/24/23

Analyzed: 05/24/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483906-004 Analyte

Moisture, Percent

Result RL Units

53 1 %

Field ID: LAWA-1C2

Lab ID: 483906-005

Matrix: Soil

Diln Fac: 1.000

Batch#: 314672

Sampled: 03/19/23

Received: 05/05/23

Prepared: 05/24/23

Analyzed: 05/24/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483906-005 Analyte

Moisture, Percent

Result RL Units

55 1 %

Field ID: LAWA-1C2-FD

Lab ID: 483906-006

Matrix: Soil

Diln Fac: 1.000

Batch#: 314672

Sampled: 03/19/23

Received: 05/05/23

Prepared: 05/24/23

Analyzed: 05/24/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483906-006 Analyte

Moisture, Percent

Result RL Units

57 1 %

Moisture

Lab #: 483906

Client: Tetra Tech, Inc.

Project#: COTL

Location: T423.20 - Gulf of Thailand

Field ID: LAWA-1C3X

Lab ID: 483906-007

Matrix: Soil

Diln Fac: 1.000

Batch#: 314672

Sampled: 03/19/23

Received: 05/05/23

Prepared: 05/24/23

Analyzed: 05/24/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483906-007 Analyte

Moisture, Percent

Result RL Units

55 1 %

Field ID: LAWA-1D1

Lab ID: 483906-008

Matrix: Soil

Diln Fac: 1.000

Batch#: 314672

Sampled: 03/18/23

Received: 05/05/23

Prepared: 05/24/23

Analyzed: 05/24/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483906-008 Analyte

Moisture, Percent

Result RL Units

53 1 %

Field ID: LAWA-1D2

Lab ID: 483906-009

Matrix: Soil

Diln Fac: 1.000

Batch#: 314672

Sampled: 03/18/23

Received: 05/05/23

Prepared: 05/24/23

Analyzed: 05/24/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483906-009 Analyte

Moisture, Percent

Result RL Units

55 1 %

Field ID: LAWA-1D3X

Lab ID: 483906-010

Matrix: Soil

Diln Fac: 1.000

Batch#: 314682

Sampled: 03/18/23

Received: 05/05/23

Prepared: 05/24/23

Analyzed: 05/25/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483906-010 Analyte

Moisture, Percent

Result RL Units

59 1 %

Field ID: LAWA-3C1

Lab ID: 483906-011

Matrix: Soil

Diln Fac: 1.000

Batch#: 314682

Sampled: 03/17/23

Received: 05/05/23

Prepared: 05/24/23

Analyzed: 05/25/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483906-011 Analyte

Moisture, Percent

Result RL Units

51 1 %

Field ID: LAWA-3C2

Lab ID: 483906-012

Matrix: Soil

Diln Fac: 1.000

Batch#: 314682

Sampled: 03/17/23

Received: 05/05/23

Prepared: 05/24/23

Analyzed: 05/25/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483906-012 Analyte

Moisture, Percent

Result RL Units

49 1 %

Moisture

Lab #: 483906

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.20 - Gulf of Thailand

Field ID: LAWA-3C3

Batch#: 314682

Analyzed: 05/25/23

Lab ID: 483906-013

Sampled: 03/17/23

Prep: METHOD

Matrix: Soil

Received: 05/05/23

Analysis: ASTM D2216

Diln Fac: 1.000

Prepared: 05/24/23

Analyst: JAK

483906-013 Analyte

Moisture, Percent

Result	RL	Units
56	1	%

Field ID: LAWA-3D1X

Batch#: 314682

Analyzed: 05/25/23

Lab ID: 483906-014

Sampled: 03/17/23

Prep: METHOD

Matrix: Soil

Received: 05/05/23

Analysis: ASTM D2216

Diln Fac: 1.000

Prepared: 05/24/23

Analyst: JAK

483906-014 Analyte

Moisture, Percent

Result	RL	Units
53	1	%

Field ID: LAWA-3D2

Batch#: 314682

Analyzed: 05/25/23

Lab ID: 483906-015

Sampled: 03/17/23

Prep: METHOD

Matrix: Soil

Received: 05/05/23

Analysis: ASTM D2216

Diln Fac: 1.000

Prepared: 05/24/23

Analyst: JAK

483906-015 Analyte

Moisture, Percent

Result	RL	Units
52	1	%

Field ID: LAWA-3D3

Batch#: 314682

Analyzed: 05/25/23

Lab ID: 483906-016

Sampled: 03/18/23

Prep: METHOD

Matrix: Soil

Received: 05/05/23

Analysis: ASTM D2216

Diln Fac: 1.000

Prepared: 05/24/23

Analyst: JAK

483906-016 Analyte

Moisture, Percent

Result	RL	Units
57	1	%

Legend

RL: Reporting Limit

Moisture: Batch QC

Lab #: 483906		Project#: COTL					
Client: Tetra Tech, Inc.		Location: T423.20 - Gulf of Thailand					
Field ID: ZZZZZZZZZZ		Diln Fac: 1.000		Analyzed: 05/24/23			
Type: SDUP		Batch#: 314672		Prep: METHOD			
MSS Lab ID: 485586-008		Sampled: 05/22/23		Analysis: ASTM D2216			
Lab ID: QC1068200		Received: 05/22/23		Analyst: JAK			
Matrix: Miscell.		Prepared: 05/24/23					
QC1068200 Analyte		MSS Result	Result	RL	Units	RPD	Lim
Moisture, Percent		1.675	1.682	1.000	%	0	20
Field ID: LAWA-3D3		Diln Fac: 1.000		Analyzed: 05/25/23			
Type: SDUP		Batch#: 314682		Prep: METHOD			
MSS Lab ID: 483906-016		Sampled: 03/18/23		Analysis: ASTM D2216			
Lab ID: QC1068232		Received: 05/05/23		Analyst: JAK			
Matrix: Soil		Prepared: 05/24/23					
QC1068232 Analyte		MSS Result	Result	RL	Units	RPD	Lim
Moisture, Percent		57.45	57.02	1.000	%	1	20

Legend

RL: Reporting Limit

RPD: Relative Percent Difference



Analytical Resources, LLC
Analytical Chemists and Consultants
Tukwila, WA

11 July 2023

Ted Donn
Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette, CA 94549

RE: Gulf of Thailand (T423.20)

Please find enclosed sample receipt documentation and analytical results for samples from the project referenced above.

Sample analyses were performed according to ARI's Quality Assurance Plan and any provided project specific Quality Assurance Plan. Each analytical section of this report has been approved and reviewed by an analytical peer, the appropriate Laboratory Supervisor or qualified substitute, and a technical reviewer.

Should you have any questions or problems, please feel free to contact us at your convenience.

Associated Work Order(s)
23E0175

Associated SDG ID(s)
N/A

Susan

Dunniho

Digitally signed by
Susan Dunniho
Date: 2023.07.11
10:49:41 -07'00'

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the enclose Narrative. ARI, an accredited laboratory, certifies that the report results for which ARI is accredited meets all the requirements of the accrediting body. A list of certified analyses, accreditations, and expiration dates is included in this report.

Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Analytical Resources, LLC

Susan Dunniho, Director, Client Services

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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4611 S. 134th Place, Ste. 100

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23E0175

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Lafayette, CA

ted.donn@tetrattech.com

General Notes:

Please report all results to the MDL, J-flag results between MDL and RL

Please report results and invoice separately for each Project ID

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Please report results on a dry weight basis.

Project	SampleID	Medium	Preservation	Date	Time	TOC
T423.20	G4/43REF-A	SED	FREEZE	23-Mar-23	12:46	1
T423.20	G4/43REF-B	SED	FREEZE	23-Mar-23	13:06	1
T423.20	G4/43REF-C	SED	FREEZE	23-Mar-23	13:16	1
T423.20	LAWA-1C1	SED	FREEZE	19-Mar-23	4:40	1
T423.20	LAWA-1C2	SED	FREEZE	19-Mar-23	5:44	1
T423.20	LAWA-1C2-FD	SED	FREEZE	19-Mar-23	5:55	1
T423.20	LAWA-1C3X	SED	FREEZE	19-Mar-23	7:33	1
T423.20	LAWA-1D1	SED	FREEZE	18-Mar-23	11:03	1
T423.20	LAWA-1D2	SED	FREEZE	18-Mar-23	22:49	1
T423.20	LAWA-1D3X	SED	FREEZE	18-Mar-23	22:13	1
T423.20	LAWA-3C1	SED	FREEZE	17-Mar-23	19:07	1
T423.20	LAWA-3C2	SED	FREEZE	17-Mar-23	19:55	1
T423.20	LAWA-3C3	SED	FREEZE	17-Mar-23	20:23	1
T423.20	LAWA-3D1X	SED	FREEZE	17-Mar-23	22:15	1
T423.20	LAWA-3D2	SED	FREEZE	17-Mar-23	23:06	1
T423.20	LAWA-3D3	SED	FREEZE	18-Mar-23	1:00	1

T423.18	MAWA-1C2	SED	FREEZE	22-Mar-23	7:27	1
T423.18	MAWA-1CP2	SED	FREEZE	22-Mar-23	13:29	1
T423.18	MAWA-2B2X	SED	FREEZE	22-Mar-23	4:35	1
T423.18	MAWA-3B2	SED	FREEZE	21-Mar-23	23:28	1
T423.18	MAWA-3C2	SED	FREEZE	21-Mar-23	23:07	1
T423.18	MAWA-4B2X	SED	FREEZE	21-Mar-23	22:45	1
T423.18	MAWB-1B2X	SED	FREEZE	21-Mar-23	3:53	1
T423.18	MAWB-1C2X	SED	FREEZE	21-Mar-23	4:06	1
T423.18	MAWB-2B2X	SED	FREEZE	21-Mar-23	1:50	1
T423.18	MAWB-3B2X	SED	FREEZE	20-Mar-23	23:15	1
T423.18	MAWB-3C2	SED	FREEZE	20-Mar-23	22:52	1
T423.18	MAWB-4B2X	SED	FREEZE	20-Mar-23	21:37	1
T423.18	MAWC-1B2X	SED	FREEZE	20-Mar-23	3:53	1
T423.18	MAWC-1C2	SED	FREEZE	20-Mar-23	5:16	1
T423.18	MAWC-1C2-FD	SED	FREEZE	20-Mar-23	5:27	1
T423.18	MAWC-2B2X	SED	FREEZE	20-Mar-23	1:41	1
T423.18	MAWC-3B2X	SED	FREEZE	19-Mar-23	23:32	1
T423.18	MAWC-3C2	SED	FREEZE	19-Mar-23	23:18	1
T423.18	MAWC-4B2X	SED	FREEZE	19-Mar-23	23:01	1
T423.18	MAWD-1B2X	SED	FREEZE	23-Mar-23	1:09	1
T423.18	MAWD-1C2	SED	FREEZE	23-Mar-23	3:36	1
T423.18	MAWD-2C2X	SED	FREEZE	23-Mar-23	5:07	1

Relinquished by:

Relinquished by:

Recieved by: *Jacob Walter*

Recieved by:

5/16/23
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General Notes:

Please report all results to the MDL, J-flag results between MDL and RL

Please report results and invoice separately for each Project ID

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Please report results on a dry weight basis.

Project	SampleID	Medium	Preservation	Date	Time	TOC
T423.18	MAWD-3B2	SED	FREEZE	22-Mar-23	23:16	1
T423.18	MAWD-3C2X	SED	FREEZE	22-Mar-23	23:29	1
T423.18	MAWD-3C2X-FD	SED	FREEZE	22-Mar-23	23:38	1
T423.18	MAWD-4B2X	SED	FREEZE	22-Mar-23	22:57	1

T423.19	Control-3-A	SED	FREEZE	23-Mar-23	20:24	1
T423.19	Control-3-B	SED	FREEZE	23-Mar-23	20:37	1
T423.19	Control-3-C	SED	FREEZE	23-Mar-23	20:54	1
T423.19	MAWG-1B1X	SED	FREEZE	21-Mar-23	18:15	1
T423.19	MAWG-1B2X	SED	FREEZE	21-Mar-23	17:14	1
T423.19	MAWG-1B3X	SED	FREEZE	21-Mar-23	19:04	1
T423.19	MAWG-1C1	SED	FREEZE	21-Mar-23	19:44	1
T423.19	MAWG-1C2	SED	FREEZE	21-Mar-23	19:09	1
T423.19	MAWG-1C3	SED	FREEZE	21-Mar-23	19:15	1
T423.19	MAWG-1D1	SED	FREEZE	21-Mar-23	20:12	1
T423.19	MAWG-1D2	SED	FREEZE	21-Mar-23	20:32	1
T423.19	MAWG-1D3	SED	FREEZE	21-Mar-23	20:50	1
T423.19	MAWG-2B2X	SED	FREEZE	21-Mar-23	13:25	1
T423.19	MAWG-2B2X-FD	SED	FREEZE	21-Mar-23	13:35	1
T423.19	MAWG-2C2	SED	FREEZE	21-Mar-23	13:08	1
T423.19	MAWG-3B1X	SED	FREEZE	21-Mar-23	8:02	1
T423.19	MAWG-3B2X	SED	FREEZE	21-Mar-23	8:08	1
T423.19	MAWG-3B3X	SED	FREEZE	21-Mar-23	8:52	1
T423.19	MAWG-3C1	SED	FREEZE	21-Mar-23	10:28	1
T423.19	MAWG-3C2	SED	FREEZE	21-Mar-23	9:00	1
T423.19	MAWG-3C2-FD	SED	FREEZE	21-Mar-23	9:45	1
T423.19	MAWG-3C3	SED	FREEZE	21-Mar-23	9:11	1
T423.19	MAWG-3D1	SED	FREEZE	21-Mar-23	11:02	1
T423.19	MAWG-3D2	SED	FREEZE	21-Mar-23	11:26	1
T423.19	MAWG-3D3	SED	FREEZE	21-Mar-23	11:48	1
T423.19	MAWG-4B2X	SED	FREEZE	21-Mar-23	12:46	1
T423.19	MAWG-4C2	SED	FREEZE	21-Mar-23	12:28	1

T423.17	CBREF-A	SED	FREEZE	25-Mar-23	19:20	1
T423.17	CBREF-B	SED	FREEZE	25-Mar-23	19:30	1
T423.17	CBREF-C	SED	FREEZE	25-Mar-23	19:39	1
T423.17	YUWA-1B1X	SED	FREEZE	16-Mar-23	17:20	1
T423.17	YUWA-1B2X	SED	FREEZE	16-Mar-23	16:50	1
T423.17	YUWA-1B3X	SED	FREEZE	16-Mar-23	17:03	1

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Jacob Walter
as/05/03
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General Notes:

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Please report results on a dry weight basis.

Project	SampleID	Medium	Preservation	Date	Time	TOC
T423.17	YUWA-1C1	SED	FREEZE	16-Mar-23	19:30	1
T423.17	YUWA-1C2	SED	FREEZE	16-Mar-23	19:43	1
T423.17	YUWA-1C3	SED	FREEZE	16-Mar-23	19:55	1
T423.17	YUWA-1D1	SED	FREEZE	16-Mar-23	20:13	1
T423.17	YUWA-1D2	SED	FREEZE	16-Mar-23	20:19	1
T423.17	YUWA-1D3	SED	FREEZE	16-Mar-23	20:44	1
T423.17	YUWA-2B2X	SED	FREEZE	16-Mar-23	18:57	1
T423.17	YUWA-2C2	SED	FREEZE	16-Mar-23	19:13	1
T423.17	YUWA-3B1X	SED	FREEZE	16-Mar-23	10:09	1
T423.17	YUWA-3B1X-FD	SED	FREEZE	16-Mar-23	10:19	1
T423.17	YUWA-3B2X	SED	FREEZE	16-Mar-23	9:07	1
T423.17	YUWA-3B3X	SED	FREEZE	16-Mar-23	10:49	1
T423.17	YUWA-3C1	SED	FREEZE	16-Mar-23	13:00	1
T423.17	YUWA-3C1-FD	SED	FREEZE	16-Mar-23	13:09	1
T423.17	YUWA-3C2	SED	FREEZE	16-Mar-23	12:03	1
T423.17	YUWA-3C3	SED	FREEZE	16-Mar-23	11:19	1
T423.17	YUWA-3D1	SED	FREEZE	16-Mar-23	13:34	1
T423.17	YUWA-3D2	SED	FREEZE	16-Mar-23	13:04	1
T423.17	YUWA-3D3	SED	FREEZE	16-Mar-23	14:17	1
T423.17	YUWA-4B2X	SED	FREEZE	16-Mar-23	6:03	1
T423.17	YUWA-4C2	SED	FREEZE	16-Mar-23	6:24	1

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Relinquished by:

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8510563
10/10/23 -5.4°C

Received by:



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.20
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
G4/43REF-A	23E0175-01	Solid	23-Mar-2023 12:46	08-May-2023 10:00
G4/43REF-B	23E0175-02	Solid	23-Mar-2023 13:06	08-May-2023 10:00
G4/43REF-C	23E0175-03	Solid	23-Mar-2023 13:16	08-May-2023 10:00
LAWA-1C1	23E0175-04	Solid	19-Mar-2023 04:40	08-May-2023 10:00
LAWA-1C2	23E0175-05	Solid	19-Mar-2023 05:44	08-May-2023 10:00
LAWA-1C2-FD	23E0175-06	Solid	19-Mar-2023 05:55	08-May-2023 10:00
LAWA-1C3X	23E0175-07	Solid	19-Mar-2023 07:33	08-May-2023 10:00
LAWA-1D1	23E0175-08	Solid	18-Mar-2023 11:03	08-May-2023 10:00
LAWA-1D2	23E0175-09	Solid	18-Mar-2023 22:49	08-May-2023 10:00
LAWA-1D3X	23E0175-10	Solid	18-Mar-2023 22:13	08-May-2023 10:00
LAWA-3C1	23E0175-11	Solid	17-Mar-2023 19:07	08-May-2023 10:00
LAWA-3C2	23E0175-12	Solid	17-Mar-2023 19:55	08-May-2023 10:00
LAWA-3C3	23E0175-13	Solid	17-Mar-2023 20:23	08-May-2023 10:00
LAWA-3D1X	23E0175-14	Solid	17-Mar-2023 22:15	08-May-2023 10:00
LAWA-3D2	23E0175-15	Solid	17-Mar-2023 23:06	08-May-2023 10:00
LAWA-3D3	23E0175-16	Solid	18-Mar-2023 01:00	08-May-2023 10:00



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.20
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

Work Order Case Narrative

Client: <#%'&#=>?(@,=7(AB&:&C#%#D

Project: EF":(*:(<>&!"&;9

Work Order:(-/0123

Sample receipt

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Wet Chemistry (Total Organic Carbon)

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Analytical Resources, LLC
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Tetra Tech

Project Name: T423.2d

COC No(s): NA

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: NA

Assigned ARI Job No: 23E0175

Tracking No: 772d 0885 0186 NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of the cooler? YES NO

Were custody papers included with the cooler? YES NO

Were custody papers properly filled out (ink, signed, etc.) YES NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)

Time 1000

-5.4°C

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: 55009708

Cooler Accepted by: JS Date: 05/05/23 Time: 1000

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES NO

What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: Dry Ice

Was sufficient ice used (if appropriate)? NA YES YES NO

How were bottles sealed in plastic bags? Individually Grouped Not

Did all bottles arrive in good condition (unbroken)? YES YES NO

Were all bottle labels complete and legible? YES YES NO

Did the number of containers listed on COC match with the number of containers received? YES YES NO

Did all bottle labels and tags agree with custody papers? YES YES NO

Were all bottles used correct for the requested analyses? YES YES NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs) ... NA YES NO

Were all VOC vials free of air bubbles? NA YES NO

Was sufficient amount of sample sent in each bottle? YES YES NO

Date VOC Trip Blank was made at ARI: NA

Were the sample(s) split by ARI? NA YES Date/Time: Equipment: Split by:

Samples Logged by: PIB Date: 5/8/23 Time: 11:32 Labels checked by: PIB

**** Notify Project Manager of discrepancies or concerns ****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

client provided electronic COC in case this happened.

By: JS

Date: 05/05/23



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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.20
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

G4/43REF-A
23E0175-01 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: CDE

Sampled: 03/23/2023 12:46
Analyzed: 06/27/2023 04:50

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5211 g (wet)	Extract ID: 23E0175-01 A
	Preparation Batch: BLF0737	Final Volume: 0.5211 g	Dry Weight: 0.26 g
	Prepared: 06/26/2023		% Solids: 50.28

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.31	%	



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Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

G4/43REF-A
23E0175-01 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/23/2023 12:46

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:21

Analysis by: Analytical Resources, LLC

Sample Preparation:

Preparation Method: No Prep Wet Chem

Extract ID: 23E0175-01

Preparation Batch: BLF0753

Sample Size: 5 g (wet)

Dry Weight: 2.51 g

Prepared: 06/26/2023

Final Volume: 5 g

% Solids: 50.28

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	50.28	%	



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Project: Gulf of Thailand
Project Number: T423.20
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

G4/43REF-B
23E0175-02 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: CDE

Sampled: 03/23/2023 13:06
Analyzed: 06/27/2023 14:24

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5077 g (wet)	Extract ID: 23E0175-02 A
	Preparation Batch: BLF0737	Final Volume: 0.5077 g	Dry Weight: 0.25 g
	Prepared: 06/26/2023		% Solids: 49.83

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.34	%	



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Project: Gulf of Thailand
Project Number: T423.20
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

G4/43REF-B
23E0175-02 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/23/2023 13:06

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:21

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0175-02
	Preparation Batch: BLF0753	Final Volume: 5 g	Dry Weight: 2.49 g
	Prepared: 06/26/2023		% Solids: 49.83

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	49.83	%	



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Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

G4/43REF-C
23E0175-03 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: CDE

Sampled: 03/23/2023 13:16
Analyzed: 06/27/2023 14:54

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5657 g (wet)	Extract ID: 23E0175-03 A
	Preparation Batch: BLF0737	Final Volume: 0.5657 g	Dry Weight: 0.27 g
	Prepared: 06/26/2023		% Solids: 48.40

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.36	%	



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Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

G4/43REF-C
23E0175-03 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/23/2023 13:16

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:21

Analysis by: Analytical Resources, LLC

Sample Preparation:

Preparation Method: No Prep Wet Chem

Extract ID: 23E0175-03

Preparation Batch: BLF0753

Sample Size: 5 g (wet)

Dry Weight: 2.42 g

Prepared: 06/26/2023

Final Volume: 5 g

% Solids: 48.40

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	48.40	%	



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Project Number: T423.20
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

LAWA-1C1
23E0175-04 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: CDE

Sampled: 03/19/2023 04:40
Analyzed: 06/27/2023 15:24

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.755 g (wet)	Extract ID: 23E0175-04 A
	Preparation Batch: BLF0737	Final Volume: 0.755 g	Dry Weight: 0.37 g
	Prepared: 06/26/2023		% Solids: 49.20

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.34	%	



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Reported:
11-Jul-2023 10:38

LAWA-1C1
23E0175-04 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/19/2023 04:40

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:21

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0175-04
	Preparation Batch: BLF0753	Final Volume: 5 g	Dry Weight: 2.46 g
	Prepared: 06/26/2023		% Solids: 49.20

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	49.20	%	



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Reported:
11-Jul-2023 10:38

LAWA-1C2
23E0175-05 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: CDE

Sampled: 03/19/2023 05:44
Analyzed: 06/27/2023 15:54

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.664 g (wet)	Extract ID: 23E0175-05 A
	Preparation Batch: BLF0737	Final Volume: 0.664 g	Dry Weight: 0.29 g
	Prepared: 06/26/2023		% Solids: 42.99

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.39	%	



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Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

LAWA-1C2
23E0175-05 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/19/2023 05:44

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:21

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0175-05
	Preparation Batch: BLF0753	Final Volume: 5 g	Dry Weight: 2.15 g
	Prepared: 06/26/2023		% Solids: 42.99

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	42.99	%	



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Project: Gulf of Thailand
Project Number: T423.20
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

LAWA-1C2-FD
23E0175-06 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: CDE

Sampled: 03/19/2023 05:55
Analyzed: 06/27/2023 17:21

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.6106 g (wet)	Extract ID: 23E0175-06 A
	Preparation Batch: BLF0737	Final Volume: 0.6106 g	Dry Weight: 0.27 g
	Prepared: 06/26/2023		% Solids: 44.01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.36	%	



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Project Number: T423.20
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

LAWA-1C2-FD
23E0175-06 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/19/2023 05:55

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:21

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0175-06
	Preparation Batch: BLF0753	Final Volume: 5 g	Dry Weight: 2.20 g
	Prepared: 06/26/2023		% Solids: 44.01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	44.01	%	



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Reported:
11-Jul-2023 10:38

LAWA-1C3X
23E0175-07 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: CDE

Sampled: 03/19/2023 07:33
Analyzed: 06/27/2023 17:51

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5126 g (wet)	Extract ID: 23E0175-07 A
	Preparation Batch: BLF0737	Final Volume: 0.5126 g	Dry Weight: 0.25 g
	Prepared: 06/26/2023		% Solids: 49.11

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.37	%	



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Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

LAWA-1C3X
23E0175-07 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/19/2023 07:33

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:21

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0175-07
	Preparation Batch: BLF0753	Final Volume: 5 g	Dry Weight: 2.46 g
	Prepared: 06/26/2023		% Solids: 49.11

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	49.11	%	



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Reported:
11-Jul-2023 10:38

LAWA-1D1
23E0175-08 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: CDE

Sampled: 03/18/2023 11:03
Analyzed: 06/27/2023 18:22

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5245 g (wet)	Extract ID: 23E0175-08 A
	Preparation Batch: BLF0737	Final Volume: 0.5245 g	Dry Weight: 0.26 g
	Prepared: 06/26/2023		% Solids: 49.84

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.34	%	



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Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

LAWA-1D1
23E0175-08 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/18/2023 11:03

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:21

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0175-08
	Preparation Batch: BLF0753	Final Volume: 5 g	Dry Weight: 2.49 g
	Prepared: 06/26/2023		% Solids: 49.84

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	49.84	%	



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Reported:
11-Jul-2023 10:38

LAWA-1D2
23E0175-09 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: CDE

Sampled: 03/18/2023 22:49
Analyzed: 06/28/2023 12:13

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5633 g (wet)	Extract ID: 23E0175-09 A
	Preparation Batch: BLF0737	Final Volume: 0.5633 g	Dry Weight: 0.25 g
	Prepared: 06/26/2023		% Solids: 44.21

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.40	%	



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Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

LAWA-1D2
23E0175-09 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/18/2023 22:49

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:21

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0175-09
	Preparation Batch: BLF0753	Final Volume: 5 g	Dry Weight: 2.21 g
	Prepared: 06/26/2023		% Solids: 44.21

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	44.21	%	



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Reported:
11-Jul-2023 10:38

LAWA-1D3X
23E0175-10 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: CDE

Sampled: 03/18/2023 22:13
Analyzed: 06/28/2023 12:43

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5134 g (wet)	Extract ID: 23E0175-10 A
	Preparation Batch: BLF0737	Final Volume: 0.5134 g	Dry Weight: 0.23 g
	Prepared: 06/26/2023		% Solids: 44.88

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.43	%	



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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.20
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

LAWA-1D3X
23E0175-10 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/18/2023 22:13

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 09:39

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0175-10
	Preparation Batch: BLF0759	Final Volume: 5 g	Dry Weight: 2.24 g
	Prepared: 06/27/2023		% Solids: 44.88

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	44.88	%	



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Project: Gulf of Thailand
Project Number: T423.20
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

LAWA-3C1
23E0175-11 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: CDE

Sampled: 03/17/2023 19:07
Analyzed: 06/28/2023 13:13

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5435 g (wet)	Extract ID: 23E0175-11 A
	Preparation Batch: BLF0737	Final Volume: 0.5435 g	Dry Weight: 0.24 g
	Prepared: 06/26/2023		% Solids: 44.13

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.41	%	



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Project: Gulf of Thailand
Project Number: T423.20
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

LAWA-3C1
23E0175-11 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/17/2023 19:07

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:21

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0175-11
	Preparation Batch: BLF0753	Final Volume: 5 g	Dry Weight: 2.21 g
	Prepared: 06/26/2023		% Solids: 44.13

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	44.13	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.20
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

LAWA-3C2
23E0175-12 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: CDE

Sampled: 03/17/2023 19:55
Analyzed: 06/28/2023 13:43

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5942 g (wet)	Extract ID: 23E0175-12 A
	Preparation Batch: BLF0737	Final Volume: 0.5942 g	Dry Weight: 0.28 g
	Prepared: 06/26/2023		% Solids: 47.45

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.39	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.20
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

LAWA-3C2
23E0175-12 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/17/2023 19:55

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:21

Analysis by: Analytical Resources, LLC

Sample Preparation:

Preparation Method: No Prep Wet Chem

Extract ID: 23E0175-12

Preparation Batch: BLF0753

Sample Size: 5 g (wet)

Dry Weight: 2.37 g

Prepared: 06/26/2023

Final Volume: 5 g

% Solids: 47.45

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	47.45	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.20
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

LAWA-3C3
23E0175-13 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: CDE

Sampled: 03/17/2023 20:23
Analyzed: 06/28/2023 14:14

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5723 g (wet)	Extract ID: 23E0175-13 A
	Preparation Batch: BLF0737	Final Volume: 0.5723 g	Dry Weight: 0.26 g
	Prepared: 06/26/2023		% Solids: 45.40

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.39	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.20
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

LAWA-3C3
23E0175-13 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/17/2023 20:23

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:21

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0175-13
	Preparation Batch: BLF0753	Final Volume: 5 g	Dry Weight: 2.27 g
	Prepared: 06/26/2023		% Solids: 45.40

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	45.40	%	



Tetra Tech, Inc. (Lafayette)
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Project: Gulf of Thailand
Project Number: T423.20
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

LAWA-3D1X
23E0175-14 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: CDE

Sampled: 03/17/2023 22:15
Analyzed: 06/28/2023 14:44

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.571 g (wet)	Extract ID: 23E0175-14 A
	Preparation Batch: BLF0737	Final Volume: 0.571 g	Dry Weight: 0.26 g
	Prepared: 06/26/2023		% Solids: 45.42

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.39	%	



Tetra Tech, Inc. (Lafayette)
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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.20
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

LAWA-3D1X
23E0175-14 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/17/2023 22:15

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:21

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0175-14
	Preparation Batch: BLF0753	Final Volume: 5 g	Dry Weight: 2.27 g
	Prepared: 06/26/2023		% Solids: 45.42

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	45.42	%	



Tetra Tech, Inc. (Lafayette)
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Project: Gulf of Thailand
Project Number: T423.20
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

LAWA-3D2
23E0175-15 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: CDE

Sampled: 03/17/2023 23:06
Analyzed: 06/28/2023 15:14

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5878 g (wet)	Extract ID: 23E0175-15 A
	Preparation Batch: BLF0737	Final Volume: 0.5878 g	Dry Weight: 0.26 g
	Prepared: 06/26/2023		% Solids: 44.48

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.44	%	



Tetra Tech, Inc. (Lafayette)
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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.20
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

LAWA-3D2
23E0175-15 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/17/2023 23:06

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:21

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0175-15
	Preparation Batch: BLF0753	Final Volume: 5 g	Dry Weight: 2.22 g
	Prepared: 06/26/2023		% Solids: 44.48

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	44.48	%	



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Project: Gulf of Thailand
Project Number: T423.20
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

LAWA-3D3
23E0175-16 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: CDE

Sampled: 03/18/2023 01:00
Analyzed: 06/28/2023 15:44

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5715 g (wet)	Extract ID: 23E0175-16 A
	Preparation Batch: BLF0737	Final Volume: 0.5715 g	Dry Weight: 0.26 g
	Prepared: 06/26/2023		% Solids: 45.30

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.36	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.20
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

LAWA-3D3
23E0175-16 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/18/2023 01:00

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:21

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0175-16
	Preparation Batch: BLF0753	Final Volume: 5 g	Dry Weight: 2.26 g
	Prepared: 06/26/2023		% Solids: 45.30

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	45.30	%	



Tetra Tech, Inc. (Lafayette)
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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.20
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

Analysis by: Analytical Resources, LLC

Wet Chemistry - Quality Control

Batch BLF0737 - Plumb 1981, Combustion IR

Instrument: TOC Cube Analyst: CDE

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BLF0737-BLK1)					Prepared: 26-Jun-2023 Analyzed: 26-Jun-2023 22:48						
Total Organic Carbon	ND	0.02	0.02	%							U
LCS (BLF0737-BS1)					Prepared: 26-Jun-2023 Analyzed: 27-Jun-2023 02:19						
Total Organic Carbon	43.4	0.02	0.02	%	44.4		97.7	80-120			
Total Carbon	44.1	0.02	0.02	%	44.4		99.3	80-120			
Duplicate (BLF0737-DUP1)					Source: 23E0175-01 Prepared: 26-Jun-2023 Analyzed: 27-Jun-2023 05:20						
Total Organic Carbon	0.32	0.02	0.02	%		0.31			3.82	20	
Total Carbon	3.01	0.02	0.02	%		2.89			4.32	20	
Total Inorganic Carbon	2.70	0.02	0.02	%		2.58			4.37	20	
Matrix Spike (BLF0737-MS1)					Source: 23E0175-01 Prepared: 26-Jun-2023 Analyzed: 27-Jun-2023 05:50						
Total Organic Carbon	1.44	0.02	0.02	%	1.24	0.31	91.7	75-125			
Total Carbon	3.91	0.02	0.02	%	1.24	2.89	82.2	75-125			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.



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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.20
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

Analysis by: Analytical Resources, LLC

Wet Chemistry - Quality Control

Batch BLF0753 - SM 2540 G-97

Instrument: BAL2 Analyst: UW

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Blank (BLF0753-BLK1)					Prepared: 26-Jun-2023 Analyzed: 26-Jun-2023 16:21					
Total Solids	ND	0.04	0.04	%						U
Duplicate (BLF0753-DUP1)					Source: 23E0175-01 Prepared: 26-Jun-2023 Analyzed: 26-Jun-2023 16:21					
Total Solids	46.54	0.04	0.04	%		50.28		7.71	20	
Duplicate (BLF0753-DUP2)					Source: 23E0175-01 Prepared: 26-Jun-2023 Analyzed: 26-Jun-2023 16:21					
Total Solids	48.71	0.04	0.04	%		50.28		3.17	20	



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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.20
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

Analysis by: Analytical Resources, LLC

Wet Chemistry - Quality Control

Batch BLF0759 - SM 2540 G-97

Instrument: BAL2 Analyst: UW

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD Limit	Notes
Blank (BLF0759-BLK1)					Prepared: 27-Jun-2023 Analyzed: 27-Jun-2023 09:39				
Total Solids	ND	0.04	0.04	%					U



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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.20
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

Certified Analyses included in this Report

Analyte	Certifications
Plumb 1981, Combustion IR in Solid	
<*&"(6'l&;!= (5&'S*;	Ä*ÄM/BPÄ
5*9#	Ä#H='!8%!*;
PÄ/5	P"&H+&(Ä#8%(*:/;K!*;G#;%&"(5*;H#K&%!*;
Ä*ÄM/BPÄ	Ä*ÄM/;K!*;G#;%&"(B&S*%*CP==#9!%&%!*;(Ä*I'&G?(Ä)B#H%I;
Z/BPÄ	6Q/BPÄ (M(6'#I*;(B&S*%*CP==#9!%&%!*;(Ä*I'&G
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	533L
	0[V.0V-0-



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.20
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:38

Notes and Definitions

U	This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
[2C]	Indicates this result was quantified on the second column on a dual column analysis.

Report of Samples Analysis

Issued Date : 2 May 2023
Customer : Tetra Tech Inc.
 77 Soi Udomsuk 39/1, Sukhumvit 103 Road, Bangchak,
 Phrakhanong, Bangkok 10260
 Tel : 0 2361 3767 Fax : 0 2361 3768
Tested by : Physical Analysis Section,
 Technical Support for Material Analysis Division, MTEC
Date received : 18 April 2023
Date analyzed : 24 April 2023
Samples : Seabed Sediment No.1 – 15 of 51 samples.
Identification No. : See sample detail
Instrument : Mastersizer 2000, Malvern Instruments.
Test method : Laser diffraction technique.
Analytical conditions : Red light source : He-Ne laser source, λ : 633 nm.
 Blue light source : Solid state light source
 Beam length : 2.35 mm.
 Particle size range analysis : 0.02 – 2,000 μm .
 Dispersion unit : Hydro 2000S (A)
 Dispersing medium : De-ionized water
 Treatment : Ultrasound 10 minutes with ultrasonic bath.
 : Stir at 2000 rpm during measuring.
 Sample refractive index : 1.5300 (as default standard wet)
 Number of experiments : 3
 Laser power : 86.6

Sample preparation : 1. Prepare the instrument for wet analysis. Stirrer should be set at 2000 rpm on Hydro 2000S (A).
 2. 10 – 50 ml. of sample was dispersed and ultrasound 10 minutes with ultrasonic bath.
 3. Add the dispersed sample into Hydro 2000S (A) unit and measure the dispersed sample with Mastersizer 2000.
 4. All measurements are made three times.

Samples detail :

Sample No.	Sample Name	Sample No.	Sample Name
1	G4/43REF-A	9	LAWA-1D3X
2	G4/43REF-B	10	LAWA-3C1
3	G4/43REF-C	11	LAWA-3C2
4	LAWA-1C1	12	LAWA-3C3
5	LAWA-1C2	13	LAWA-3D1X
6	LAWA-1C3X	14	LAWA-3D2
7	LAWA-1D1	15	LAWA-3D3
8	LAWA-1D2		

Technical Terms

:

Obscuration : value at particle come cover to laser beam (percent), ranging from 10 – 30%.

Residual : on error value of analysis. This value should be less than 5%.

D [4, 3] : mean diameter value by volume.

D [3, 2] : mean diameter value by surface area.

D (v, 0.1) : 10 volume percent less than or equal to a given diameter.

D (v, 0.5) : 50 volume percent less than or equal to a given diameter, median diameter.

D (v, 0.9) : 90 volume percent less than or equal to a given diameter.

Span : the width of the distribution, which is independent of median size (D (v, 0.5)).

Uniformity : a measure of the absolute deviations from the median(D (v, 0.5)).

Specific S.A. : specific surface area, calculated from density and D [3, 2] of a sample.

Results :

MTEC received samples from Tetra Tech Inc. Laser diffraction technique is used in order to analyze the particle size and size distribution by wet analysis.

The results of the particle size and size distribution of samples are shown in tables 1 – 30 and the attachments No.1 – 45.

Table 1 Mastersizer 2000 results of G4/43REF-A

No.of measurement	Sub-run	D [4,3] (μm)	D (v,0.1) (μm)	D (v,0.5) (μm)	D (v,0.9) (μm)	Span
1	1	57.33	1.87	29.81	142.56	4.72
	2	60.39	1.88	29.85	145.51	4.81
	3	59.81	1.88	29.69	148.38	4.94
2	1	56.38	1.84	28.07	139.32	4.90
	2	58.06	1.85	28.58	144.84	5.00
	3	57.08	1.83	27.83	142.93	5.07
3	1	59.84	1.83	28.08	139.87	4.92
	2	58.08	1.84	27.97	146.42	5.17
	3	57.55	1.82	27.55	138.87	4.98
Mean		58.28	1.85	28.60	143.19	4.94
STD		1.41	0.02	0.93	3.37	0.13
RSD%		2.41	1.17	3.24	2.35	2.70

Table 2 Mastersizer 2000 results of G4/43REF-A (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	19.16	48.74	32.11	76.82
	2	19.09	48.60	32.31	76.65
	3	19.13	48.42	32.45	77.00
2	1	19.54	49.10	31.35	78.20
	2	19.40	48.96	31.64	76.32
	3	19.59	49.28	31.14	75.37
3	1	19.58	49.25	31.18	75.77
	2	19.57	49.01	31.42	75.95
	3	19.71	49.24	31.05	77.46
Mean		19.42	48.95	31.63	76.62
STD		0.23	0.31	0.53	0.88

Table 3 Mastersizer 2000 results of G4/43REF-B

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	47.37	1.67	23.42	120.09	5.06
	2	47.17	1.67	23.29	120.05	5.08
	3	48.56	1.68	23.55	123.51	5.17
2	1	48.82	1.66	22.99	121.22	5.20
	2	48.09	1.68	23.30	121.60	5.15
	3	47.00	1.97	24.64	115.71	4.62
3	1	48.41	1.99	25.40	119.28	4.62
	2	48.27	1.98	25.13	117.69	4.61
	3	48.21	1.95	24.36	117.44	4.74
Mean		47.99	1.80	24.01	119.62	4.92
STD		0.65	0.16	0.89	2.39	0.26
RSD%		1.35	8.76	3.70	2.00	5.35

Table 4 Mastersizer 2000 results of G4/43REF-B (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	21.07	52.61	26.32	66.31
	2	21.07	52.66	26.27	67.15
	3	20.94	52.30	26.76	67.76
2	1	21.09	52.79	26.12	65.45
	2	20.93	52.70	26.38	65.90
	3	19.15	54.72	26.13	65.66
3	1	18.90	54.15	26.95	66.80
	2	19.01	54.38	26.61	65.94
	3	19.30	54.70	26.00	63.53
Mean		20.16	53.44	26.39	66.06
STD		1.02	1.01	0.32	1.21

Table 5 Mastersizer 2000 results of G4/43REF-C

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	45.60	1.62	23.33	113.71	4.81
	2	47.65	1.64	23.96	116.04	4.78
	3	47.72	1.62	23.56	115.70	4.84
2	1	45.26	1.60	22.82	110.85	4.79
	2	47.32	1.61	23.02	111.87	4.79
	3	45.63	1.63	23.49	112.72	4.73
3	1	48.09	1.61	23.08	113.72	4.86
	2	46.55	1.62	23.43	113.37	4.77
	3	48.18	1.61	23.18	114.40	4.87
Mean		46.89	1.62	23.32	113.60	4.80
STD		1.15	0.01	0.34	1.68	0.05
RSD%		2.46	0.74	1.46	1.47	0.94

Table 6 Mastersizer 2000 results of G4/43REF-C (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 - 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	21.40	53.17	25.43	63.69
	2	21.16	53.05	25.79	62.44
	3	21.33	53.04	25.63	62.79
2	1	21.60	53.82	24.59	60.66
	2	21.53	53.53	24.94	62.06
	3	21.31	53.25	25.44	64.19
3	1	21.51	53.46	25.03	61.17
	2	21.36	53.17	25.47	63.70
	3	21.49	53.36	25.15	61.12
Mean		21.41	53.32	25.27	62.42
STD		0.14	0.25	0.38	1.27

Table 7 Mastersizer 2000 results of LAWA-1C1

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	33.45	1.56	19.99	77.31	3.79
	2	33.51	1.55	19.84	76.89	3.80
	3	33.69	1.55	19.87	76.26	3.76
2	1	33.11	1.57	20.16	77.33	3.76
	2	33.51	1.58	20.22	77.47	3.75
	3	33.14	1.56	19.85	75.41	3.72
3	1	33.72	1.59	20.34	78.38	3.78
	2	33.10	1.57	20.03	76.39	3.74
	3	33.61	1.58	19.95	76.21	3.74
Mean		33.43	1.57	20.03	76.85	3.76
STD		0.25	0.01	0.18	0.88	0.03
RSD%		0.74	0.84	0.88	1.15	0.67

Table 8 Mastersizer 2000 results of LAWA-1C1 (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 - 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	21.52	63.66	14.82	34.72
	2	21.55	63.86	14.59	34.42
	3	21.49	63.96	14.55	34.38
2	1	21.31	63.78	14.90	34.88
	2	21.16	63.95	14.89	34.55
	3	21.38	64.33	14.30	34.42
3	1	21.03	63.82	15.15	34.62
	2	21.20	64.23	14.57	34.07
	3	21.20	64.28	14.52	34.30
Mean		21.32	63.98	14.70	34.48
STD		0.18	0.24	0.26	0.24

Table 9 Mastersizer 2000 results of LAWA-1C2

No.of measurement	Sub-run	D [4,3] (μm)	D (v,0.1) (μm)	D (v,0.5) (μm)	D (v,0.9) (μm)	Span
1	1	28.84	1.56	17.35	68.40	3.85
	2	28.66	1.56	17.18	66.22	3.76
	3	28.56	1.55	17.02	66.77	3.83
2	1	28.73	1.55	16.87	66.10	3.83
	2	28.36	1.55	16.71	66.66	3.90
	3	28.83	1.55	16.83	66.80	3.88
3	1	28.42	1.54	16.63	65.93	3.87
	2	28.71	1.55	16.73	66.63	3.89
	3	28.48	1.54	16.42	67.96	4.05
Mean		28.62	1.55	16.86	66.83	3.87
STD		0.18	0.01	0.29	0.83	0.08
RSD%		0.62	0.43	1.70	1.24	1.97

Table 10 Mastersizer 2000 results of LAWA-1C2 (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 - 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	22.67	65.51	11.83	29.88
	2	22.70	66.12	11.18	30.10
	3	22.80	65.85	11.35	29.69
2	1	22.80	66.07	11.12	29.31
	2	22.88	65.85	11.26	28.78
	3	22.79	65.91	11.30	29.21
3	1	22.94	66.01	11.05	29.51
	2	22.87	65.86	11.27	29.23
	3	23.10	65.28	11.62	28.73
Mean		22.84	65.83	11.33	29.38
STD		0.13	0.27	0.24	0.46

Table 11 Mastersizer 2000 results of LAWA-1C3X

No.of measurement	Sub-run	D [4,3] (μm)	D (v,0.1) (μm)	D (v,0.5) (μm)	D (v,0.9) (μm)	Span
1	1	33.03	1.64	17.53	76.86	4.29
	2	31.94	1.65	17.49	77.04	4.31
	3	31.94	1.66	17.76	77.49	4.27
2	1	31.48	1.67	17.68	75.64	4.19
	2	33.93	1.68	17.99	80.96	4.41
	3	33.54	1.68	18.01	79.84	4.34
3	1	33.30	1.67	17.85	79.07	4.34
	2	31.78	1.67	17.76	77.83	4.29
	3	32.47	1.69	17.97	79.02	4.30
Mean		32.60	1.67	17.78	78.19	4.30
STD		0.88	0.02	0.19	1.66	0.06
RSD%		2.68	0.96	1.07	2.13	1.40

Table 12 Mastersizer 2000 results of LAWA-1C3X (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	22.03	64.17	13.79	29.12
	2	21.92	64.23	13.86	28.84
	3	21.76	64.16	14.08	28.91
2	1	21.69	64.71	13.60	29.01
	2	21.48	63.87	14.66	28.82
	3	21.47	64.06	14.47	29.03
3	1	21.56	64.04	14.39	28.83
	2	21.61	64.22	14.17	28.91
	3	21.44	64.11	14.46	28.58
Mean		21.66	64.17	14.16	28.89
STD		0.21	0.23	0.36	0.16

Table 13 Mastersizer 2000 results of LAWA-1D1

No.of measurement	Sub-run	D [4,3] (μm)	D (v,0.1) (μm)	D (v,0.5) (μm)	D (v,0.9) (μm)	Span
1	1	66.52	1.99	28.36	179.48	6.26
	2	64.20	1.98	27.83	168.87	6.00
	3	67.49	2.00	28.62	178.13	6.16
2	1	63.89	1.99	28.04	169.51	5.97
	2	67.61	2.00	28.41	177.82	6.19
	3	67.44	2.33	28.90	170.83	5.83
3	1	64.84	2.34	29.00	166.93	5.68
	2	65.56	2.32	28.58	164.17	5.66
	3	67.11	2.33	29.13	170.15	5.76
Mean		66.07	2.14	28.54	171.77	5.94
STD		1.48	0.18	0.43	5.42	0.22
RSD%		2.25	8.36	1.52	3.15	3.78

Table 14 Mastersizer 2000 results of LAWA-1D1 (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	18.24	48.46	33.30	100.15
	2	18.33	48.98	32.69	97.93
	3	18.12	48.32	33.56	97.94
2	1	18.21	48.94	32.85	96.97
	2	18.08	48.62	33.30	96.20
	3	16.48	50.48	33.04	95.89
3	1	16.44	50.57	32.99	96.32
	2	16.56	50.52	32.91	97.61
	3	16.46	50.16	33.38	94.98
Mean		17.43	49.45	33.12	97.11
STD		0.90	0.96	0.29	1.51

Table 15 Mastersizer 2000 results of LAWA-1D2

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	38.12	1.74	16.31	96.33	5.80
	2	38.16	1.74	16.23	94.65	5.72
	3	38.17	1.73	16.09	93.41	5.70
2	1	39.55	1.77	16.59	98.29	5.82
	2	41.35	1.78	16.68	104.84	6.18
	3	39.34	1.75	15.90	96.57	5.96
3	1	39.18	1.74	15.85	96.44	5.98
	2	38.93	1.73	15.69	91.22	5.71
	3	41.28	1.74	15.75	103.80	6.48
Mean		39.34	1.75	16.12	97.28	5.93
STD		1.24	0.02	0.36	4.49	0.26
RSD%		3.15	0.95	2.23	4.62	4.41

Table 16 Mastersizer 2000 results of LAWA-1D2 (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	22.12	61.08	16.80	27.46
	2	22.10	61.16	16.74	26.68
	3	22.18	61.48	16.34	26.85
2	1	21.71	61.02	17.27	27.12
	2	21.61	60.53	17.86	26.78
	3	22.02	61.54	16.44	26.42
3	1	22.08	61.42	16.50	26.41
	2	22.18	61.95	15.87	26.77
	3	22.14	60.57	17.30	25.72
Mean		22.01	61.19	16.79	26.69
STD		0.21	0.46	0.60	0.49

Table 17 Mastersizer 2000 results of LAWA-1D3X

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	23.58	1.43	13.32	53.89	3.94
	2	23.71	1.43	13.28	53.87	3.95
	3	23.78	1.44	13.39	54.42	3.96
2	1	23.92	1.43	13.23	53.32	3.92
	2	23.87	1.44	13.34	54.36	3.97
	3	23.36	1.43	12.98	52.76	3.96
3	1	23.68	1.41	12.81	52.51	3.99
	2	23.07	1.42	12.82	52.22	3.96
	3	24.00	1.42	12.89	53.67	4.05
Mean		23.66	1.43	13.12	53.45	3.97
STD		0.29	0.01	0.24	0.80	0.04
RSD%		1.24	0.62	1.81	1.49	0.94

Table 18 Mastersizer 2000 results of LAWA-1D3X (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 - 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	25.55	66.95	7.50	25.68
	2	25.46	67.06	7.48	25.69
	3	25.33	67.00	7.67	25.62
2	1	25.46	67.22	7.32	25.55
	2	25.30	67.00	7.70	25.40
	3	25.56	67.23	7.21	25.20
3	1	25.77	67.10	7.13	24.97
	2	25.70	67.24	7.06	24.98
	3	25.65	66.75	7.60	24.74
Mean		25.53	67.06	7.41	25.32
STD		0.16	0.16	0.24	0.35

Table 19 Mastersizer 2000 results of LAWA-3C1

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	28.30	1.68	15.59	67.76	4.24
	2	27.86	1.67	15.47	66.63	4.20
	3	28.39	1.67	15.22	65.83	4.22
2	1	27.86	1.67	15.12	65.59	4.23
	2	27.99	1.68	15.21	66.62	4.27
	3	28.14	1.66	15.05	66.12	4.28
3	1	28.07	1.66	15.00	66.24	4.31
	2	28.63	1.66	14.88	66.79	4.38
	3	27.89	1.64	14.54	65.51	4.39
Mean		28.13	1.66	15.12	66.34	4.28
STD		0.27	0.01	0.31	0.70	0.07
RSD%		0.95	0.72	2.05	1.06	1.60

Table 20 Mastersizer 2000 results of LAWA-3C1 (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	22.46	65.98	11.56	29.15
	2	22.50	66.30	11.20	28.81
	3	22.59	66.45	10.97	28.71
2	1	22.64	66.44	10.92	28.68
	2	22.53	66.25	11.22	28.81
	3	22.73	66.23	11.04	28.39
3	1	22.69	66.22	11.09	28.48
	2	22.77	66.02	11.21	28.22
	3	23.03	66.12	10.86	27.61
Mean		22.66	66.22	11.12	28.54
STD		0.17	0.16	0.21	0.44

Table 21 Mastersizer 2000 results of LAWA-3C2

No.of measurement	Sub-run	D [4,3] (μm)	D (v,0.1) (μm)	D (v,0.5) (μm)	D (v,0.9) (μm)	Span
1	1	35.36	1.41	15.99	77.58	4.77
	2	32.11	1.38	15.04	74.50	4.86
	3	34.40	1.37	14.79	74.76	4.96
2	1	36.42	1.37	14.82	75.11	4.98
	2	33.67	1.36	14.73	74.28	4.95
	3	33.32	1.35	14.33	74.17	5.08
3	1	33.29	1.33	13.97	71.07	4.99
	2	34.70	1.34	14.00	71.04	4.98
	3	31.19	1.31	13.58	68.65	4.96
Mean		33.83	1.36	14.58	73.46	4.95
STD		1.61	0.03	0.71	2.70	0.09
RSD%		4.75	2.12	4.90	3.68	1.79

Table 22 Mastersizer 2000 results of LAWA-3C2 (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	24.07	62.58	13.35	26.51
	2	24.58	62.71	12.71	25.43
	3	24.79	62.56	12.65	25.32
2	1	24.74	62.58	12.68	25.35
	2	24.85	62.62	12.53	25.42
	3	25.20	62.39	12.41	25.05
3	1	25.50	62.63	11.87	25.04
	2	25.45	62.69	11.86	24.96
	3	25.88	62.72	11.41	24.34
Mean		25.01	62.61	12.39	25.27
STD		0.55	0.10	0.58	0.58

Table 23 Mastersizer 2000 results of LAWA-3C3

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	35.99	1.53	16.72	81.36	4.78
	2	35.13	1.54	16.79	80.60	4.71
	3	34.90	1.53	16.46	79.61	4.74
2	1	37.77	1.55	16.76	87.51	5.13
	2	36.46	1.52	16.45	82.84	4.95
	3	34.32	1.51	16.21	80.79	4.89
3	1	36.72	1.52	16.32	84.75	5.10
	2	36.38	1.52	16.29	84.26	5.08
	3	34.43	1.51	16.12	82.47	5.02
Mean		35.79	1.52	16.46	82.69	4.93
STD		1.16	0.01	0.25	2.48	0.16
RSD%		3.25	0.79	1.51	3.00	3.27

Table 24 Mastersizer 2000 results of LAWA-3C3 (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	23.11	62.51	14.38	27.06
	2	22.99	62.71	14.30	27.20
	3	23.15	62.89	13.96	26.97
2	1	22.90	61.97	15.14	26.45
	2	23.17	62.35	14.48	26.61
	3	23.36	62.60	14.04	26.38
3	1	23.23	62.07	14.70	26.31
	2	23.23	62.26	14.51	26.42
	3	23.37	62.36	14.27	26.28
Mean		23.17	62.41	14.42	26.63
STD		0.16	0.30	0.35	0.35

Table 25 Mastersizer 2000 results of LAWA-3D1X

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	25.38	1.39	13.14	56.83	4.22
	2	26.05	1.40	13.23	57.58	4.25
	3	24.78	1.38	12.99	54.97	4.13
2	1	26.22	1.40	13.11	56.76	4.22
	2	26.62	1.38	12.81	56.98	4.34
	3	25.11	1.38	12.79	56.63	4.32
3	1	25.10	1.38	12.65	55.48	4.28
	2	26.50	1.38	12.78	57.46	4.39
	3	26.26	1.38	12.78	58.07	4.43
Mean		25.78	1.39	12.92	56.75	4.29
STD		0.69	0.01	0.20	0.99	0.10
RSD%		2.68	0.55	1.56	1.74	2.22

Table 26 Mastersizer 2000 results of LAWA-3D1X (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	25.93	65.60	8.47	25.32
	2	25.80	65.48	8.72	25.34
	3	26.03	66.03	7.94	25.35
2	1	25.75	65.79	8.46	25.26
	2	26.00	65.41	8.59	24.55
	3	26.03	65.49	8.49	24.38
3	1	26.16	65.70	8.14	24.54
	2	25.99	65.29	8.72	24.67
	3	26.01	65.11	8.89	24.51
Mean		25.96	65.55	8.49	24.88
STD		0.12	0.28	0.30	0.42

Table 27 Mastersizer 2000 results of LAWA-3D2

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	33.98	1.60	16.71	78.32	4.59
	2	33.91	1.60	16.79	78.55	4.58
	3	36.38	1.61	17.00	80.58	4.65
2	1	36.91	1.62	16.90	83.43	4.84
	2	35.32	1.61	16.71	81.70	4.79
	3	35.59	1.60	16.54	80.58	4.78
3	1	35.65	1.61	16.50	85.08	5.06
	2	34.17	1.59	16.34	78.22	4.69
	3	35.35	1.59	16.22	79.91	4.83
Mean		35.25	1.60	16.63	80.71	4.76
STD		1.06	0.01	0.26	2.37	0.15
RSD%		2.99	0.61	1.54	2.93	3.14

Table 28 Mastersizer 2000 results of LAWA-3D2 (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	23.00	63.24	13.76	28.02
	2	22.86	63.34	13.80	27.78
	3	22.67	63.11	14.22	28.04
2	1	22.56	62.89	14.55	27.70
	2	22.68	62.98	14.34	27.47
	3	22.80	63.17	14.03	27.13
3	1	22.77	62.65	14.58	26.77
	2	22.94	63.44	13.63	27.26
	3	22.98	63.13	13.90	26.98
Mean		22.81	63.10	14.09	27.46
STD		0.15	0.24	0.35	0.45

Table 29 Mastersizer 2000 results of LAWA-3D3

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	27.86	1.62	17.20	65.78	3.73
	2	27.88	1.62	16.98	65.47	3.76
	3	27.92	1.61	16.72	65.07	3.80
2	1	27.17	1.61	16.60	64.41	3.78
	2	27.57	1.61	16.58	64.62	3.80
	3	27.98	1.62	16.67	65.68	3.84
3	1	27.28	1.60	16.43	64.98	3.86
	2	27.71	1.60	16.32	65.56	3.92
	3	27.47	1.60	16.26	65.01	3.90
Mean		27.65	1.61	16.64	65.18	3.82
STD		0.29	0.01	0.30	0.48	0.06
RSD%		1.06	0.54	1.81	0.73	1.65

Table 30 Mastersizer 2000 results of LAWA-3D3 (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	22.51	66.40	11.09	31.15
	2	22.54	66.48	10.98	30.68
	3	22.66	66.51	10.83	30.51
2	1	22.73	66.64	10.63	30.41
	2	22.71	66.59	10.70	30.63
	3	22.65	66.32	11.03	30.46
3	1	22.86	66.33	10.81	30.32
	2	22.93	66.10	10.97	29.95
	3	23.00	66.20	10.80	30.05
Mean		22.73	66.40	10.87	30.46
STD		0.17	0.18	0.16	0.36

- Note :** 1. The specific surface area is inapplicable unless the density of a sample is known.
2. The results of particle size distribution are dispersion particle only.
3. Some particle of sample are vary size and size over range of instrument.

Interpretation/Opinion : None

Attached pages :

The attachment number	Detail
1 – 3	Mastersizer 2000 results of G4/43REF-A
4 – 6	Mastersizer 2000 results of G4/43REF-B
7 – 9	Mastersizer 2000 results of G4/43REF-C
10 – 12	Mastersizer 2000 results of LAWA-1C1
13 – 15	Mastersizer 2000 results of LAWA-1C2
16 – 18	Mastersizer 2000 results of LAWA-1C3X
19 – 21	Mastersizer 2000 results of LAWA-1D1
22 – 24	Mastersizer 2000 results of LAWA-1D2
25 – 27	Mastersizer 2000 results of LAWA-1D3X
28 – 30	Mastersizer 2000 results of LAWA-3C1
31 – 33	Mastersizer 2000 results of LAWA-3C2
34 – 36	Mastersizer 2000 results of LAWA-3C3
37 – 39	Mastersizer 2000 results of LAWA-3D1X
40 – 42	Mastersizer 2000 results of LAWA-3D2
43 – 45	Mastersizer 2000 results of LAWA-3D3

Work performed by :



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Remark

1. MTEC does not allow any alteration or modification of this report, or any part of this report, without prior formal written permission from MTEC.
2. MTEC will not accept liability for any damage whatsoever, resulting directly or indirectly, from using data, results, conclusions or recommendations in this report for the purpose of designing, manufacturing or for other purposes.
3. Experimental results are only valid for the specimens tested.

Result : Analysis Report

Attached page 1

Sample Details

Sample ID : G4/43REF-A_1

Measured : Monday, April 24, 2023 14:01:02

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 65\MTEC0850 65 513mm Tetatech 1.mea

Analysed : Monday, April 24, 2023 14:01:04

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

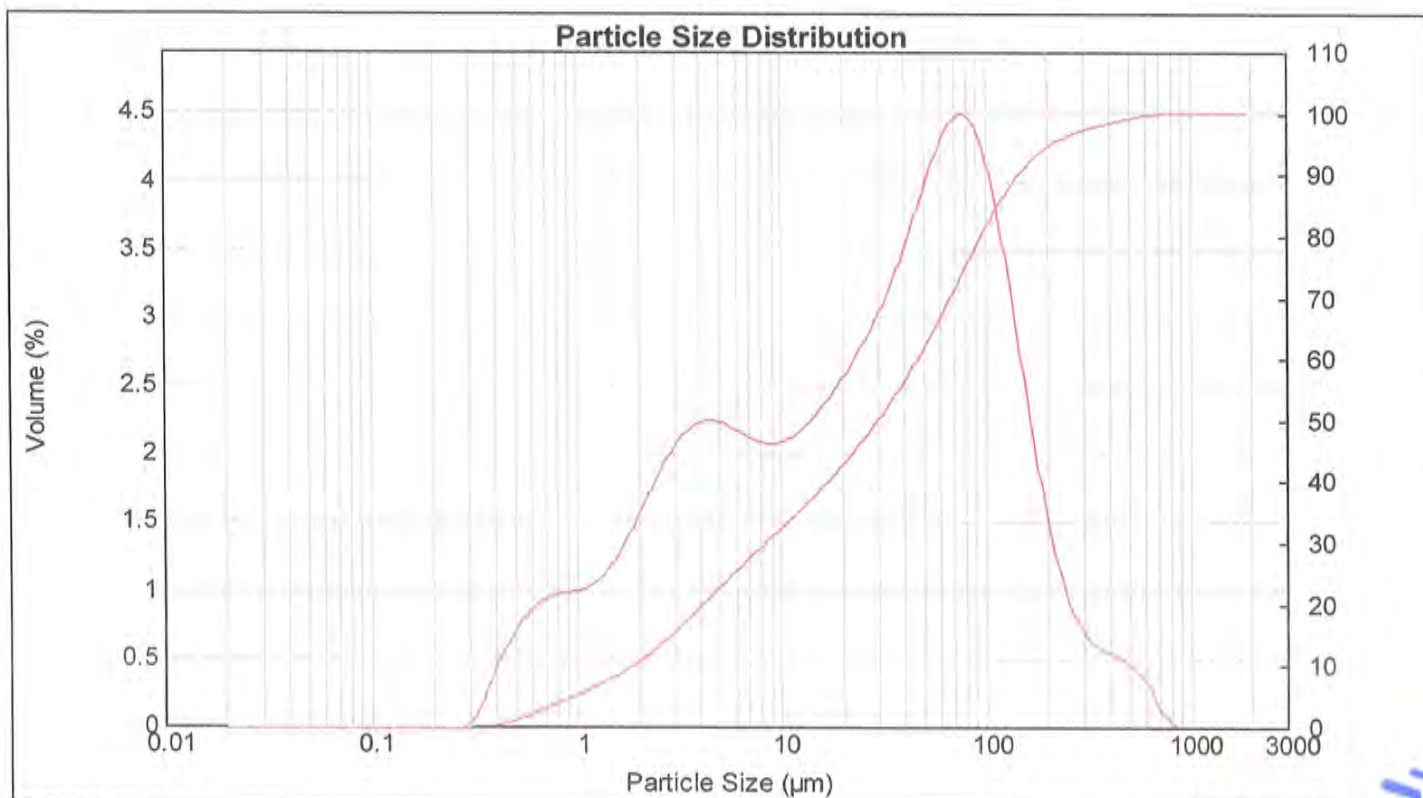
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.31 Residual (%) : 0.325
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0189 %Vol Specific Surface Area : 1.16 m²/g
Mean Diameters : D (0.1) : 1.88 um D (0.5) : 29.85 um D (0.9) : 145.51 um
D [4,3] 60.39 um D [3,2] : 5.18 um Span : 4.811 Uniformity : 1.72

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.04	7.962	2.09	58.573	4.37	430.887	0.50
0.023	0.00	0.172	0.00	1.262	1.12	9.283	2.10	68.291	4.50	502.377	0.42
0.027	0.00	0.200	0.00	1.471	1.25	10.823	2.15	79.621	4.45	585.729	0.29
0.032	0.00	0.233	0.00	1.715	1.44	12.619	2.24	92.832	4.18	682.910	0.11
0.037	0.00	0.272	0.01	2.000	1.65	14.713	2.35	108.234	3.72	796.214	0.00
0.043	0.00	0.317	0.14	2.332	1.85	17.154	2.49	126.191	3.11	928.318	0.00
0.050	0.00	0.370	0.41	2.719	2.03	20.000	2.64	147.128	2.45	1082.339	0.00
0.059	0.00	0.431	0.60	3.170	2.17	23.318	2.81	171.539	1.84	1261.915	0.00
0.068	0.00	0.502	0.77	3.696	2.24	27.187	3.00	200.000	1.33	1471.285	0.00
0.080	0.00	0.586	0.89	4.309	2.26	31.698	3.23	233.183	0.96	1715.392	0.00
0.093	0.00	0.683	0.95	5.024	2.23	36.957	3.51	271.871	0.73	2000.000	0.00
0.108	0.00	0.796	0.99	5.857	2.17	43.089	3.81	316.979	0.61		
0.126	0.00	0.928	1.01	6.829	2.12	50.238	4.12	369.570	0.55		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 2

Sample Details

Sample ID : G4/43REF-A_2

Measured : Monday, April 24, 2023 14:02:53

Sample File : D:\Data Mastersizer2000\Technical
april23_66\MTEC0859_66_51sam_Tetrachol 1.mea

Analysed : Monday, April 24, 2023 14:02:55

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

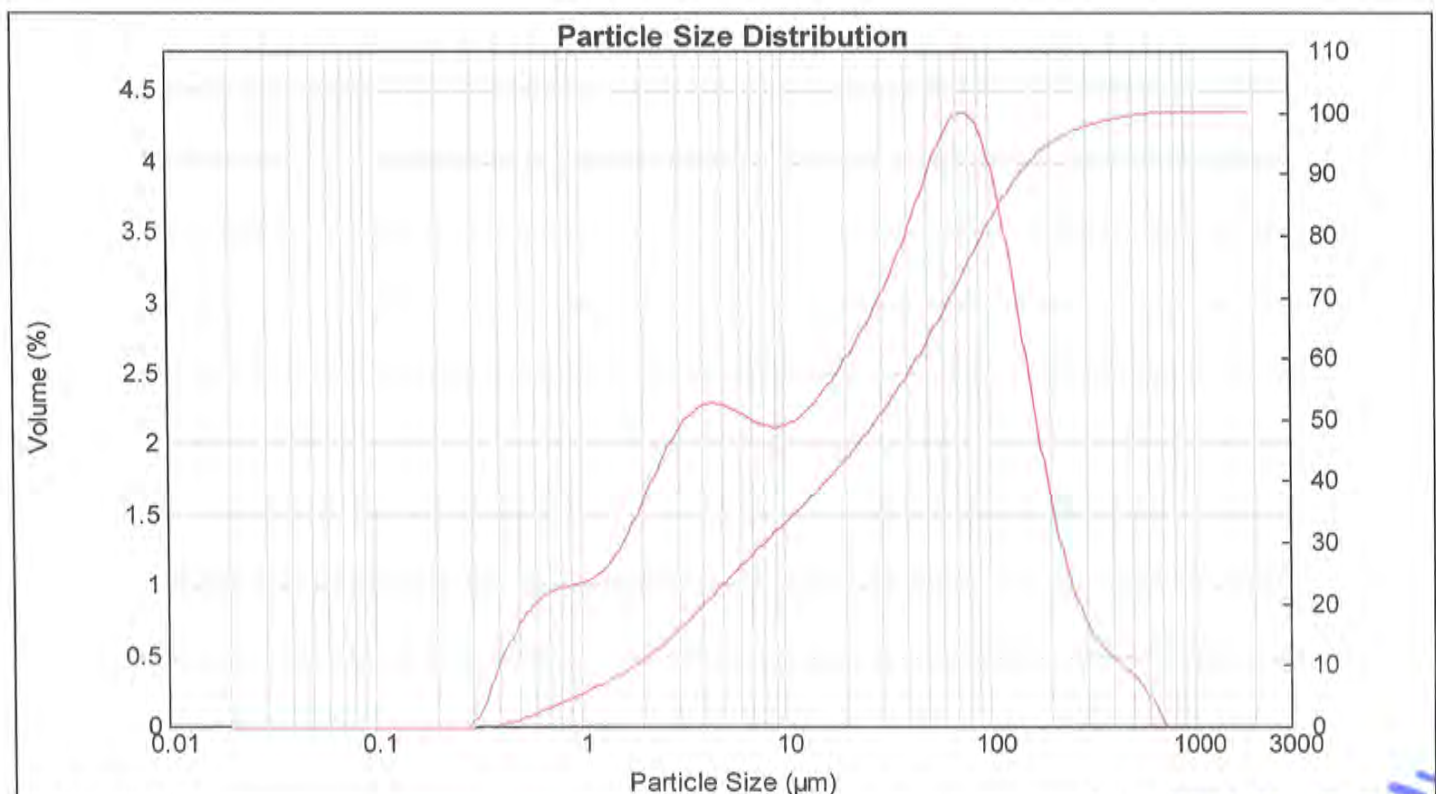
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.93 Residual (%) : 0.333
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0183 %Vol Specific Surface Area : 1.17 m²/g
Mean Diameters : D (0.1) : 1.85 um D (0.5) : 28.58 um D (0.9) : 144.84 um
D [4,3] : 58.06 um D [3,2] : 5.11 um Span : 5.003 Uniformity : 1.73

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.06	7.962	2.13	58.573	4.24	430.887	0.41
0.023	0.00	0.172	0.00	1.262	1.14	9.283	2.14	68.291	4.35	502.377	0.32
0.027	0.00	0.200	0.00	1.471	1.27	10.823	2.19	79.621	4.30	585.729	0.19
0.032	0.00	0.233	0.00	1.715	1.46	12.619	2.39	92.832	4.06	682.910	0.01
0.037	0.00	0.272	0.01	2.000	1.68	14.713	2.53	108.234	3.64	795.214	0.00
0.043	0.00	0.317	0.14	2.332	1.89	17.154	2.68	126.191	3.09	928.318	0.00
0.050	0.00	0.370	0.41	2.719	2.07	20.000	2.85	147.128	2.49	1082.339	0.00
0.059	0.00	0.431	0.61	3.170	2.20	23.318	3.03	171.539	1.92	1261.915	0.00
0.068	0.00	0.502	0.78	3.696	2.28	27.187	3.25	200.000	1.43	1471.285	0.00
0.080	0.00	0.586	0.90	4.309	2.27	31.698	3.49	233.183	1.05	1715.392	0.00
0.093	0.00	0.683	0.97	5.024	2.22	36.957	4.03	271.871	0.78	2000.000	0.00
0.108	0.00	0.796	1.00	5.857	2.17	43.089		316.979	0.61		
0.126	0.00	0.928	1.02	6.829		50.238		369.570	0.50		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 3

Sample Details

Sample ID : G4/43REF-A_3

Measured : Monday, April 24, 2023 14:03:40

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTEC0850_66_51um_Tetatech 1.mea

Analysed : Monday, April 24, 2023 14:03:42

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

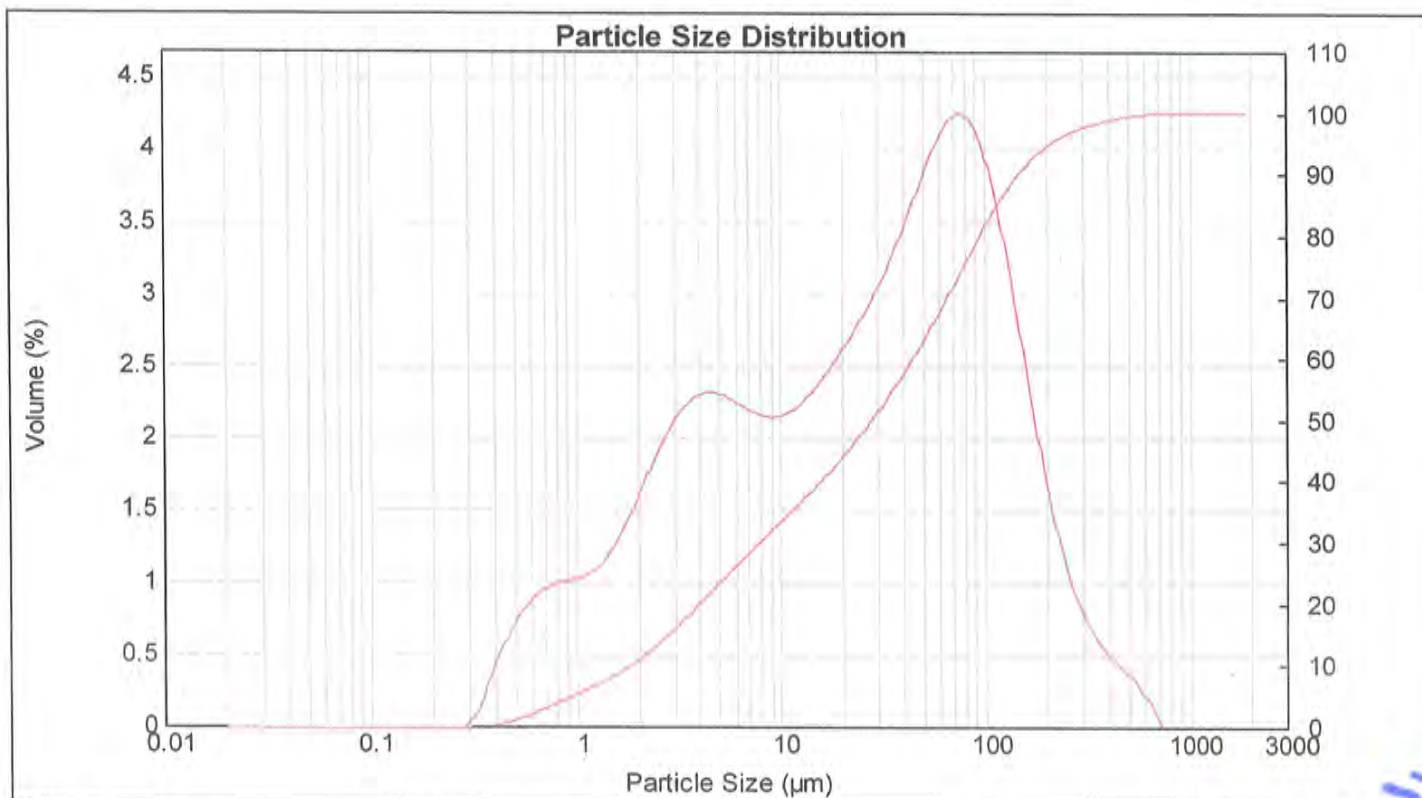
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.82 Residual (%) : 0.326
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0180 %Vol Specific Surface Area : 1.18 m²/g
Mean Diameters : D (0.1) : 1.84 um D (0.5) : 27.96 um D (0.9) : 146.42 um
D [4,3] : 58.08 um D [3,2] : 5.07 um Span : 5.170 Uniformity : 1.77

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.06	7.952	2.16	58.573	4.16	430.887	0.41
0.023	0.00	0.172	0.00	1.262	1.14	9.283	2.16	68.291	4.26	502.377	0.31
0.027	0.00	0.200	0.00	1.471	1.28	10.823	2.21	79.621	4.21	585.729	0.18
0.032	0.00	0.233	0.00	1.715	1.47	12.619	2.30	92.832	3.98	682.910	0.01
0.037	0.00	0.272	0.01	2.000	1.69	14.713	2.41	108.234	3.58	793.214	0.00
0.043	0.00	0.317	0.14	2.332	1.91	17.154	2.55	126.191	3.07	928.318	0.00
0.050	0.00	0.370	0.42	2.719	2.09	20.000	2.69	147.128	2.50	1082.339	0.00
0.059	0.00	0.431	0.61	3.170	2.23	23.318	2.85	171.539	1.95	1261.915	0.00
0.068	0.00	0.502	0.79	3.696	2.31	27.187	3.03	200.000	1.48	1471.285	0.00
0.080	0.00	0.586	0.90	4.309	2.33	31.698	3.23	233.183	1.10	1715.392	0.00
0.093	0.00	0.683	0.97	5.024	2.30	36.957	3.46	271.871	0.82	2000.000	0.00
0.108	0.00	0.795	1.01	5.857	2.25	43.089	3.71	316.979	0.63		
0.126	0.00	0.928	1.03	6.829	2.19	50.238	3.96	369.570	0.51		
0.147	0.00	1.082		7.952		58.573		430.887			



Result : Analysis Report

Attached page 4

Sample Details

Sample ID : G4/43REF-B_1

Measured : Monday, April 24, 2023 14:27:25

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTEC0859_66_51sam_Tetatech-1.mea

Analysed : Monday, April 24, 2023 14:27:27

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

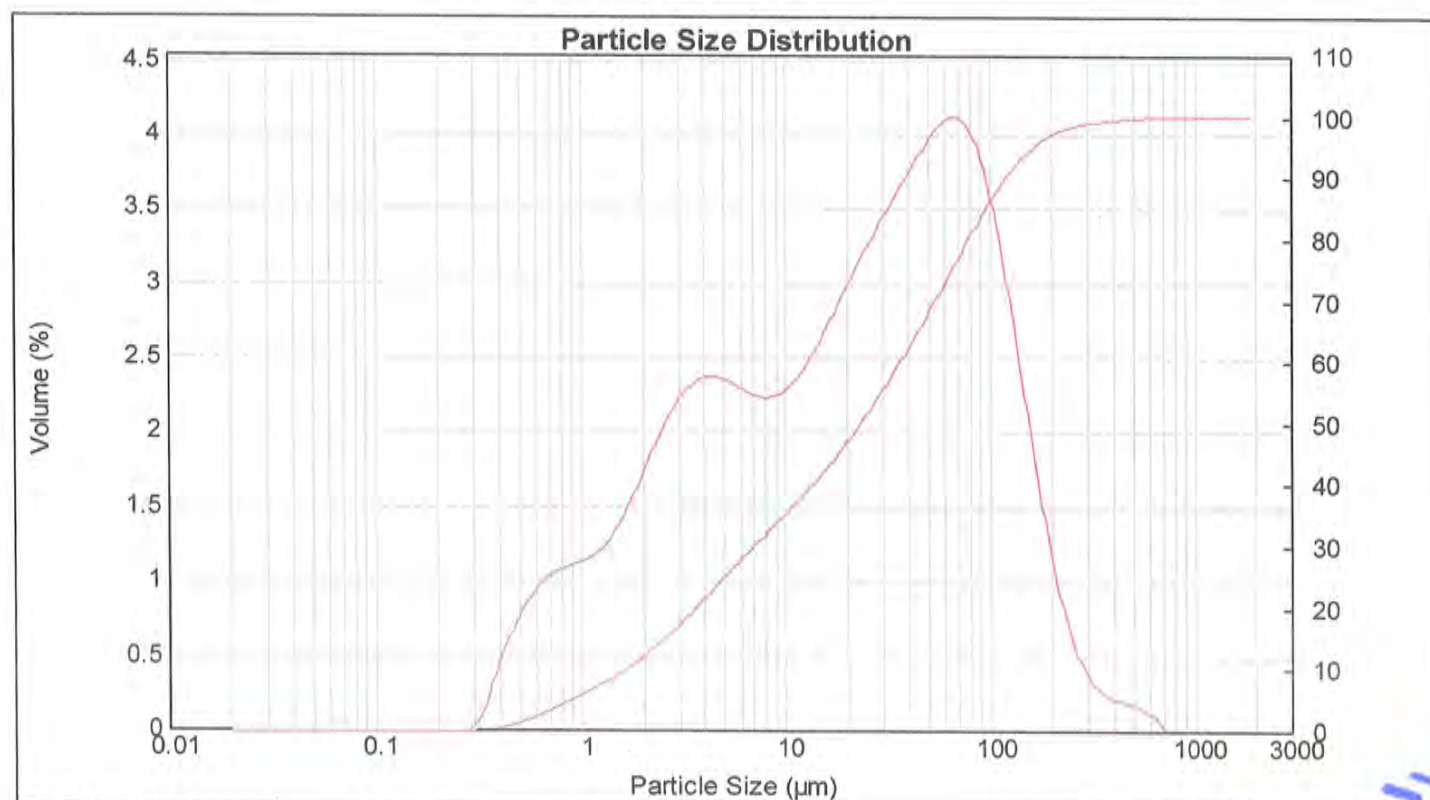
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.39 Residual (%) : 0.331
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0173 %Vol Specific Surface Area : 1.27 m²/g
Mean Diameters : D (0.1) : 1.67 um D (0.5) : 23.29 um D (0.9) : 120.05 um
D [4,3] : 47.17 um D [3,2] : 4.72 um Span : 5.084 Uniformity : 1.71

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.062	1.18	7.962	2.25	58.573	4.12	430.887	0.19
0.023	0.00	0.172	0.00	1.262	1.27	9.283	2.29	68.291	4.11	502.377	0.16
0.027	0.00	0.200	0.00	1.471	1.42	10.823	2.39	79.621	3.95	585.729	0.10
0.032	0.00	0.233	0.00	1.715	1.61	12.619	2.53	92.832	3.63	682.910	0.01
0.037	0.00	0.272	0.01	2.000	1.82	14.713	2.71	106.234	3.17	796.214	0.00
0.043	0.00	0.317	0.14	2.332	2.03	17.154	2.90	126.191	2.60	928.318	0.00
0.050	0.00	0.370	0.45	2.719	2.20	20.000	3.08	147.128	2.00	1082.339	0.00
0.059	0.00	0.431	0.66	3.170	2.32	23.318	3.43	171.539	1.45	1261.915	0.00
0.068	0.00	0.502	0.85	3.696	2.38	27.187	3.59	200.000	0.99	1471.285	0.00
0.080	0.00	0.586	0.98	4.309	2.34	31.696	3.75	233.183	0.64	1715.392	0.00
0.093	0.00	0.683	1.06	5.024	2.29	36.957	4.04	271.871	0.28	2000.000	0.00
0.108	0.00	0.796	1.14	5.857	2.25	43.089		316.979	0.22		
0.126	0.00	0.928		6.829		50.238		369.570			
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 5

Sample Details

Sample ID : G4/43REF-B_2

Measured : Monday, April 24, 2023 14:29:16

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTEC0859_66_51sam_Tetratosh 1.mea

Analysed : Monday, April 24, 2023 14:29:18

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

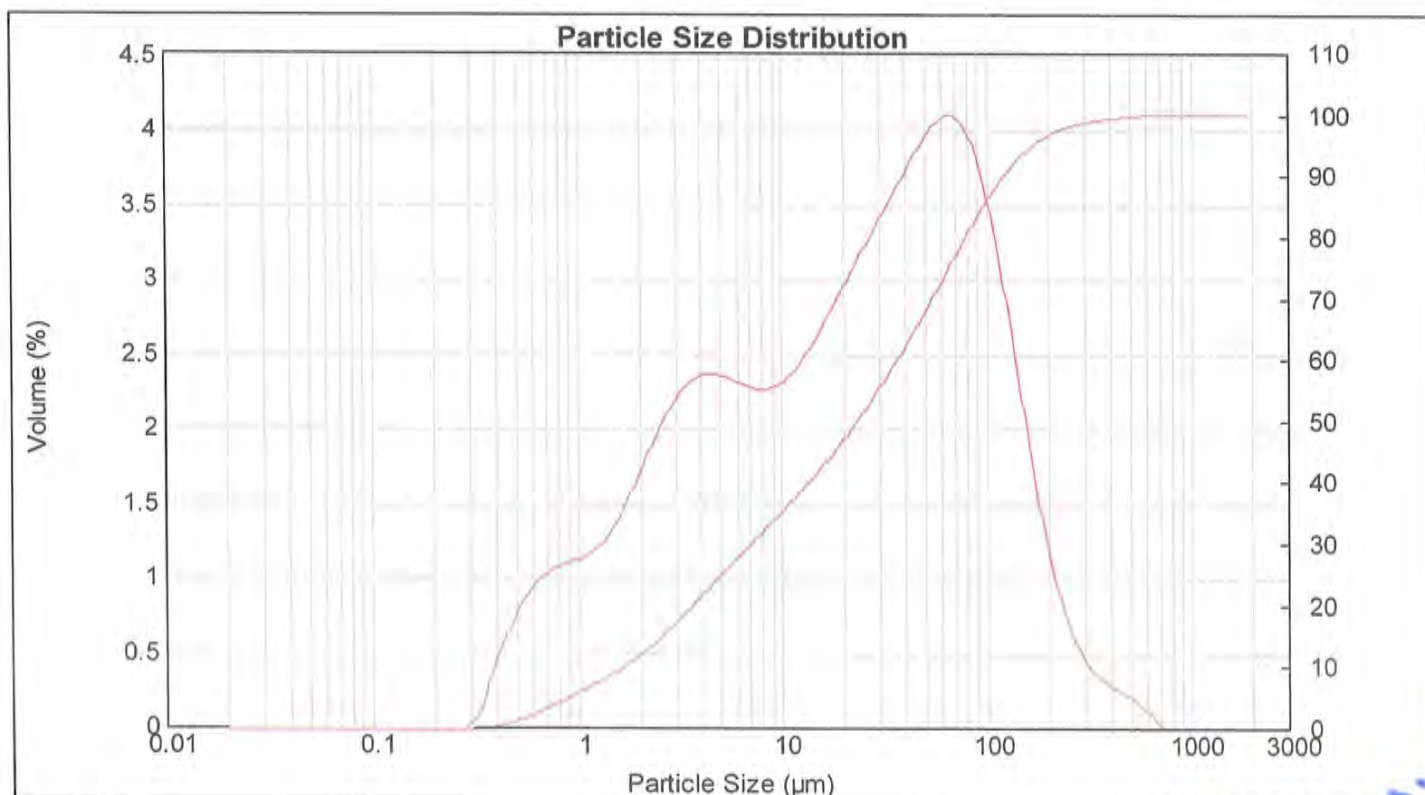
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.85 Residual (%) : 0.335
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0169 %Vol Specific Surface Area : 1.27 m²/g
Mean Diameters : D (0.1) : 1.68 um D (0.5) : 23.3 um D (0.9) : 121.6 um
D [4,3] : 48.09 um D [3,2] : 4.74 um Span : 5.147 Uniformity : 1.75

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.18	7.962	2.28	58.573	4.12	430.887	0.23
0.023	0.00	0.172	0.00	1.262	1.26	9.283	2.32	68.291	4.09	502.377	0.18
0.027	0.00	0.200	0.00	1.471	1.40	10.823	2.41	79.621	3.91	585.729	0.09
0.032	0.00	0.233	0.00	1.715	1.59	12.619	2.55	92.832	3.58	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.80	14.713	2.71	108.234	3.11	796.214	0.00
0.043	0.00	0.317	0.14	2.332	2.01	17.154	2.88	126.191	2.54	928.318	0.00
0.050	0.00	0.370	0.44	2.719	2.18	20.000	3.05	147.128	1.96	1082.339	0.00
0.059	0.00	0.431	0.66	3.170	2.30	23.318	3.23	171.539	1.44	1261.915	0.00
0.068	0.00	0.502	0.85	3.696	2.37	27.187	3.40	200.000	1.01	1471.285	0.00
0.080	0.00	0.586	0.98	4.309	2.38	31.698	3.56	233.183	0.70	1715.392	0.00
0.093	0.00	0.683	1.06	5.024	2.36	36.957	3.74	271.871	0.49	2000.000	0.00
0.108	0.00	0.796	1.10	5.857	2.32	43.089	3.90	316.979	0.36		
0.126	0.00	0.928	1.13	6.829	2.28	50.238	4.04	369.570	0.29		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 6

Sample Details

Sample ID : G4/43REF-B_3

Measured : Monday, April 24, 2023 14:30:03

Sample File : D:\Data Mastersizer2000\Technical
sample\TS_66\MTEC0950_66_51sam_TetraTech_1.maa

Analysed : Monday, April 24, 2023 14:30:05

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

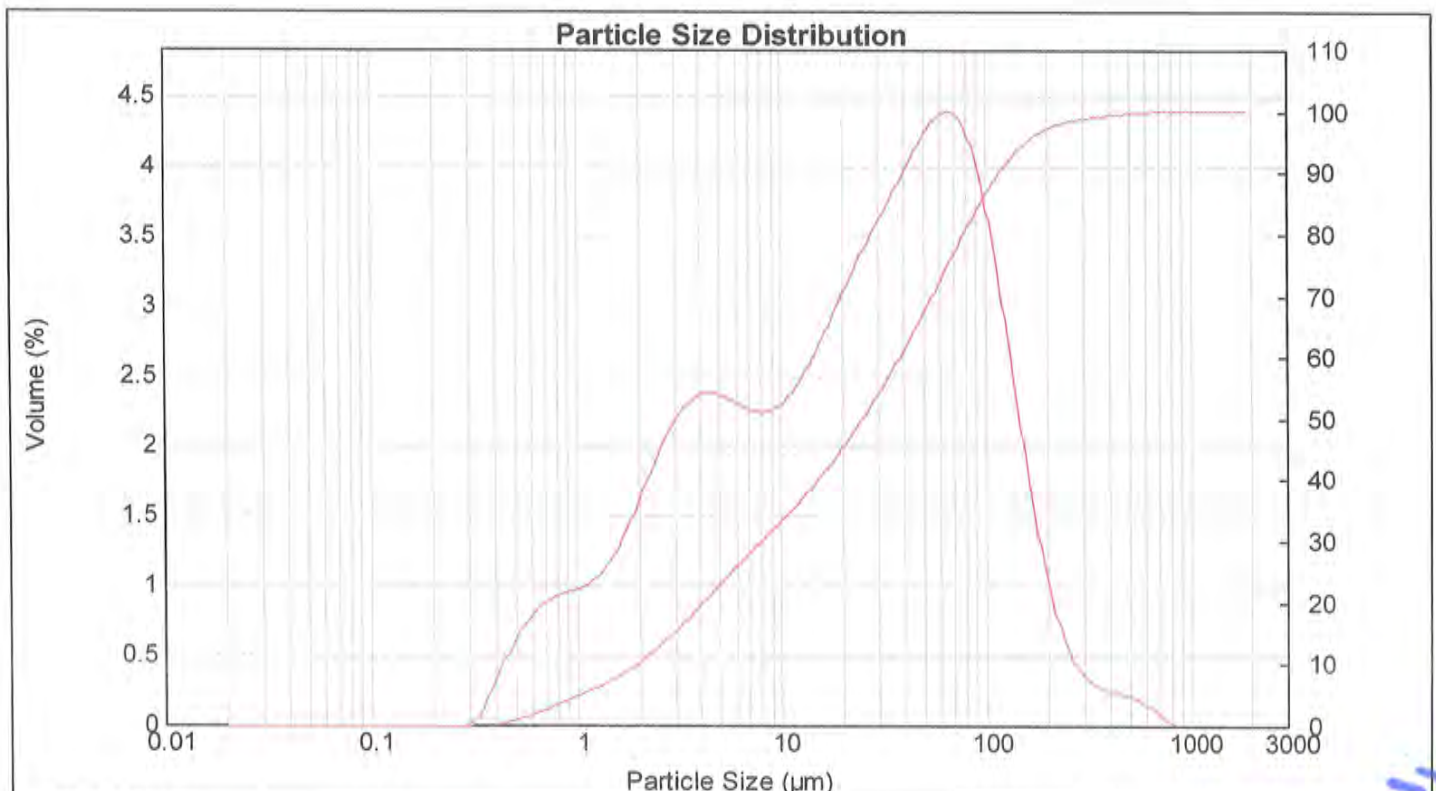
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.70 Residual (%) : 0.745
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0183 %Vol Specific Surface Area : 1.12 m²/g
Mean Diameters : D (0.1) : 1.98 um D (0.5) : 25.13 um D (0.9) : 117.69 um
D [4,3] : 48.27 um D [3,2] : 5.34 um Span : 4.605 Uniformity : 1.59

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.02	7.962	2.26	58.573	4.39	430.887	0.22
0.023	0.00	0.172	0.00	1.262	1.11	9.283	2.31	68.291	4.36	502.377	0.19
0.027	0.00	0.200	0.00	1.471	1.26	10.823	2.42	79.621	4.15	585.729	0.13
0.032	0.00	0.233	0.00	1.715	1.47	12.619	2.58	92.832	3.75	682.910	0.06
0.037	0.00	0.272	0.01	2.000	1.71	14.713	2.77	108.234	3.18	796.214	0.00
0.043	0.00	0.317	0.08	2.332	1.94	17.154	2.98	126.191	2.53	928.318	0.00
0.050	0.00	0.370	0.31	2.719	2.14	20.000	3.20	147.128	1.87	1082.339	0.00
0.059	0.00	0.431	0.51	3.170	2.29	23.318	3.40	171.539	1.30	1261.915	0.00
0.068	0.00	0.502	0.69	3.696	2.37	27.187	3.59	200.000	0.86	1471.285	0.00
0.080	0.00	0.586	0.82	4.309	2.39	31.698	3.77	233.183	0.56	1715.392	0.00
0.093	0.00	0.683	0.90	5.024	2.35	36.957	3.96	271.871	0.38	2000.000	0.00
0.108	0.00	0.796	0.94	5.857	2.30	43.089	4.14	316.979	0.29		
0.126	0.00	0.928	0.98	6.829	2.26	50.238	4.30	369.570	0.25		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 7

Sample Details

Sample ID : G4/43REF-C_1

Measured : Monday, April 24, 2023 14:47:55

Sample File : D:\Data Mastersizer2000\Technical
sample\TS_66\MTEC0950_66_51mm_Tetrastack 1.mea

Analysed : Monday, April 24, 2023 14:47:56

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

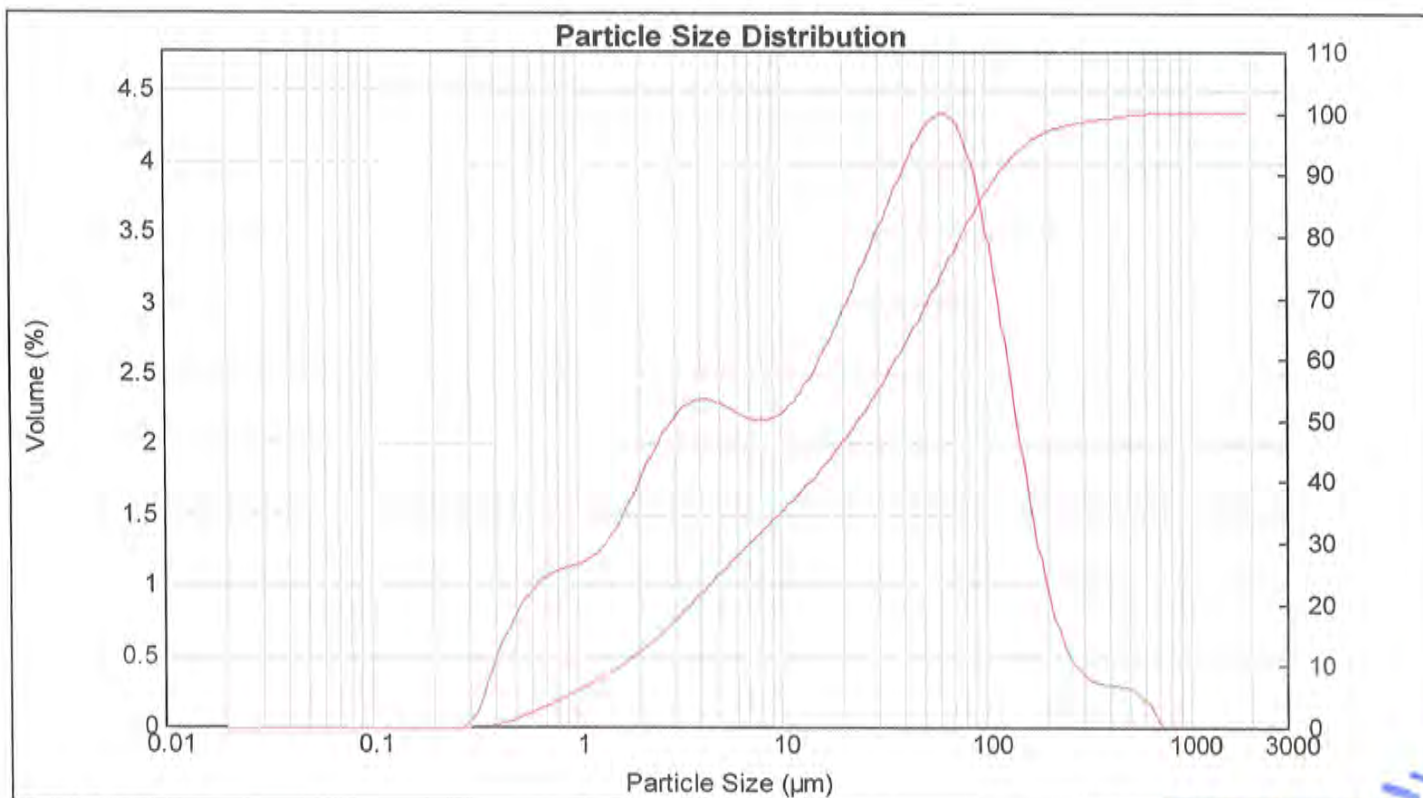
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.90 Residual (%) : 0.345
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0168 %Vol Specific Surface Area : 1.28 m²/g
Mean Diameters : D (0.1) : 1.64 um D (0.5) : 23.96 um D (0.9) : 116.04 um
D [4,3] : 47.65 um D [3,2] : 4.68 um Span : 4.775 Uniformity : 1.68

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.20	7.962	2.18	58.573	4.35	430.887	0.29
0.023	0.00	0.172	0.00	1.262	1.29	9.283	2.23	68.291	4.26	502.377	0.25
0.027	0.00	0.200	0.00	1.471	1.43	10.823	2.33	79.621	4.00	585.729	0.16
0.032	0.00	0.233	0.00	1.715	1.62	12.619	2.47	92.832	3.57	682.910	0.01
0.037	0.00	0.272	0.01	2.000	1.82	14.713	2.65	108.234	3.01	796.214	0.00
0.043	0.00	0.317	0.16	2.332	2.02	17.154	2.84	126.191	2.37	928.318	0.00
0.050	0.00	0.370	0.46	2.719	2.18	20.000	3.05	147.128	1.76	1082.339	0.00
0.059	0.00	0.431	0.87	3.170	2.28	23.318	3.28	171.539	1.23	1261.915	0.00
0.068	0.00	0.502	0.87	3.696	2.33	27.187	3.50	200.000	0.82	1471.285	0.00
0.080	0.00	0.586	1.00	4.309	2.32	31.698	3.73	233.183	0.55	1715.392	0.00
0.093	0.00	0.683	1.08	5.024	2.28	36.957	3.96	271.871	0.39	2000.000	0.00
0.108	0.00	0.796	1.12	5.857	2.23	43.089	4.16	316.979	0.32		
0.126	0.00	0.928	1.15	6.829	2.19	50.238	4.31	368.570	0.30		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 8

Sample Details

Sample ID : G4/43REF-C_2

Measured : Monday, April 24, 2023 14:48:59

Sample File : D:\Data Mastersizer2000\Technical
sample\TS 66\MTEC0859_66_510nm_Tetrachol-1.mes

Analysed : Monday, April 24, 2023 14:49:00

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

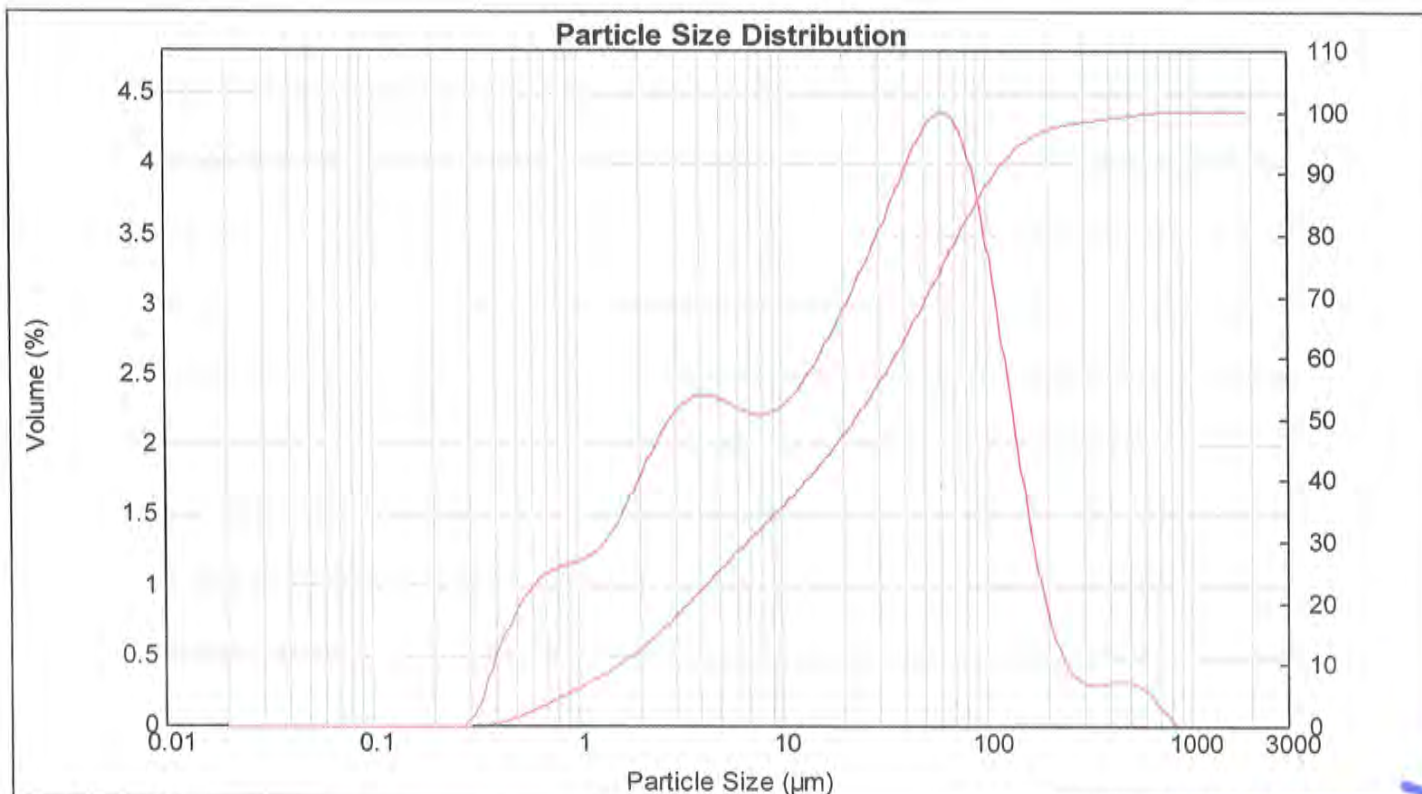
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.76 Residual (%) : 0.339
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0164 %Vol Specific Surface Area : 1.3 m²/g
Mean Diameters : D (0.1) : 1.61 um D (0.5) : 23.02 um D (0.9) : 111.87 um
D [4,3] : 47.32 um D [3,2] : 4.6 um Span : 4.790 Uniformity : 1.74

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.22	7.962	2.23	58.573	4.38	430.887	0.32
0.023	0.00	0.172	0.00	1.262	1.31	9.283	2.28	68.291	4.27	502.377	0.29
0.027	0.00	0.200	0.00	1.471	1.45	10.823	2.38	79.621	3.97	585.729	0.23
0.032	0.00	0.233	0.00	1.715	1.64	12.619	2.68	92.832	3.50	682.910	0.11
0.037	0.00	0.272	0.02	2.000	1.85	14.713	2.68	108.234	2.88	796.214	0.01
0.043	0.00	0.317	0.16	2.332	2.05	17.154	2.87	126.191	2.21	928.318	0.00
0.050	0.00	0.370	0.47	2.719	2.21	20.000	3.06	147.128	1.58	1082.339	0.00
0.059	0.00	0.431	0.69	3.170	2.32	23.318	3.27	171.539	1.05	1261.915	0.00
0.068	0.00	0.502	0.88	3.696	2.36	27.187	3.49	200.000	0.66	1471.285	0.00
0.080	0.00	0.586	1.02	4.309	2.36	31.698	3.72	233.183	0.43	1715.392	0.00
0.093	0.00	0.683	1.10	5.024	2.32	36.957	3.96	271.871	0.32	2000.000	0.00
0.108	0.00	0.796	1.14	5.857	2.27	43.089	4.17	316.979	0.29		
0.126	0.00	0.928	1.17	6.829	2.23	50.238	4.33	369.570	0.30		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 9

Sample Details

Sample ID : G4/43REF-C_3

Measured : Monday, April 24, 2023 14:50:18

Sample File : D:\Data Mastersizer2000\Technical
sample\TS 66\MTEC0850_66_51sam_TetraTech 1.mps

Analysed : Monday, April 24, 2023 14:50:20

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

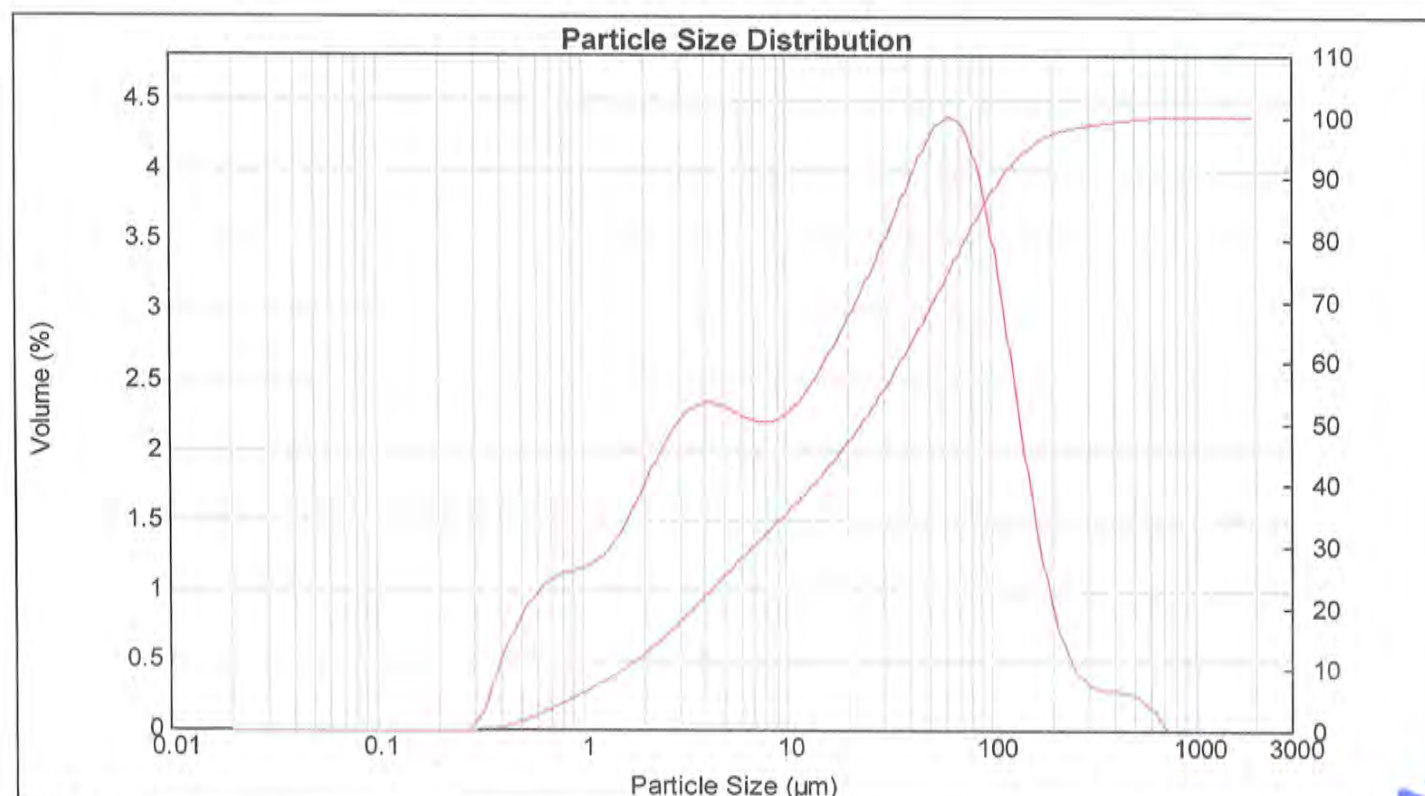
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.68 Residual (%) : 0.351
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0164 %Vol Specific Surface Area : 1.29 m²/g
Mean Diameters : D (0.1) : 1.62 um D (0.5) : 23.43 um D (0.9) : 113.37 um
D [4,3] : 46.55 um D [3,2] : 4.63 um Span : 4.770 Uniformity : 1.67

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.21	7.962	2.22	58.573	4.39	430.887	0.27
0.023	0.00	0.172	0.00	1.262	1.30	9.283	2.27	68.291	4.32	502.377	0.23
0.027	0.00	0.200	0.00	1.471	1.44	10.823	2.36	79.621	4.05	585.729	0.14
0.032	0.00	0.233	0.00	1.715	1.63	12.619	2.50	92.832	3.60	682.910	0.01
0.037	0.00	0.272	0.02	2.000	1.84	14.713	2.67	108.234	3.00	796.214	0.01
0.043	0.00	0.317	0.16	2.332	2.03	17.154	2.85	126.191	2.33	928.318	0.00
0.050	0.00	0.370	0.47	2.719	2.19	20.000	3.04	147.128	1.69	1082.339	0.00
0.059	0.00	0.431	0.68	3.170	2.30	23.318	3.24	171.539	1.15	1261.915	0.00
0.068	0.00	0.502	0.88	3.696	2.35	27.187	3.46	200.000	0.75	1471.285	0.00
0.080	0.00	0.586	1.01	4.309	2.34	31.698	3.68	233.183	0.49	1715.392	0.00
0.093	0.00	0.683	1.09	5.024	2.30	36.957	3.92	271.871	0.35	2000.000	0.00
0.108	0.00	0.796	1.14	5.857	2.25	43.089	4.14	316.979	0.29		
0.126	0.00	0.928	1.17	6.829	2.22	50.238	4.32	369.570	0.28		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 10

Sample Details

Sample ID : LAWA-1C1_1

Measured : Monday, April 24, 2023 15:05:19

Sample File : D:\Data Mastersizer2000\Technical
 Sample\TS 66\MTEC0859_66_51um_Tetratex 1.mea

Analysed : Monday, April 24, 2023 15:05:21

Sample Notes : Dispersion medium : De-ionized water.
 Treatment : Ultrasound 10 minutes with ultrasonic bath before
 analysis and stirring at 2000 rpm during measurement.

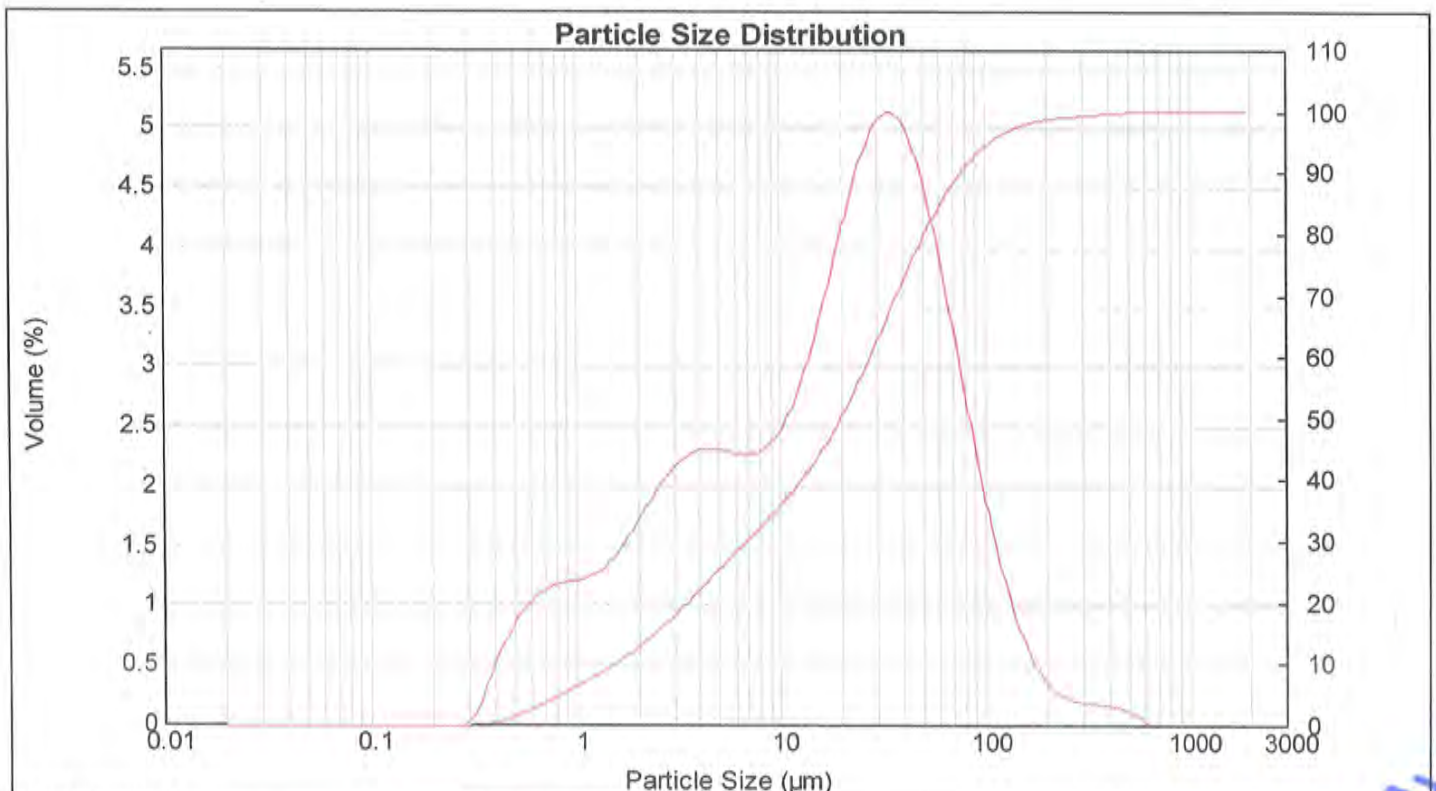
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.26 Residual (%) : 0.344
 Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0164 %Vol Specific Surface Area : 1.35 m²/g
 Mean Diameters : D (0.1) : 1.55 um D (0.5) : 19.84 um D (0.9) : 76.89 um
 D [4,3] : 33.51 um D [3,2] : 4.45 um Span : 3.797 Uniformity : 1.34

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.062	1.25	7.962	2.34	58.573	3.77	430.887	0.14
0.023	0.00	0.172	0.00	1.262	1.32	9.283	2.48	68.291	3.15	502.377	0.09
0.027	0.00	0.200	0.00	1.471	1.44	10.823	2.71	79.621	2.53	585.729	0.01
0.032	0.00	0.233	0.00	1.715	1.61	12.619	3.04	92.832	1.94	682.910	0.00
0.037	0.00	0.272	0.02	2.000	1.80	14.713	3.46	108.234	1.43	796.214	0.00
0.043	0.00	0.317	0.16	2.332	1.99	17.154	3.92	126.191	1.00	928.318	0.00
0.050	0.00	0.370	0.49	2.719	2.14	20.000	4.38	147.128	0.67	1082.339	0.00
0.059	0.00	0.431	0.72	3.170	2.25	23.318	4.78	171.539	0.45	1261.915	0.00
0.068	0.00	0.502	0.93	3.696	2.31	27.187	5.05	200.000	0.31	1471.285	0.00
0.080	0.00	0.586	1.07	4.309	2.33	31.698	5.16	233.183	0.23	1715.392	0.00
0.093	0.00	0.683	1.16	5.024	2.31	36.957	5.06	271.871	0.19	2000.000	0.00
0.108	0.00	0.796	1.20	5.857	2.29	43.069	4.78	316.979	0.18		
0.126	0.00	0.928	1.22	6.829	2.29	50.238	4.33	369.570	0.17		
0.147	0.00	1.062		7.962		58.573		430.887			



Result : Analysis Report

Attached page 11

Sample Details

Sample ID : LAWA-1C1_2

Measured : Monday, April 24, 2023 15:06:54

Sample File : D:\Data Mastersizer2000\Technical
series\TS_66\MTEC00950_66_51um_Telrotech_1.mea

Analysed : Monday, April 24, 2023 15:06:55

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

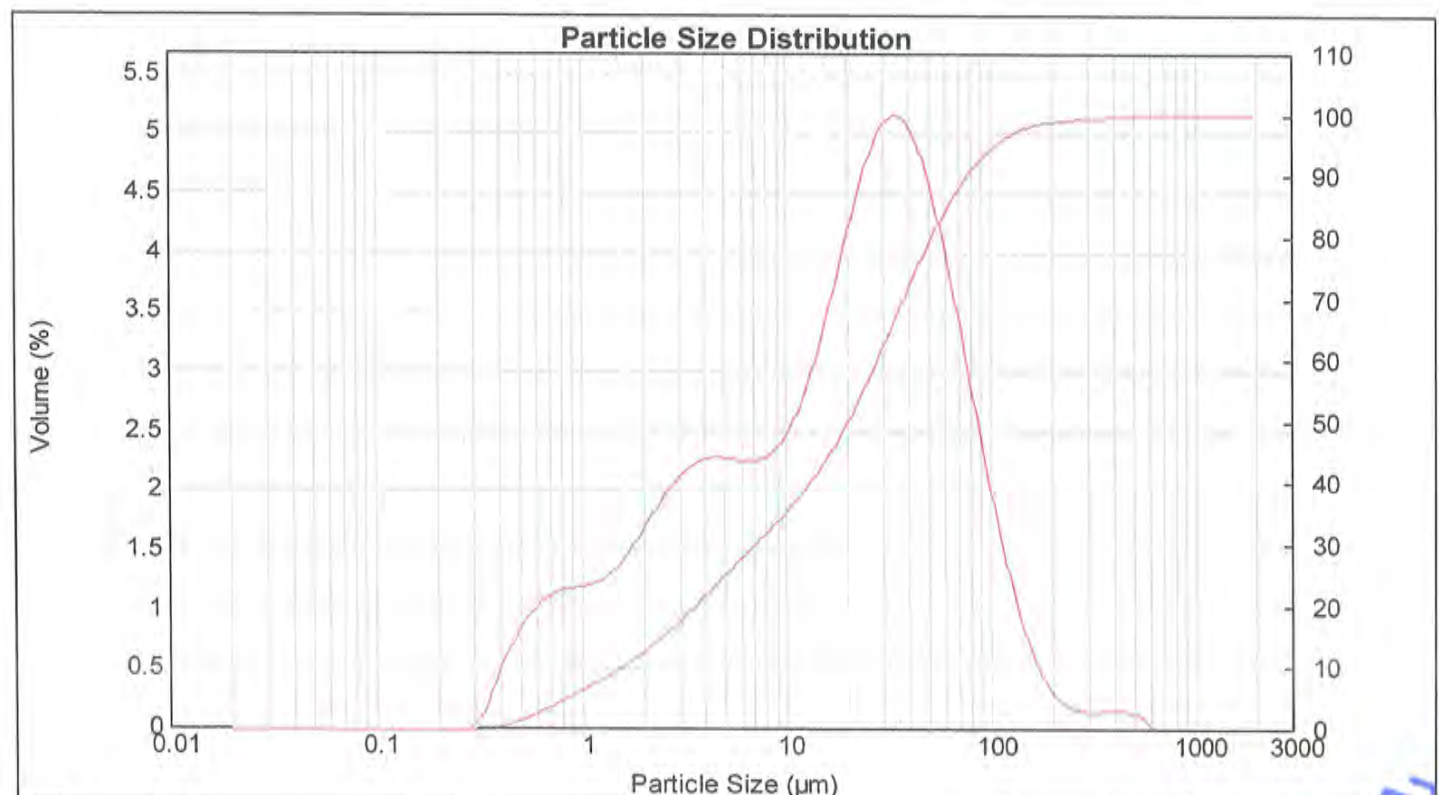
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.86 Residual (%) : 0.349
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0162 %Vol Specific Surface Area : 1.33 m²/g
Mean Diameters : D (0.1) : 1.58 um D (0.5) : 20.22 um D (0.9) : 77.47 um
D [4,3] : 33.51 um D [3,2] : 4.51 um Span : 3.754 Uniformity : 1.31

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.23	7.962	2.33	58.573	3.86	430.887	0.15
0.023	0.00	0.172	0.00	1.262	1.29	9.283	2.47	68.291	3.27	502.377	0.11
0.027	0.00	0.200	0.00	1.471	1.41	10.823	2.71	79.621	2.65	585.729	0.01
0.032	0.00	0.233	0.00	1.715	1.57	12.619	3.05	92.832	2.05	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.76	14.713	3.47	108.234	1.51	796.214	0.00
0.043	0.00	0.317	0.15	2.332	1.94	17.154	3.93	126.191	1.04	928.318	0.00
0.050	0.00	0.370	0.48	2.719	2.10	20.000	4.39	147.128	0.67	1082.339	0.00
0.059	0.00	0.431	0.71	3.170	2.21	23.318	4.79	171.539	0.41	1261.915	0.00
0.068	0.00	0.502	0.91	3.696	2.27	27.187	5.05	200.000	0.25	1471.285	0.00
0.080	0.00	0.586	1.06	4.309	2.29	31.698	5.17	233.183	0.17	1715.392	0.00
0.093	0.00	0.683	1.14	5.024	2.28	36.957	5.08	271.871	0.15	2000.000	0.00
0.108	0.00	0.796	1.18	5.857	2.26	43.089	4.81	316.979	0.15		
0.126	0.00	0.928	1.20	6.829	2.27	50.238	4.39	369.570	0.15		
0.147	0.00	1.082		7.962		58.573		430.887	0.15		



Result : Analysis Report

Attached page 12

Sample Details

Sample ID : LAWA-1C1_3

Measured : Monday, April 24, 2023 15:07:57

Sample File : D:\Data Mastersizer2000\Technical
series\TS_66\MTEC0859_66_51um_Tetratosh 1.mea

Analysed : Monday, April 24, 2023 15:07:59

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

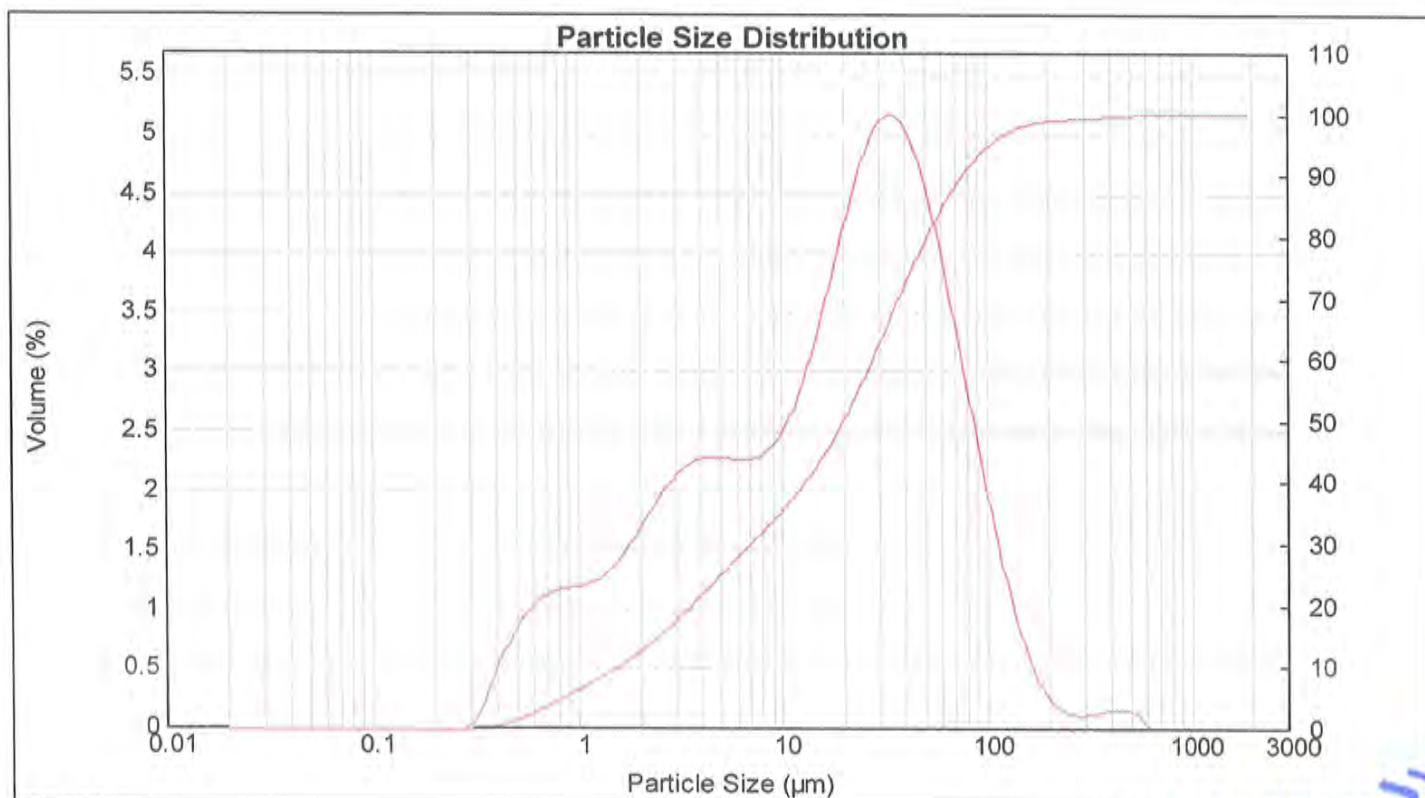
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.70 Residual (%) : 0.346
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0160 %Vol Specific Surface Area : 1.33 m²/g
Mean Diameters : D (0.1) : 1.57 um D (0.5) : 20.03 um D (0.9) : 76.39 um
D [4,3] : 33.1 um D [3,2] : 4.5 um Span : 3.735 Uniformity : 1.3

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.062	1.23	7.962	2.34	58.573	3.83	430.887	0.16
0.023	0.00	0.172	0.00	1.262	1.30	9.283	2.49	68.291	3.24	502.377	0.13
0.027	0.00	0.200	0.00	1.471	1.41	10.823	2.74	79.621	2.63	585.729	0.01
0.032	0.00	0.233	0.00	1.715	1.58	12.619	3.09	92.832	2.03	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.76	14.713	3.51	108.234	1.49	796.214	0.00
0.043	0.00	0.317	0.15	2.332	1.94	17.154	3.98	126.191	1.01	928.318	0.00
0.050	0.00	0.370	0.48	2.719	2.10	20.000	4.44	147.128	0.63	1082.339	0.00
0.059	0.00	0.431	0.71	3.170	2.21	23.318	4.83	171.539	0.37	1261.915	0.00
0.068	0.00	0.502	0.92	3.696	2.27	27.187	5.09	200.000	0.21	1471.285	0.00
0.080	0.00	0.586	1.06	4.309	2.29	31.698	5.18	233.183	0.13	1715.392	0.00
0.093	0.00	0.683	1.15	5.024	2.28	36.957	5.08	271.871	0.11	2000.000	0.00
0.108	0.00	0.796	1.19	5.857	2.27	43.089	4.80	316.979	0.13		
0.126	0.00	0.928	1.20	6.829	2.28	50.238	4.36	369.570	0.15		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 13

Sample Details

Sample ID : LAWA-1C2_1

Measured : Monday, April 24, 2023 15:20:59

Sample File : D:\Data Mastersizer2000\Technical
samples\TS 66\MTEC0859_66_51sam_Tetratech 1.mea

Analysed : Monday, April 24, 2023 15:21:00

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

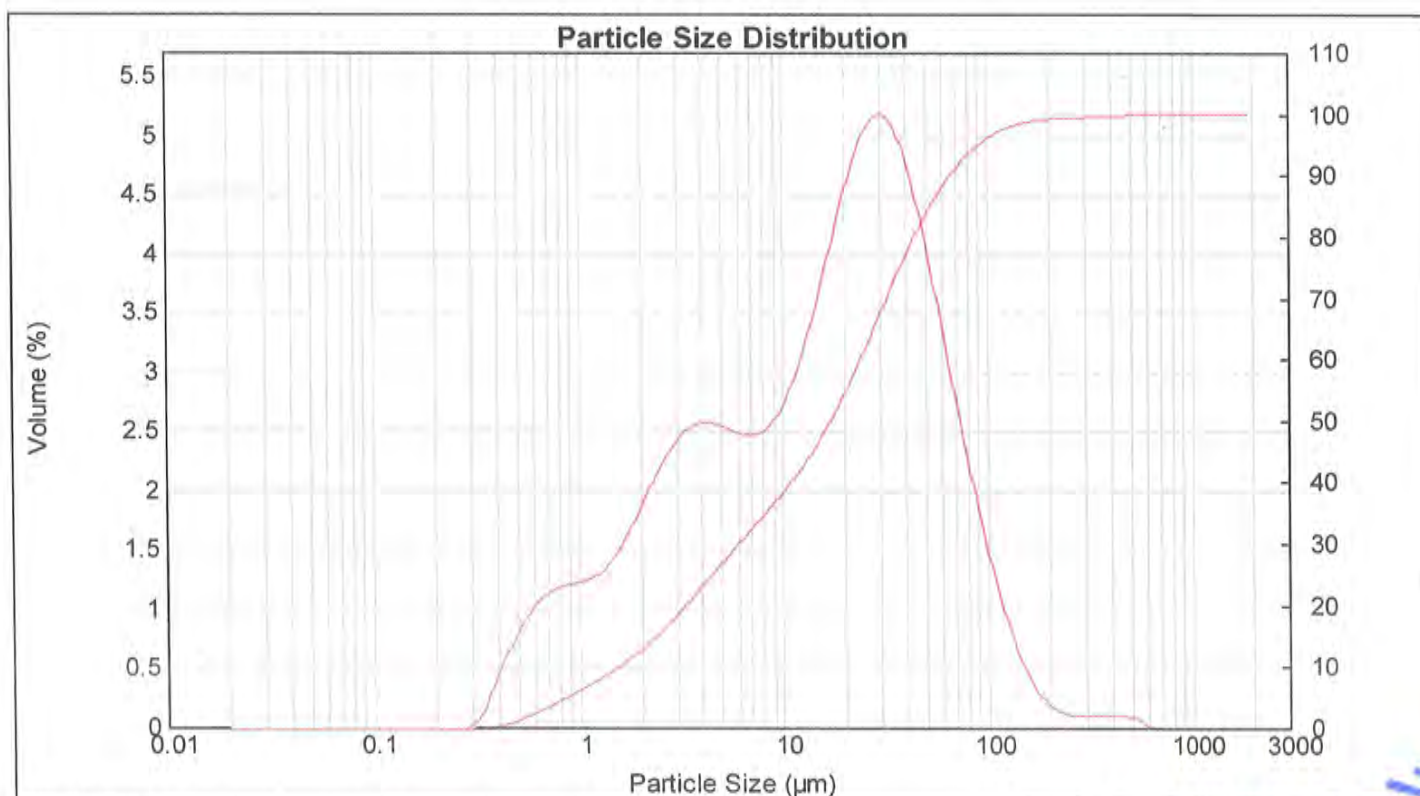
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.47 Residual (%) : 0.788
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0159 %Vol Specific Surface Area : 1.38 m²/g
Mean Diameters : D (0.1) : 1.56 um D (0.5) : 17.18 um D (0.9) : 66.22 um
D [4,3] : 28.66 um D [3,2] : 4.36 um Span : 3.763 Uniformity : 1.32

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.28	7.962	2.55	58.573	3.21	430.887	0.10
0.023	0.00	0.172	0.00	1.262	1.36	9.283	2.72	68.291	2.60	502.377	0.08
0.027	0.00	0.200	0.00	1.471	1.51	10.823	3.00	79.621	2.03	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.73	12.619	3.38	92.832	1.52	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.97	14.713	3.83	108.234	1.08	796.214	0.00
0.043	0.00	0.317	0.13	2.332	2.20	17.154	4.31	126.191	0.71	928.318	0.00
0.050	0.00	0.370	0.43	2.719	2.40	20.000	4.74	147.128	0.44	1082.339	0.00
0.059	0.00	0.431	0.68	3.170	2.52	23.318	5.19	171.539	0.26	1261.915	0.00
0.068	0.00	0.502	0.90	3.696	2.58	27.187	5.11	200.000	0.16	1471.285	0.00
0.080	0.00	0.596	1.03	4.309	2.53	31.698	4.83	233.183	0.11	1715.392	0.00
0.093	0.00	0.683	1.16	5.024	2.49	36.957	3.82	271.871	0.11	2000.000	0.00
0.108	0.00	0.796	1.24	5.857		43.089		316.979			
0.126	0.00	0.928		6.829		50.238		369.570			
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 14

Sample Details

Sample ID : LAWA-1C2_2

Measured : Monday, April 24, 2023 15:22:34

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTEC0859_66_51a.m Tetrattech 1.mea

Analysed : Monday, April 24, 2023 15:22:35

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

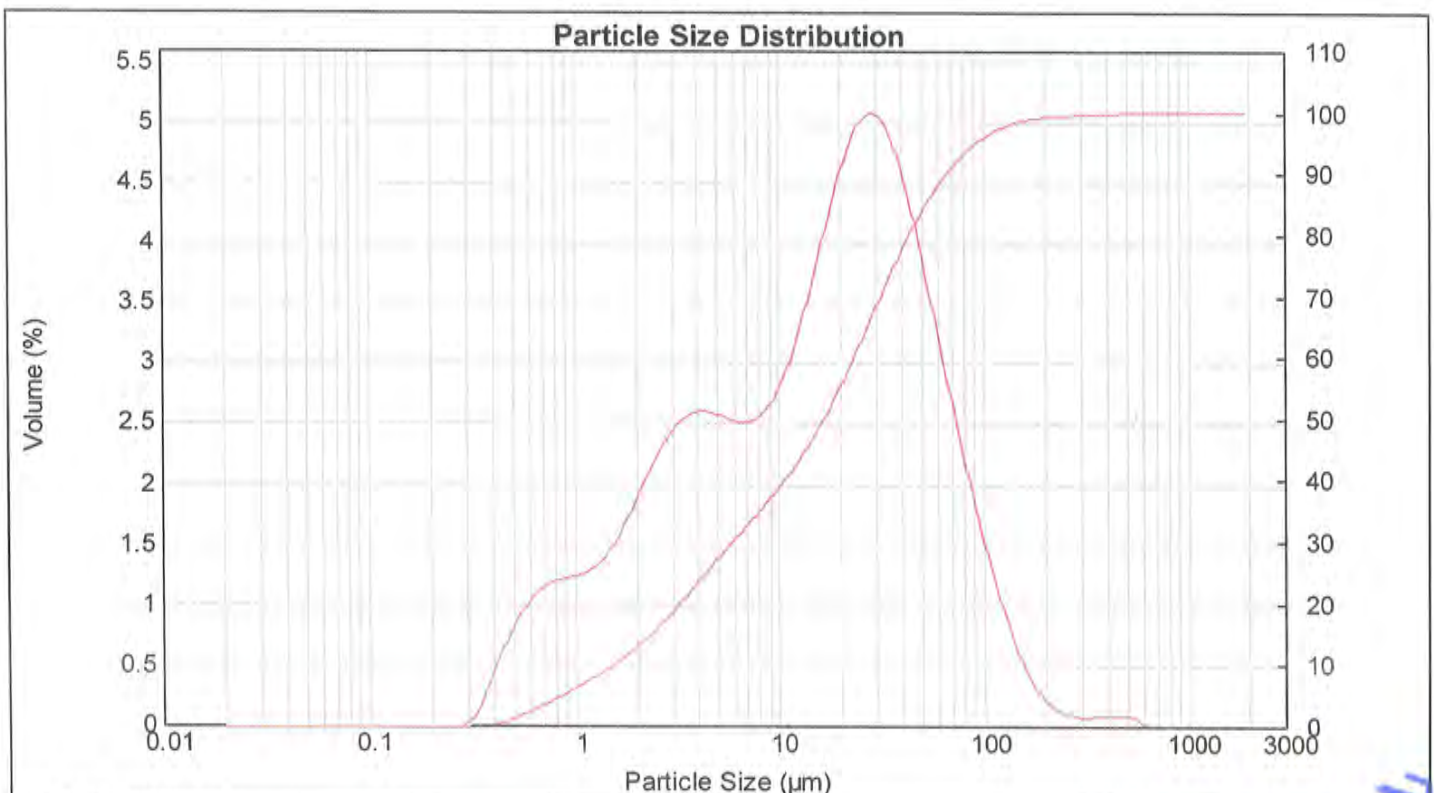
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.02 Residual (%) : 0.773
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0154 %Vol Specific Surface Area : 1.39 m²/g
Mean Diameters : D (0.1) : 1.55 um D (0.5) : 16.71 um D (0.9) : 66.66 um
D [4,3] : 28.36 um D [3,2] : 4.33 um Span : 3.896 Uniformity : 1.34

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.29	7.962	2.61	58.573	3.08	430.887	0.09
0.023	0.00	0.172	0.00	1.262	1.37	9.283	2.80	68.291	2.54	502.377	0.08
0.027	0.00	0.200	0.00	1.471	1.53	10.823	3.09	79.621	2.03	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.74	12.619	3.47	92.832	1.57	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.99	14.713	3.92	108.234	1.15	796.214	0.00
0.043	0.00	0.317	0.13	2.332	2.22	17.154	4.37	126.191	0.79	928.318	0.00
0.050	0.00	0.370	0.43	2.719	2.42	20.000	4.76	147.128	0.50	1082.339	0.00
0.059	0.00	0.431	0.68	3.170	2.55	23.318	5.09	171.539	0.29	1261.915	0.00
0.068	0.00	0.502	0.91	3.696	2.61	27.187	5.48	200.000	0.17	1471.285	0.00
0.080	0.00	0.596	1.07	4.309	2.60	31.698	4.95	233.183	0.10	1715.392	0.00
0.093	0.00	0.683	1.17	5.024	2.57	36.957	4.64	271.871	0.08	2000.000	0.00
0.108	0.00	0.796	1.22	5.857	2.53	43.089	4.18	316.979	0.08		
0.126	0.00	0.928	1.25	6.829		50.238	3.64	369.570	0.09		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 15

Sample Details

Sample ID : LAWA-1C2_3

Measured : Monday, April 24, 2023 15:23:21

Sample File : D:\Data Mastersizer2000\Technical
sample\TS_66\MTEC0859_66_51sam_Tetrattech-1.mea

Analysed : Monday, April 24, 2023 15:23:23

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

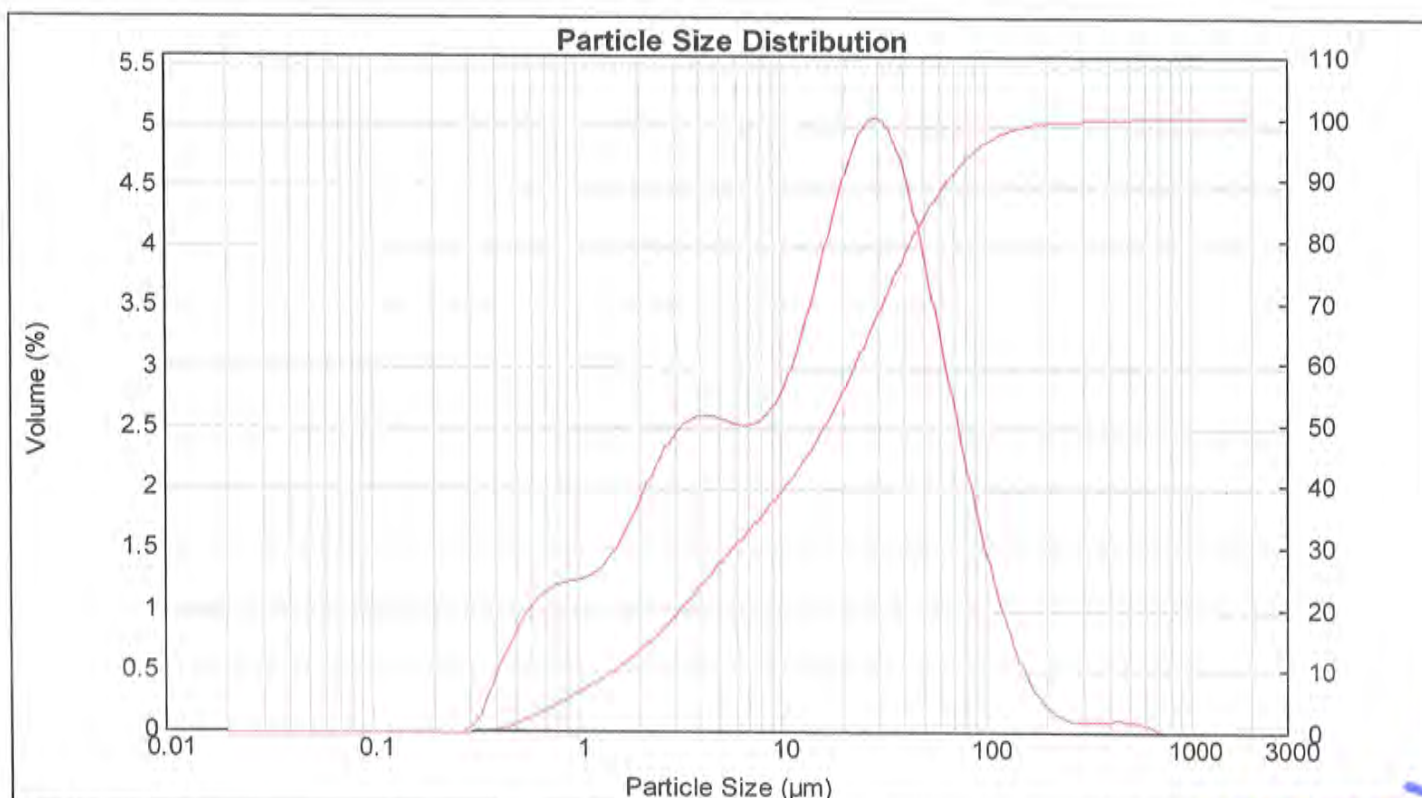
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.90 Residual (%) : 0.774
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0153 %Vol Specific Surface Area : 1.39 m²/g
Mean Diameters : D (0.1) : 1.55 um D (0.5) : 16.73 um D (0.9) : 66.63 um
D [4,3] : 28.71 um D [3,2] : 4.33 um Span : 3.891 Uniformity : 1.36

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.29	7.962	2.62	58.573	3.12	430.887	0.10
0.023	0.00	0.172	0.00	1.262	1.37	9.283	2.80	68.291	2.55	502.377	0.08
0.027	0.00	0.200	0.00	1.471	1.53	10.823	3.08	79.621	2.03	585.729	0.05
0.032	0.00	0.233	0.00	1.715	1.74	12.619	3.45	92.832	1.54	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.99	14.713	4.33	108.234	1.12	796.214	0.00
0.043	0.00	0.317	0.13	2.332	2.22	17.154	3.89	126.191	0.76	928.318	0.00
0.050	0.00	0.370	0.43	2.719	2.42	20.000	4.72	147.128	0.48	1082.339	0.00
0.059	0.00	0.431	0.68	3.170	2.55	23.318	4.99	171.539	0.29	1261.915	0.00
0.068	0.00	0.502	0.91	3.696	2.61	27.187	4.97	200.000	0.17	1471.285	0.00
0.080	0.00	0.586	1.07	4.309	2.57	31.698	4.67	233.183	0.08	1715.392	0.00
0.093	0.00	0.683	1.17	5.024	2.54	36.957	4.23	271.871	0.09	2000.000	0.00
0.108	0.00	0.796	1.22	5.857	2.54	43.089	3.69	316.979	0.08		
0.126	0.00	0.928	1.25	6.829		50.238		369.570			
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 16

Sample Details

Sample ID : LAWA-1C3X_1

Measured : Monday, April 24, 2023 15:35:52

Sample File : D:\Data Mastersizer2000\Technical
service\TS 66\MTEC0850_66_51a.m TetraTech 1.mn

Analysed : Monday, April 24, 2023 15:35:54

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

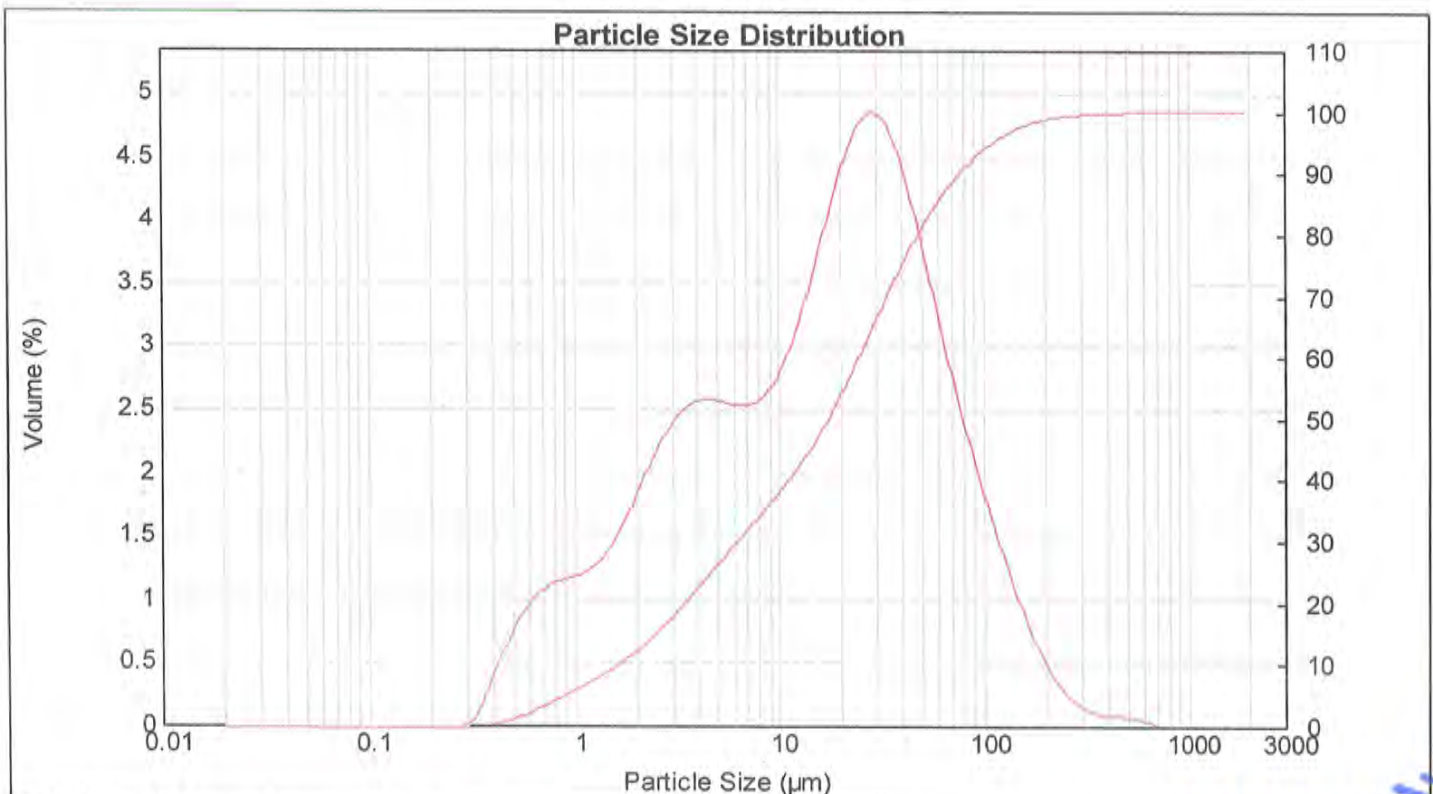
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.74 Residual (%) : 0.755
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0158 %Vol Specific Surface Area : 1.32 m²/g
Mean Diameters : D (0.1) : 1.65 um D (0.5) : 17.49 um D (0.9) : 77.04 um
D [4,3] : 31.94 um D [3,2] : 4.54 um Span : 4.310 Uniformity : 1.47

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.062	1.22	7.962	2.62	58.573	3.11	430.887	0.08
0.023	0.00	0.172	0.00	1.262	1.31	9.283	2.79	68.291	2.66	502.377	0.07
0.027	0.00	0.200	0.00	1.471	1.47	10.823	3.05	79.621	2.24	585.729	0.04
0.032	0.00	0.233	0.00	1.715	1.68	12.619	3.39	92.832	1.86	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.92	14.713	3.80	108.234	1.50	796.214	0.00
0.043	0.00	0.317	0.09	2.332	2.16	17.154	4.20	126.191	1.17	928.318	0.00
0.050	0.00	0.370	0.39	2.719	2.36	20.000	4.56	147.128	0.87	1082.339	0.00
0.059	0.00	0.431	0.62	3.170	2.50	23.318	4.79	171.539	0.61	1261.915	0.00
0.068	0.00	0.502	0.84	3.696	2.57	27.187	4.86	200.000	0.41	1471.285	0.00
0.080	0.00	0.586	1.00	4.309	2.57	31.698	4.75	233.183	0.26	1715.392	0.00
0.093	0.00	0.683	1.10	5.024	2.54	36.957	4.03	271.871	0.16	2000.000	0.00
0.108	0.00	0.796	1.15	5.857	2.55	43.089	3.59	316.979	0.09		
0.126	0.00	0.928	1.18	6.829		50.238		369.570			
0.147	0.00	1.062		7.962		58.573		430.887			



Result : Analysis Report

Attached page 17

Sample Details

Sample ID : LAWA-1C3X_2

Measured : Monday, April 24, 2023 15:37:27

Sample File : D:\Data Mastersizer2000\Technical
0001\TS_66MTEC0859_66_51sam_Tetrated-1.mea

Analysed : Monday, April 24, 2023 15:37:29

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

System Details

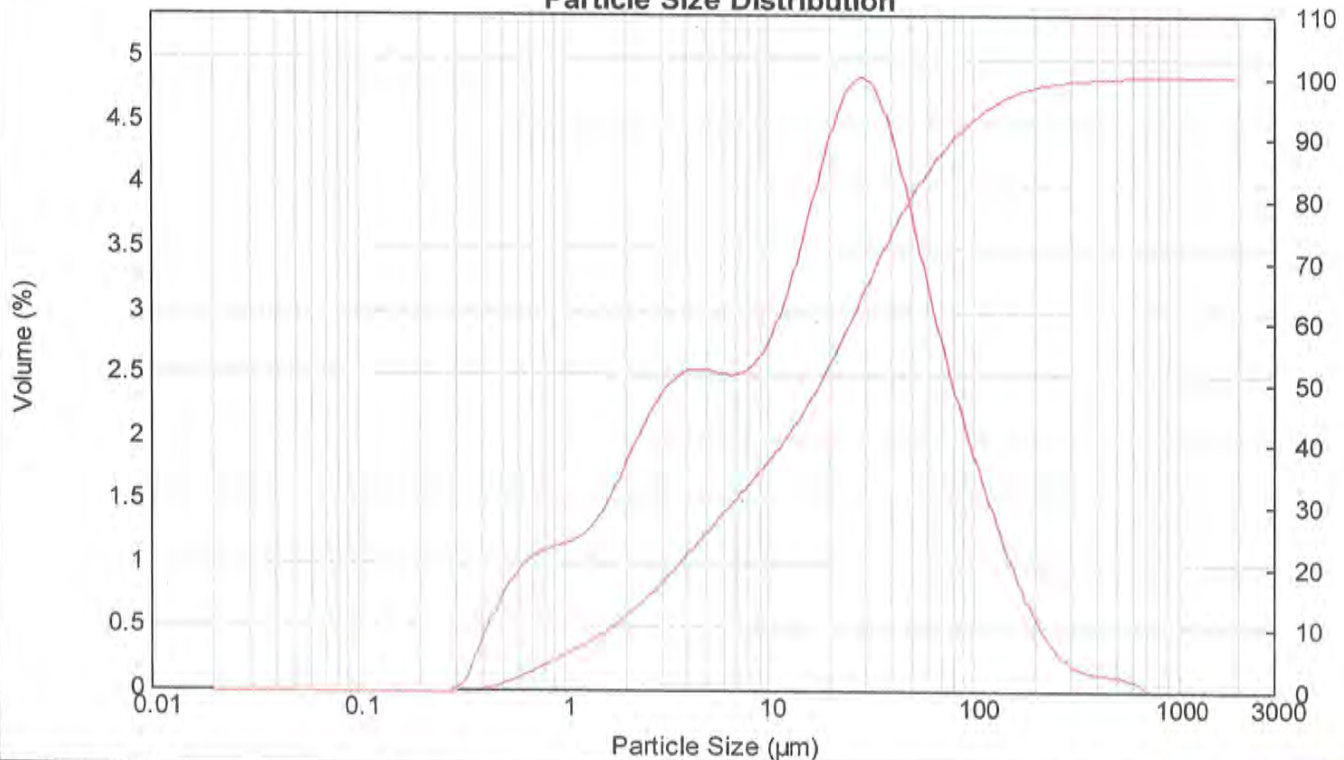
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.49 Residual (%) : 0.771
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0158 %Vol Specific Surface Area : 1.3 m²/g
Mean Diameters : D (0.1) : 1.68 um D (0.5) : 17.99 um D (0.9) : 80.96 um
D [4,3] : 33.93 um D [3,2] : 4.63 um Span : 4.408 Uniformity : 1.53

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.20	7.962	2.59	58.573	3.10	430.887	0.12
0.023	0.00	0.172	0.00	1.262	1.29	9.283	2.76	68.291	2.66	502.377	0.10
0.027	0.00	0.200	0.00	1.471	1.44	10.823	3.02	79.621	2.27	585.729	0.07
0.032	0.00	0.233	0.00	1.715	1.65	12.619	3.37	92.832	1.90	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.88	14.713	3.78	108.234	1.57	796.214	0.00
0.043	0.00	0.317	0.01	2.332	2.12	17.154	4.19	126.191	1.25	928.318	0.00
0.050	0.00	0.370	0.10	2.719	2.31	20.000	4.55	147.128	0.95	1082.339	0.00
0.059	0.00	0.431	0.38	3.170	2.45	23.318	4.80	171.539	0.70	1261.915	0.00
0.068	0.00	0.502	0.61	3.696	2.53	27.187	4.87	200.000	0.49	1471.285	0.00
0.080	0.00	0.585	0.82	4.309	2.55	31.698	4.46	233.183	0.33	1715.392	0.00
0.093	0.00	0.683	1.08	5.024	2.51	36.957	4.04	271.871	0.22	2000.000	0.00
0.108	0.00	0.795	1.13	5.857	2.52	43.089	3.57	316.979	0.16		
0.126	0.00	0.928	1.16	6.829		50.238		369.570	0.14		
0.147	0.00	1.082		7.962		58.573		430.887			

Particle Size Distribution



Result : Analysis Report

Attached page 18

Sample Details

Sample ID : LAWA-1C3X_3

Measured : Monday, April 24, 2023 15:38:15

Sample File : D:\Data Mastersizer2000\Technical
serial\TS SEMTEC0850_66_51um_Tebratech_1.mea

Analysed : Monday, April 24, 2023 15:38:17

Sample Notes : Dispersion medium : De-ionized water,
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

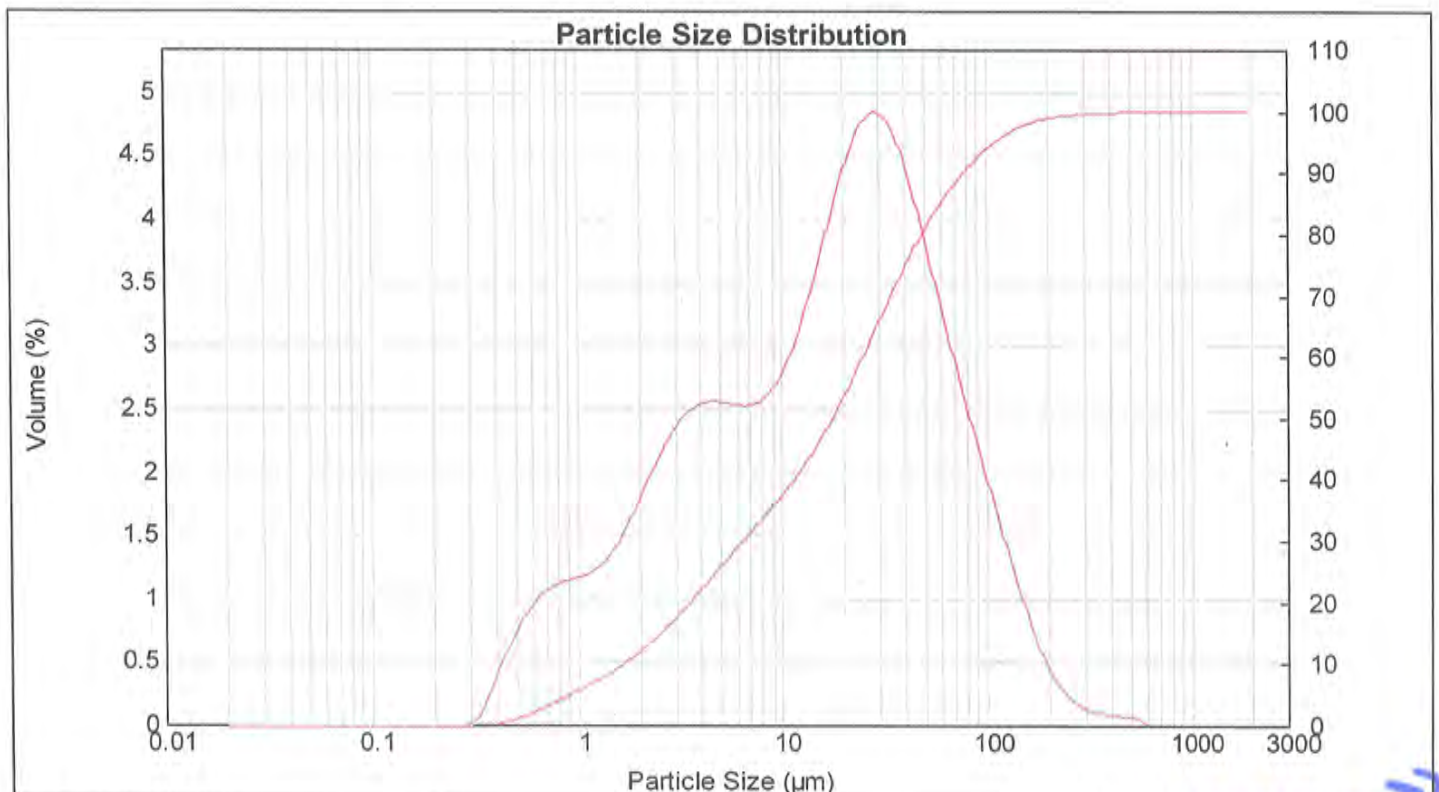
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.41 Residual (%) : 0.755
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0156 %Vol Specific Surface Area : 1.31 m²/g
Mean Diameters : D (0.1) : 1.67 um D (0.5) : 17.76 um D (0.9) : 77.83 um
D [4,3] : 31.78 um D [3,2] : 4.59 um Span : 4.289 Uniformity : 1.43

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.21	7.962	2.62	58.573	3.19	430.887	0.07
0.023	0.00	0.172	0.00	1.262	1.30	9.283	2.78	68.291	2.76	502.377	0.06
0.027	0.00	0.200	0.00	1.471	1.30	10.823	2.78	79.621	2.76	585.729	0.06
0.032	0.00	0.233	0.00	1.715	1.45	12.619	3.04	92.832	2.36	682.910	0.00
0.037	0.00	0.272	0.00	2.000	1.65	14.713	3.38	108.234	1.97	796.214	0.00
0.043	0.00	0.317	0.01	2.332	1.89	17.154	3.78	126.191	1.58	928.318	0.00
0.050	0.00	0.370	0.10	2.719	2.12	20.000	4.19	147.128	1.21	1082.339	0.00
0.059	0.00	0.431	0.38	3.170	2.32	23.318	4.55	171.539	0.87	1261.915	0.00
0.068	0.00	0.502	0.61	3.696	2.47	27.187	4.79	200.000	0.58	1471.285	0.00
0.080	0.00	0.585	0.83	4.309	2.55	31.698	4.86	233.183	0.37	1715.392	0.00
0.093	0.00	0.683	0.99	5.024	2.57	36.957	4.75	271.871	0.22	2000.000	0.00
0.108	0.00	0.796	1.09	5.857	2.56	43.089	4.48	316.979	0.14		
0.126	0.00	0.928	1.14	6.829	2.54	50.238	4.09	369.570	0.10		
0.147	0.00	1.082	1.17	7.962	2.55	58.573	3.64	430.887	0.09		



Result : Analysis Report

Attached page 19

Sample Details

Sample ID : LAWA-1D1_1

Measured : Monday, April 24, 2023 15:46:21

Sample File : D:\Data Mastersizer2000\Technical
sample\TS_66\MTEC0859_66_51sam_Telratech-1.mea

Analysed : Monday, April 24, 2023 15:46:22

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

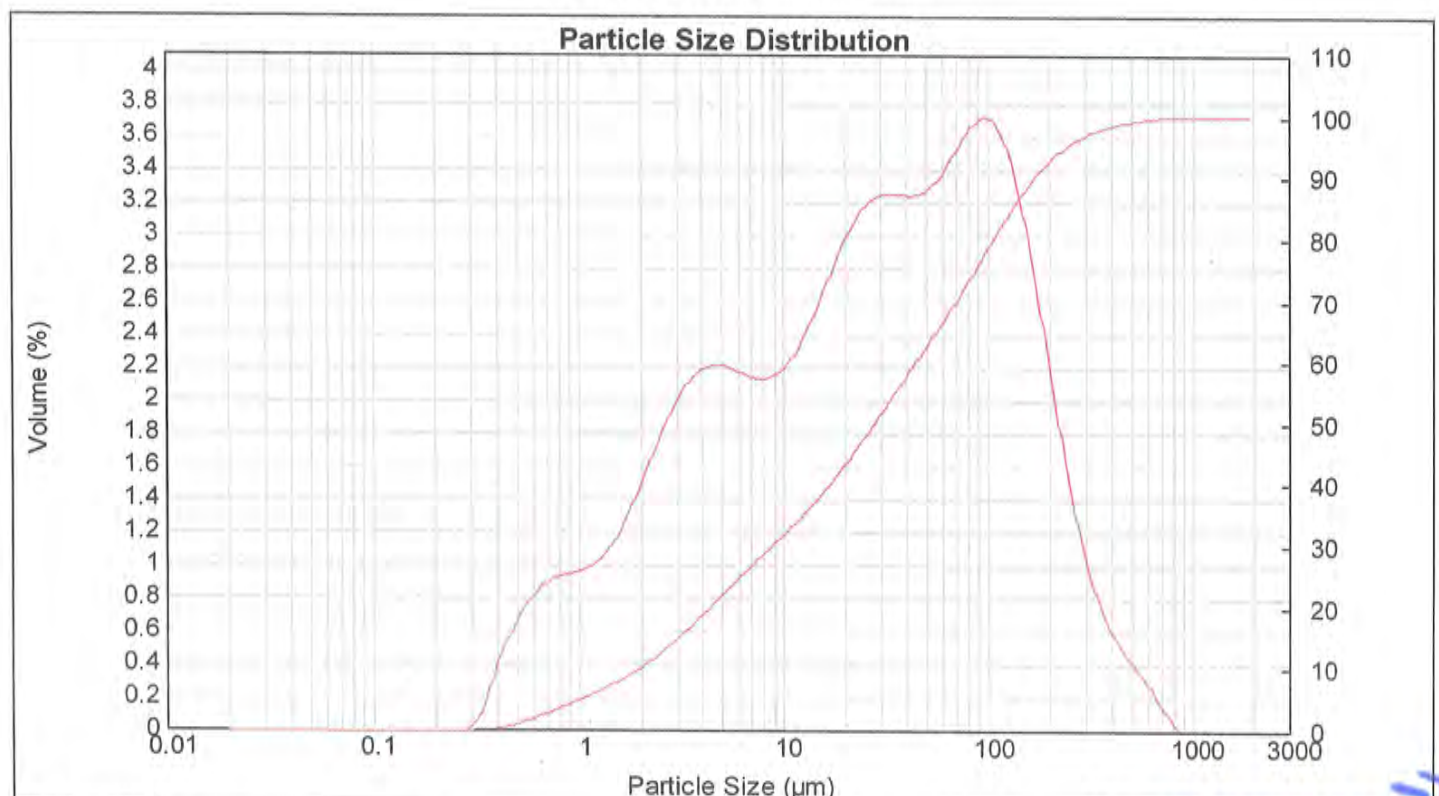
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.36 Residual (%) : 0.305
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0195 %Vol Specific Surface Area : 1.12 m²/g
Mean Diameters : D (0.1) : 1.98 um D (0.5) : 27.83 um D (0.9) : 168.87 um
D [4,3] : 64.19 um D [3,2] : 5.38 um Span : 5.998 Uniformity : 1.98

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.00	7.962	2.15	58.573	3.43	430.887	0.48
0.023	0.00	0.172	0.00	1.262	1.07	9.283	2.20	68.291	3.57	502.377	0.36
0.027	0.00	0.200	0.00	1.471	1.07	10.823	2.32	79.621	3.69	585.729	0.25
0.032	0.00	0.233	0.00	1.715	1.20	12.619	2.48	92.832	3.73	682.910	0.12
0.037	0.00	0.272	0.01	2.000	1.38	14.713	2.68	108.234	3.63	796.214	0.01
0.043	0.00	0.317	0.11	2.332	1.58	17.154	2.89	126.191	3.37	928.318	0.00
0.050	0.00	0.370	0.11	2.719	1.79	20.000	3.19	147.128	2.97	1082.339	0.00
0.059	0.00	0.431	0.38	3.170	1.97	23.318	3.06	171.539	2.49	1261.915	0.00
0.068	0.00	0.502	0.56	3.696	2.11	27.187	3.19	200.000	1.98	1471.285	0.00
0.080	0.00	0.585	0.73	4.309	2.20	31.698	3.26	233.183	1.50	1715.392	0.00
0.093	0.00	0.683	0.84	5.024	2.23	36.957	3.27	271.871	1.11	2000.000	0.00
0.108	0.00	0.796	0.91	5.857	2.21	43.089	3.26	316.979	0.82		
0.126	0.00	0.928	0.94	6.829	2.18	50.238	3.27	369.570	0.61		
0.147	0.00	1.082	0.97	7.962	2.15	58.573	3.32	430.887	0.61		



Result : Analysis Report

Attached page 20

Sample Details

Sample ID : LAWA-1D1_2

Measured : Monday, April 24, 2023 15:47:25

Sample File : D:\Data Mastersizer2000\Technical
sample\TS 66\MTEC0950_66_51sam_Tetrattech-1.mea

Analysed : Monday, April 24, 2023 15:47:26

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

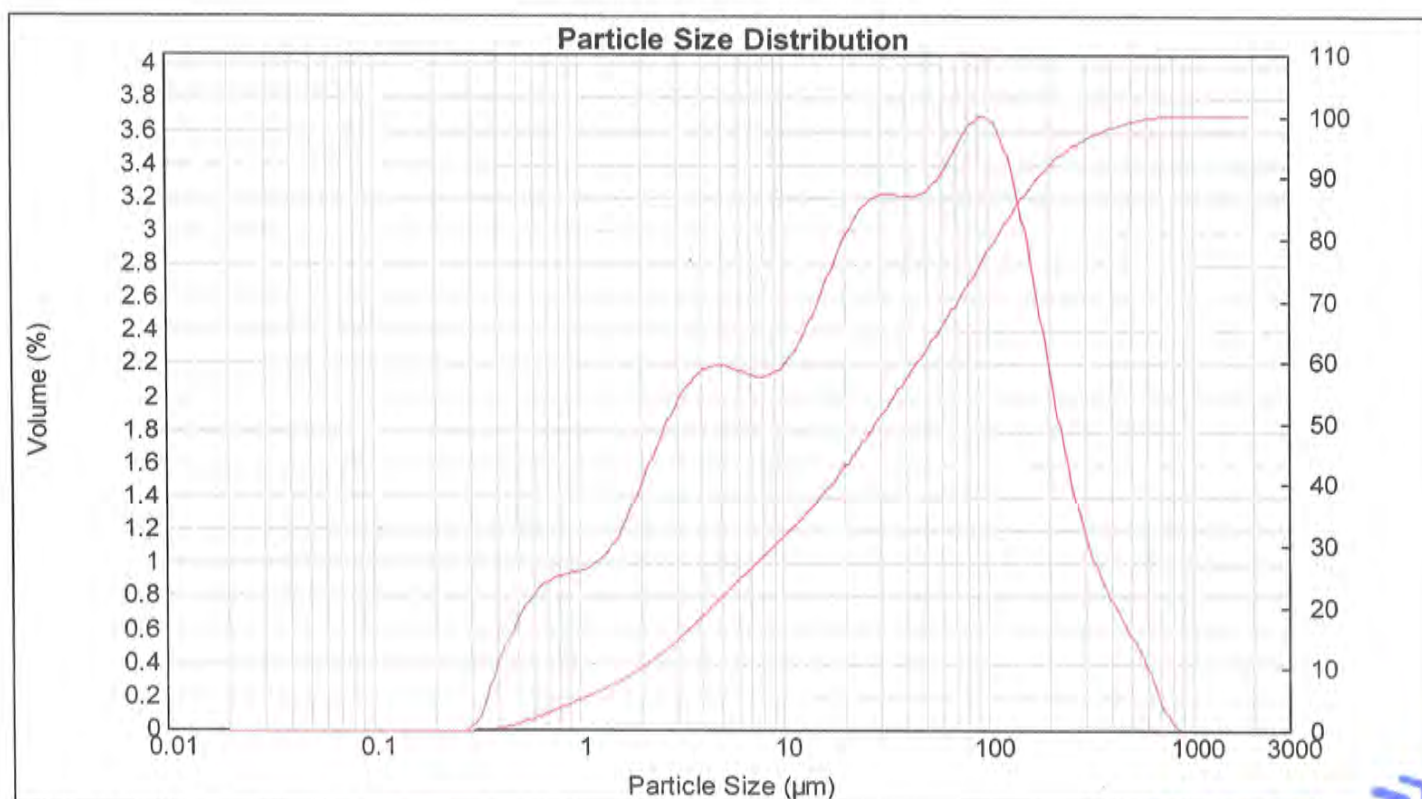
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.96 Residual (%) : 0.319
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0193 %Vol Specific Surface Area : 1.1 m²/g
Mean Diameters : D (0.1) : 2 um D (0.5) : 28.41 um D (0.9) : 177.82 um
D [4,3] : 67.61 um D [3,2] : 5.43 um Span : 6.189 Uniformity : 2.06

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	0.99	7.962	2.15	58.573	3.41	430.887	0.65
0.023	0.00	0.172	0.00	1.262	1.06	9.283	2.20	68.291	3.55	502.377	0.50
0.027	0.00	0.200	0.00	1.471	1.06	10.823	2.31	79.621	3.67	585.729	0.33
0.032	0.00	0.233	0.00	1.715	1.35	12.619	2.48	92.832	3.70	682.910	0.12
0.037	0.00	0.272	0.01	2.000	1.55	14.713	2.67	108.234	3.58	796.214	0.01
0.043	0.00	0.317	0.11	2.332	1.76	17.154	2.87	126.191	3.30	928.318	0.00
0.050	0.00	0.370	0.37	2.719	1.94	20.000	3.05	147.128	2.91	1082.339	0.00
0.059	0.00	0.431	0.56	3.170	2.08	23.318	3.17	171.539	2.44	1261.915	0.00
0.068	0.00	0.502	0.72	3.696	2.16	27.187	3.22	200.000	1.98	1471.285	0.00
0.080	0.00	0.586	0.84	4.309	2.20	31.698	3.23	233.183	1.56	1715.392	0.00
0.093	0.00	0.683	0.90	5.024	2.19	36.957	3.22	271.871	1.23	2000.000	0.00
0.108	0.00	0.796	0.94	5.857	2.17	43.089	3.23	316.979	0.98		
0.126	0.00	0.928	0.96	6.829	2.14	50.238	3.29	369.570	0.80		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 21

Sample Details

Sample ID : LAWA-1D1_3

Measured : Monday, April 24, 2023 15:50:35

Sample File : D:\Data Mastersizer2000\Technical
serial\TS 66\MTEC0859_66_51sam_Tetratex 1.mea

Analysed : Monday, April 24, 2023 15:50:36

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

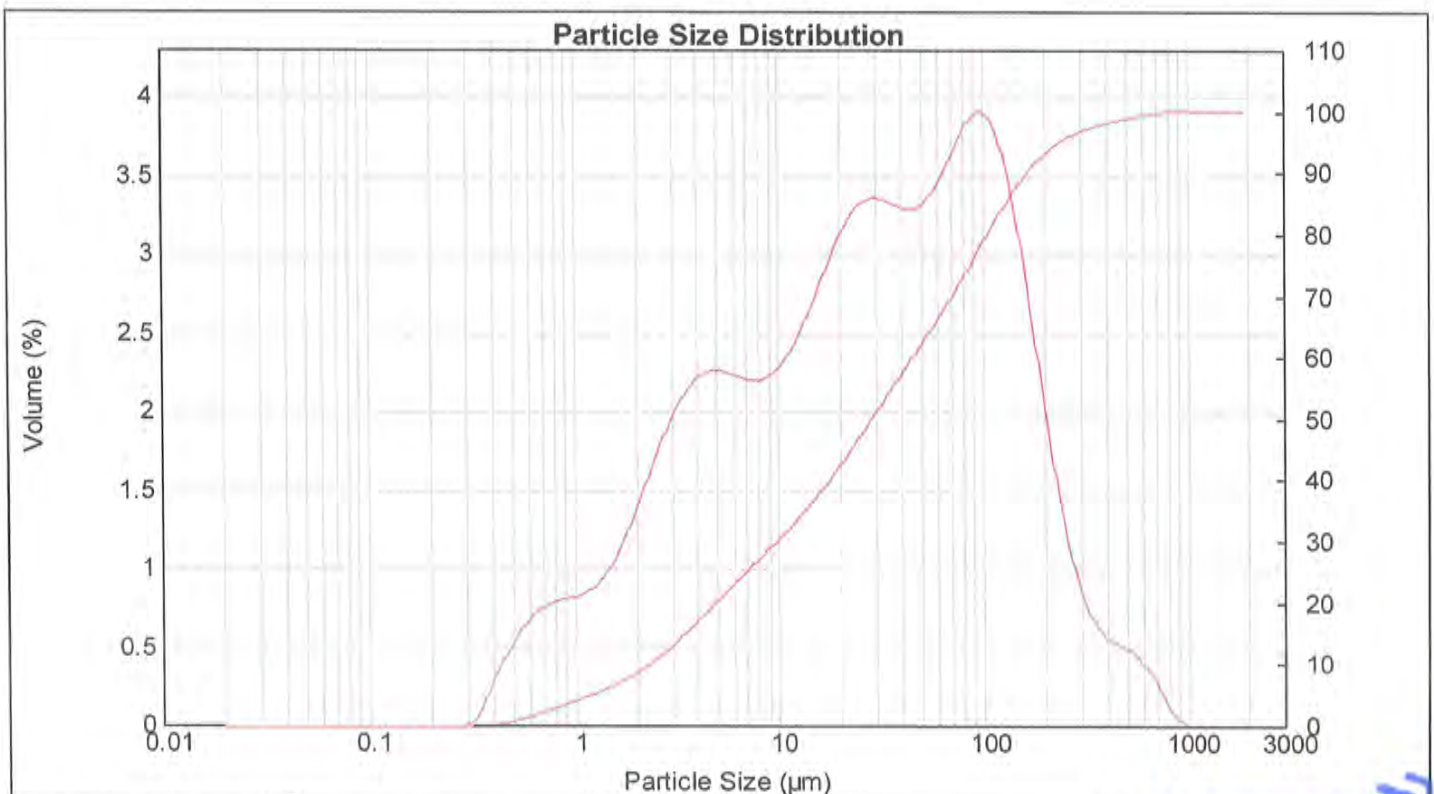
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.35 Residual (%) : 0.717
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0202 %Vol Specific Surface Area : 0.993 m²/g
Mean Diameters : D (0.1) : 2.32 um D (0.5) : 28.58 um D (0.9) : 164.17 um
D [4,3] : 65.56 um D [3,2] : 6.04 um Span : 5.663 Uniformity : 1.96

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	0.86	7.962	2.22	58.573	3.52	430.887	0.51
0.023	0.00	0.172	0.00	1.262	0.93	9.283	2.28	68.291	3.71	502.377	0.46
0.027	0.00	0.200	0.00	1.471	1.07	10.823	2.41	79.621	3.87	585.729	0.37
0.032	0.00	0.233	0.00	1.715	1.25	12.619	2.59	92.832	3.92	682.910	0.23
0.037	0.00	0.272	0.00	2.000	1.48	14.713	2.81	108.234	3.78	796.214	0.07
0.043	0.00	0.317	0.00	2.332	1.71	17.154	3.03	126.191	3.44	928.318	0.00
0.050	0.00	0.370	0.07	2.719	1.93	20.000	3.22	147.128	2.94	1082.339	0.00
0.059	0.00	0.431	0.27	3.170	2.10	23.318	3.33	171.539	2.35	1261.915	0.00
0.068	0.00	0.502	0.43	3.696	2.22	27.187	3.37	200.000	1.78	1471.285	0.00
0.080	0.00	0.585	0.59	4.309	2.27	31.698	3.35	233.183	1.28	1715.392	0.00
0.093	0.00	0.683	0.77	5.024	2.27	36.957	3.31	271.871	0.91	2000.000	0.00
0.108	0.00	0.796	0.81	5.857	2.24	43.089	3.31	316.979	0.68		
0.126	0.00	0.928	0.83	6.829	2.21	50.238	3.37	369.570	0.57		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 22

Sample Details

Sample ID : LAWA-1D2_1

Measured : Monday, April 24, 2023 15:58:52

Sample File : D:\Data Mastersizer2000\Technical
series\TS 66\MTFC0850_66_51sam_Tetratex-1.mea

Analysed : Monday, April 24, 2023 15:58:53

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

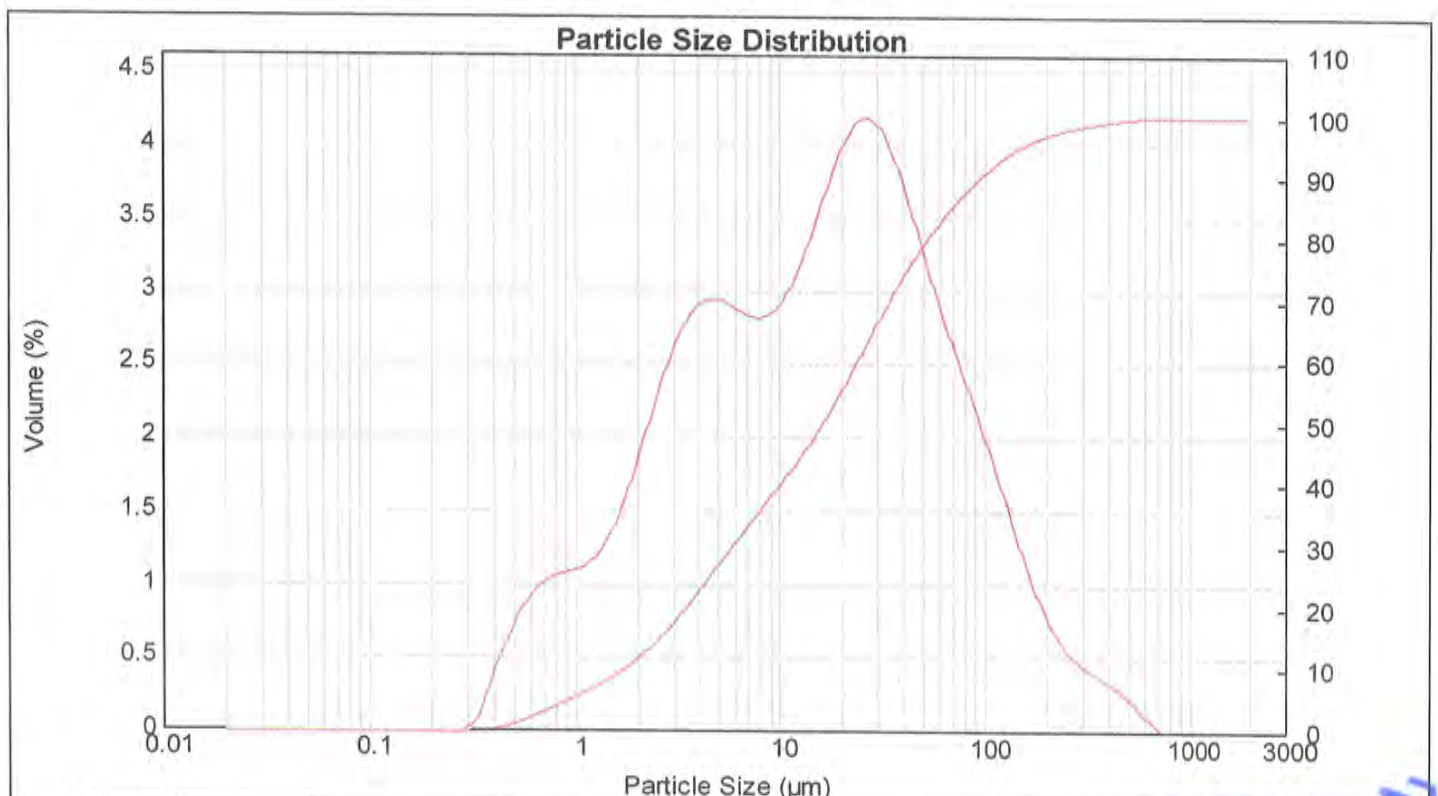
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.42 Residual (%) : 0.667
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0164 %Vol Specific Surface Area : 1.31 m²/g
Mean Diameters : D (0.1) : 1.74 um D (0.5) : 16.23 um D (0.9) : 94.64 um
D [4,3] : 38.16 um D [3,2] : 4.6 um Span : 5.724 Uniformity : 1.99

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.15	7.962	2.84	58.573	2.84	430.887	0.27
0.023	0.00	0.172	0.00	1.262	1.24	9.283	2.91	68.291	2.56	502.377	0.19
0.027	0.00	0.200	0.00	1.471	1.24	10.823	3.07	79.621	2.30	585.729	0.08
0.032	0.00	0.233	0.00	1.715	1.42	12.619	3.31	92.832	2.03	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.67	14.713	3.59	108.234	1.74	796.214	0.00
0.043	0.00	0.317	0.10	2.332	2.28	17.154	3.86	126.191	1.44	928.318	0.00
0.050	0.00	0.370	0.37	2.719	2.56	20.000	4.08	147.128	1.15	1082.339	0.00
0.059	0.00	0.431	0.59	3.170	2.77	23.318	4.19	171.539	0.90	1261.915	0.00
0.068	0.00	0.502	0.80	3.696	2.91	27.187	4.18	200.000	0.70	1471.285	0.00
0.080	0.00	0.586	0.95	4.309	2.95	31.698	4.03	233.183	0.56	1715.392	0.00
0.093	0.00	0.683	1.04	5.024	2.93	35.957	3.77	271.871	0.46	2000.000	0.00
0.108	0.00	0.796	1.08	5.857	2.88	43.089	3.46	316.979	0.39		
0.126	0.00	0.928	1.10	6.829	2.84	50.238	3.14	369.570	0.34		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 23

Sample Details

Sample ID : LAWA-1D2_2

Measured : Monday, April 24, 2023 16:00:11

Sample File : D:\Data Mastersizer2000\Technical
sample\TS 66\NTEC0950_66_51sam_Tetratosh-1.mea

Analysed : Monday, April 24, 2023 16:00:12

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

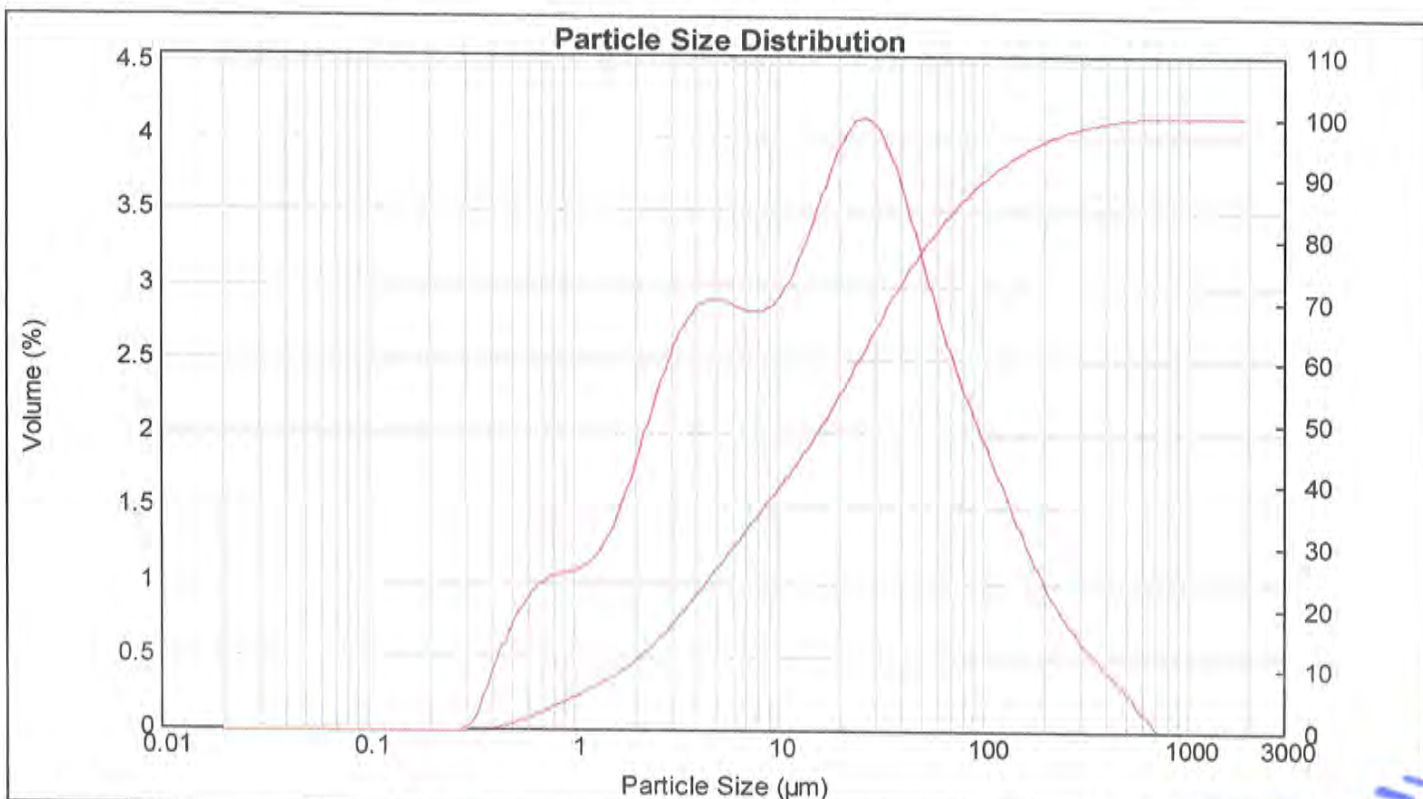
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.93 Residual (%) : 0.671
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0163 %Vol Specific Surface Area : 1.28 m²/g
Mean Diameters : D (0.1) : 1.78 um D (0.5) : 16.68 um D (0.9) : 104.84 um
D [4,3] : 41.34 um D [3,2] : 4.69 um Span : 6.178 Uniformity : 2.12

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.12	7.962	2.84	58.573	2.76	430.887	0.32
0.023	0.00	0.172	0.00	1.262	1.22	9.283	2.92	68.291	2.48	502.377	0.22
0.027	0.00	0.200	0.00	1.471	1.39	10.823	3.07	79.621	2.23	585.729	0.10
0.032	0.00	0.233	0.00	1.715	1.63	12.619	3.29	92.832	2.00	682.910	0.01
0.037	0.00	0.272	0.01	2.000	1.92	14.713	3.55	108.234	1.76	796.214	0.00
0.043	0.00	0.317	0.09	2.332	2.22	17.154	3.81	126.191	1.53	928.318	0.00
0.050	0.00	0.370	0.36	2.719	2.50	20.000	4.02	147.128	1.31	1082.339	0.00
0.059	0.00	0.431	0.58	3.170	2.71	23.318	4.13	171.539	1.10	1261.915	0.00
0.068	0.00	0.502	0.78	3.696	2.85	27.187	4.12	200.000	0.92	1471.285	0.00
0.080	0.00	0.586	0.93	4.309	2.91	31.698	3.98	233.183	0.76	1715.392	0.00
0.093	0.00	0.683	1.02	5.024	2.91	36.957	3.73	271.871	0.63	2000.000	0.00
0.108	0.00	0.796	1.06	5.857	2.87	43.089	3.41	316.979	0.52		
0.126	0.00	0.928	1.08	6.829	2.84	50.238	3.07	369.570	0.42		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 24

Sample Details

Sample ID : LAWA-1D2_3

Measured : Monday, April 24, 2023 16:01:45

Sample File : D:\Data Mastersizer2000\Technical
sample\TS_66\MTEC0859_66_51sam_Tetrattech-1.mea

Analysed : Monday, April 24, 2023 16:01:47

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

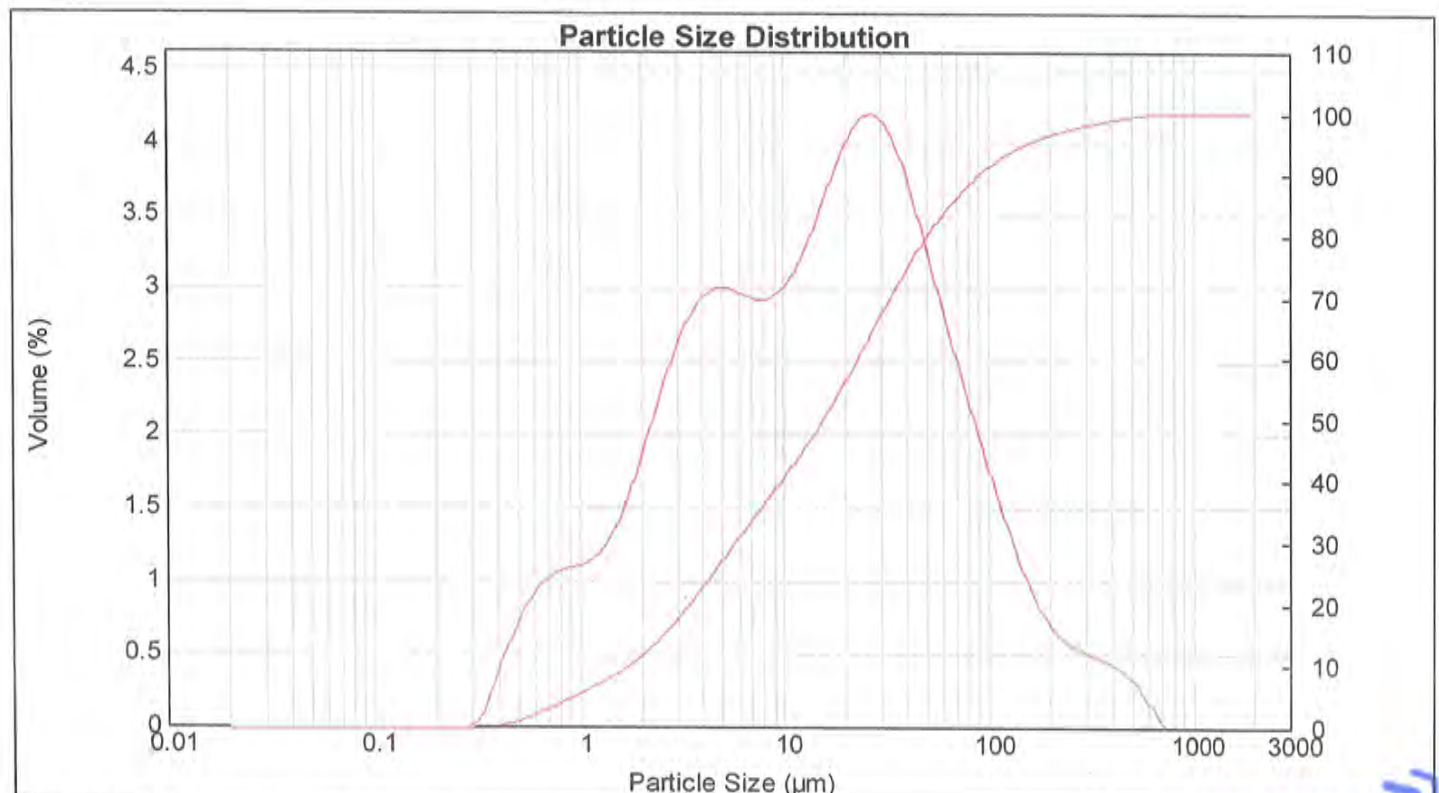
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.59 Residual (%) : 0.691
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0155 %Vol Specific Surface Area : 1.31 m²/g
Mean Diameters : D (0.1) : 1.73 um D (0.5) : 15.69 um D (0.9) : 91.22 um
D [4,3] : 38.93 um D [3,2] : 4.57 um Span : 5.705 Uniformity : 2.12

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.15	7.962	2.94	58.573	2.77	430.887	0.38
0.023	0.00	0.172	0.00	1.262	1.25	9.283	3.01	68.291	2.43	502.377	0.28
0.027	0.00	0.200	0.00	1.471	1.25	10.823	3.16	79.621	2.11	585.729	0.15
0.032	0.00	0.233	0.00	1.715	1.42	12.619	3.37	92.832	1.80	682.910	0.01
0.037	0.00	0.272	0.01	2.000	1.67	14.713	3.63	108.234	1.50	796.214	0.00
0.043	0.00	0.317	0.09	2.332	1.97	17.154	3.88	126.191	1.22	928.318	0.00
0.050	0.00	0.370	0.37	2.719	2.28	20.000	4.09	147.128	0.98	1082.339	0.00
0.059	0.00	0.431	0.59	3.170	2.56	23.318	4.20	171.539	0.79	1261.915	0.00
0.068	0.00	0.502	0.80	3.696	2.79	27.187	4.19	200.000	0.66	1471.285	0.00
0.080	0.00	0.586	0.95	4.309	3.01	31.698	4.04	233.183	0.57	1715.392	0.00
0.093	0.00	0.683	1.04	5.024	3.01	36.957	3.79	271.871	0.52	2000.000	0.00
0.108	0.00	0.796	1.09	5.857	2.97	43.089	3.47	316.979	0.48		
0.126	0.00	0.928	1.11	6.829	2.94	50.238	3.12	369.570	0.44		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 25

Sample Details

Sample ID : LAWA-1D3X_1

Measured : Monday, April 24, 2023 16:10:34

Sample File : D:\Data Mastersizer2000\Technical
session\TS_66\MTEC0950_66_51sam_Tetratex-1.mea

Analysed : Monday, April 24, 2023 16:10:35

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

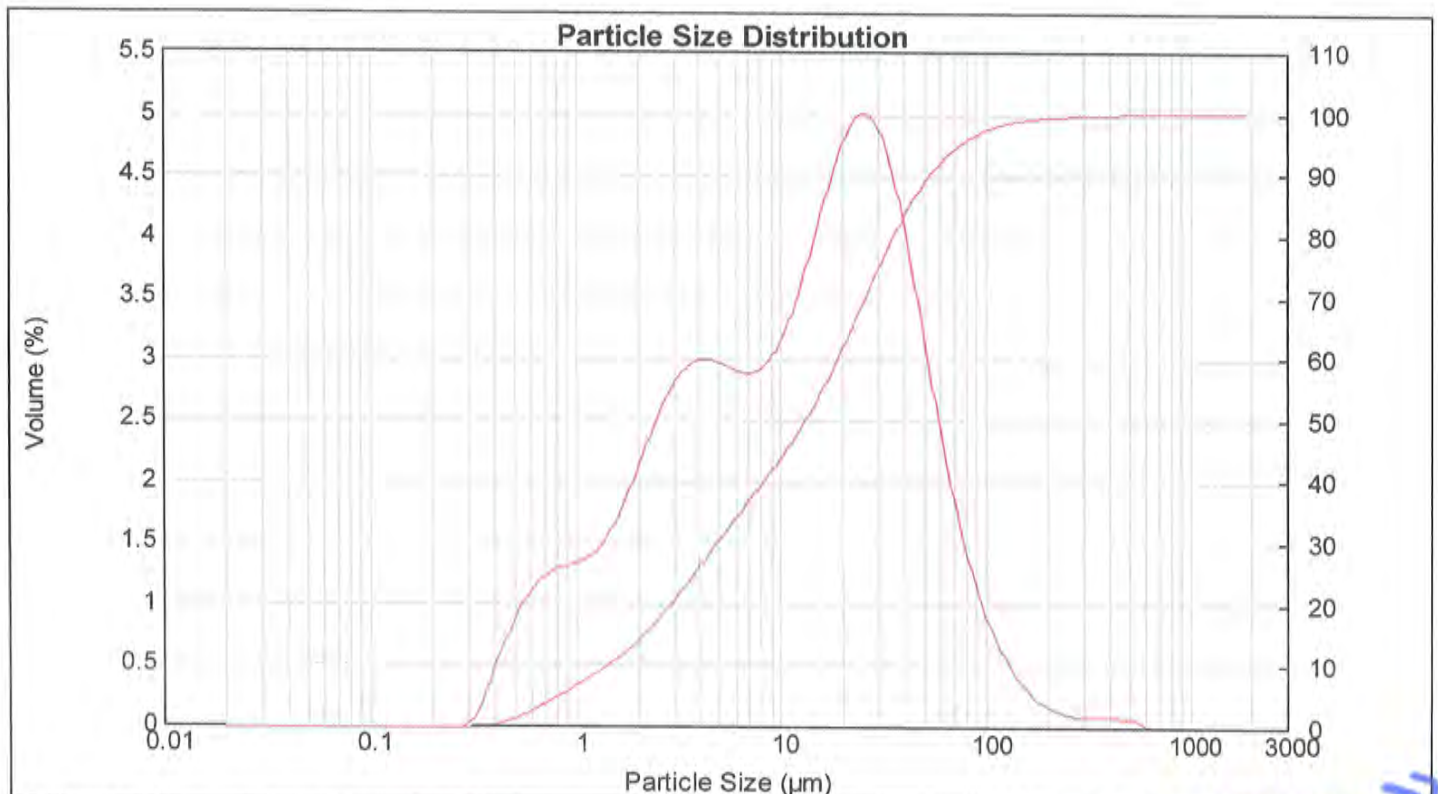
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.02 Residual (%) : 0.719
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0140 %Vol Specific Surface Area : 1.51 m²/g
Mean Diameters : D (0.1) : 1.43 um D (0.5) : 13.28 um D (0.9) : 53.87 um
D [4,3] : 23.71 um D [3,2] : 3.97 um Span : 3.950 Uniformity : 1.42

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.40	7.962	2.98	58.573	2.26	430.887	0.08
0.023	0.00	0.172	0.00	1.262	1.51	9.283	3.16	68.291	1.72	502.377	0.07
0.027	0.00	0.200	0.00	1.471	1.70	10.823	3.44	79.621	1.28	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.95	12.619	3.81	92.832	0.94	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.25	14.713	4.22	108.234	0.67	796.214	0.00
0.043	0.00	0.317	0.13	2.332	2.53	17.154	4.61	126.191	0.46	928.318	0.00
0.050	0.00	0.370	0.46	2.719	2.77	20.000	4.90	147.128	0.31	1082.339	0.00
0.059	0.00	0.431	0.73	3.170	2.93	23.318	5.03	171.539	0.21	1261.915	0.00
0.068	0.00	0.502	0.97	3.696	3.01	27.187	4.94	200.000	0.14	1471.285	0.00
0.080	0.00	0.586	1.15	4.309	2.95	31.698	4.15	233.183	0.09	1715.392	0.00
0.093	0.00	0.683	1.26	5.024	2.91	36.957	3.54	271.871	0.08	2000.000	0.00
0.108	0.00	0.796	1.32	5.857	2.91	43.089	2.88	316.979	0.08		
0.126	0.00	0.928	1.35	6.829		50.238		369.570			
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 26

Sample Details

Sample ID : LAWA-1D3X_2

Measured : Monday, April 24, 2023 16:11:38

Sample File : D:\Data Mastersizer2000\Technical
sample\TS 66\MTEC0859_66_51sam_Tetratexh 1.mes

Analysed : Monday, April 24, 2023 16:11:39

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

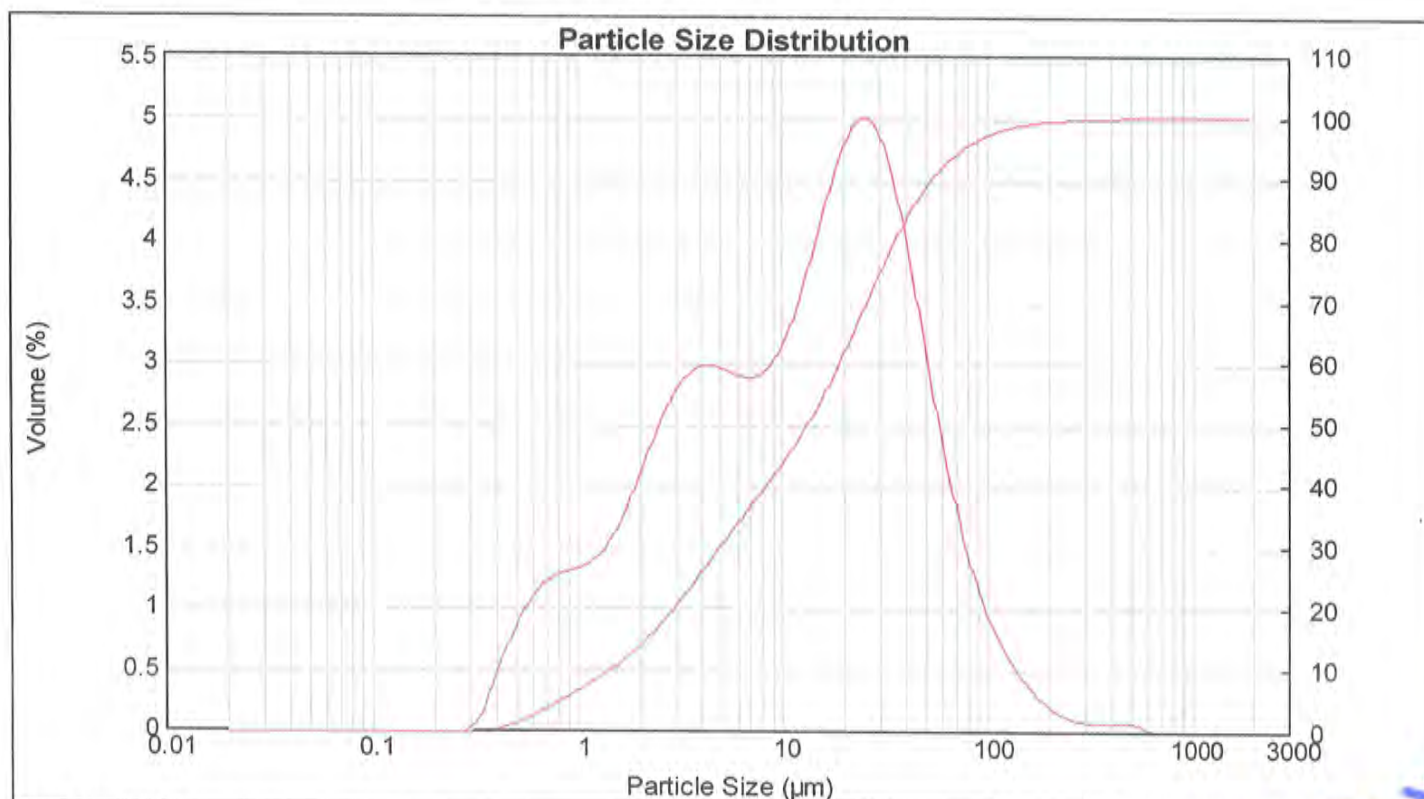
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.72 Residual (%) : 0.722
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0139 %Vol Specific Surface Area : 1.5 m²/g
Mean Diameters : D (0.1) : 1.44 um D (0.5) : 13.34 um D (0.9) : 54.36 um
D [4,3] : 23.87 um D [3,2] : 3.99 um Span : 3.969 Uniformity : 1.43

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.39	7.962	2.99	58.573	2.22	430.887	0.07
0.023	0.00	0.172	0.00	1.262	1.50	9.283	3.17	68.291	1.71	502.377	0.06
0.027	0.00	0.200	0.00	1.471	1.68	10.823	3.46	79.621	1.30	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.94	12.619	3.83	92.832	0.98	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.23	14.713	4.25	108.234	0.73	796.214	0.00
0.043	0.00	0.317	0.13	2.332	2.52	17.154	4.64	126.191	0.53	928.318	0.00
0.050	0.00	0.370	0.45	2.719	2.76	20.000	4.92	147.128	0.37	1082.339	0.00
0.059	0.00	0.431	0.72	3.170	2.92	23.318	5.04	171.539	0.25	1261.915	0.00
0.068	0.00	0.502	0.97	3.696	3.00	27.187	4.94	200.000	0.17	1471.285	0.00
0.080	0.00	0.586	1.14	4.309	3.00	31.698	4.61	233.183	0.11	1715.392	0.00
0.093	0.00	0.683	1.25	5.024	2.96	36.957	4.10	271.871	0.08	2000.000	0.00
0.108	0.00	0.796	1.31	5.857	2.92	43.089	3.48	316.979	0.07		
0.126	0.00	0.928	1.34	6.829	2.91	50.238	2.83	369.570	0.07		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 27

Sample Details

Sample ID : LAWA-1D3X_3

Measured : Monday, April 24, 2023 16:13:28

Sample File : D:\Data Mastersizer2000\Technical
session\TS_66\MTEC0859_66_51sam_Tebratech-1.mea

Analysed : Monday, April 24, 2023 16:13:30

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

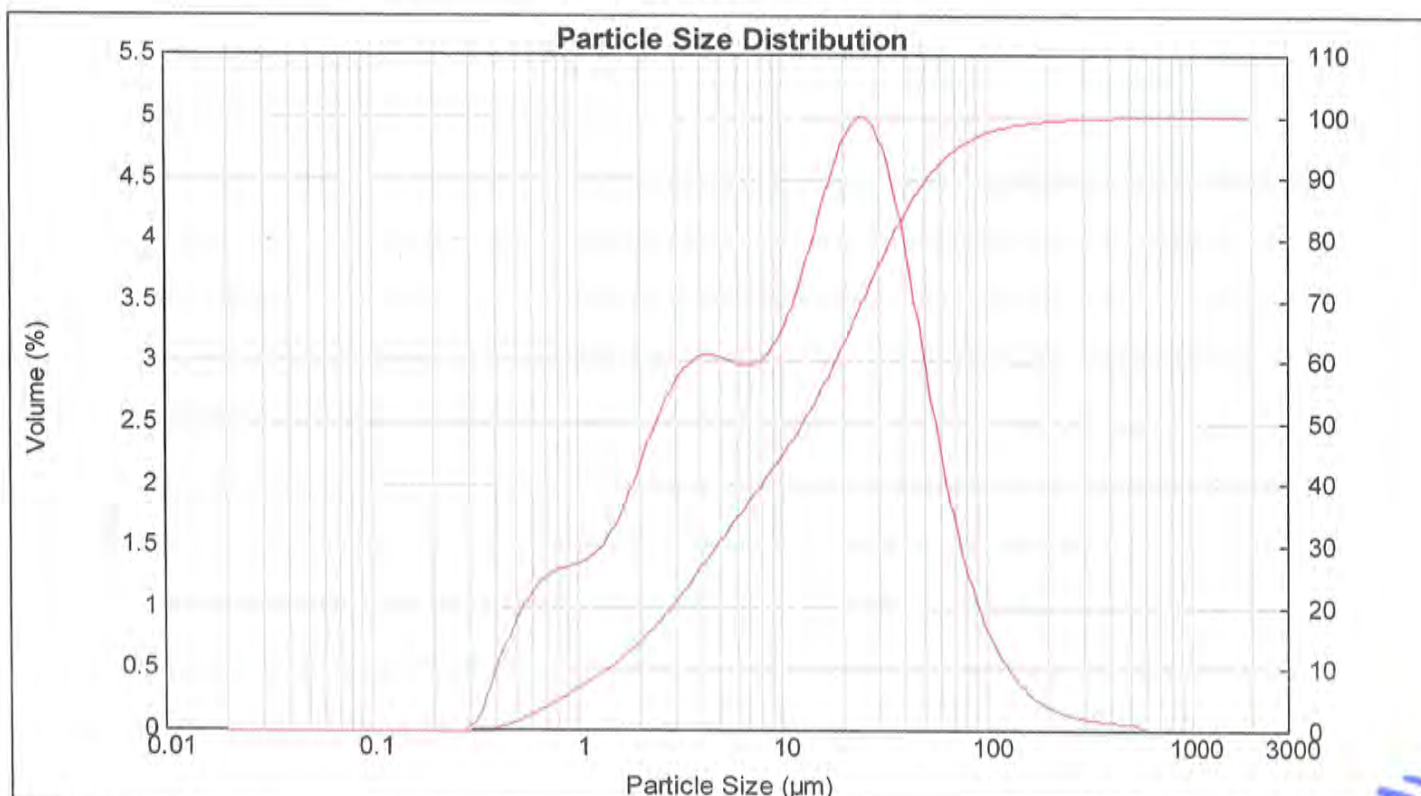
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.40 Residual (%) : 0.719
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0134 %Vol Specific Surface Area : 1.53 m²/g
Mean Diameters : D (0.1) : 1.42 um D (0.5) : 12.82 um D (0.9) : 52.22 um
D [4,3] : 23.07 um D [3,2] : 3.93 um Span : 3.963 Uniformity : 1.43

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.41	7.962	3.07	58.573	2.11	430.887	0.06
0.023	0.00	0.172	0.00	1.262	1.52	9.283	3.25	68.291	1.59	502.377	0.04
0.027	0.00	0.200	0.00	1.471	1.71	10.823	3.53	79.621	1.18	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.97	12.619	3.90	92.832	0.86	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.27	14.713	4.29	108.234	0.62	796.214	0.00
0.043	0.00	0.317	0.13	2.332	2.56	17.154	4.66	126.191	0.45	928.318	0.00
0.050	0.00	0.370	0.46	2.719	2.80	20.000	4.93	147.128	0.32	1082.339	0.00
0.059	0.00	0.431	0.73	3.170	2.97	23.318	5.02	171.539	0.23	1261.915	0.00
0.068	0.00	0.502	0.98	3.696	3.05	27.187	4.89	200.000	0.17	1471.285	0.00
0.080	0.00	0.586	1.16	4.309	3.06	31.698	4.55	233.183	0.13	1715.392	0.00
0.093	0.00	0.683	1.27	5.024	3.03	36.957	4.02	271.871	0.10	2000.000	0.00
0.108	0.00	0.796	1.33	5.857	2.99	43.089	3.39	316.979	0.08		
0.126	0.00	0.928	1.36	6.829	2.99	50.238	2.72	369.570	0.07		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 28

Sample Details

Sample ID : LAWA-3C1_1

Measured : Monday, April 24, 2023 16:22:09

Sample File : D:\Data Mastersizer2000\Technical
sample\TS_66\MTEC0850_66_51sam_TetraTech-1.mea

Analysed : Monday, April 24, 2023 16:22:11

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

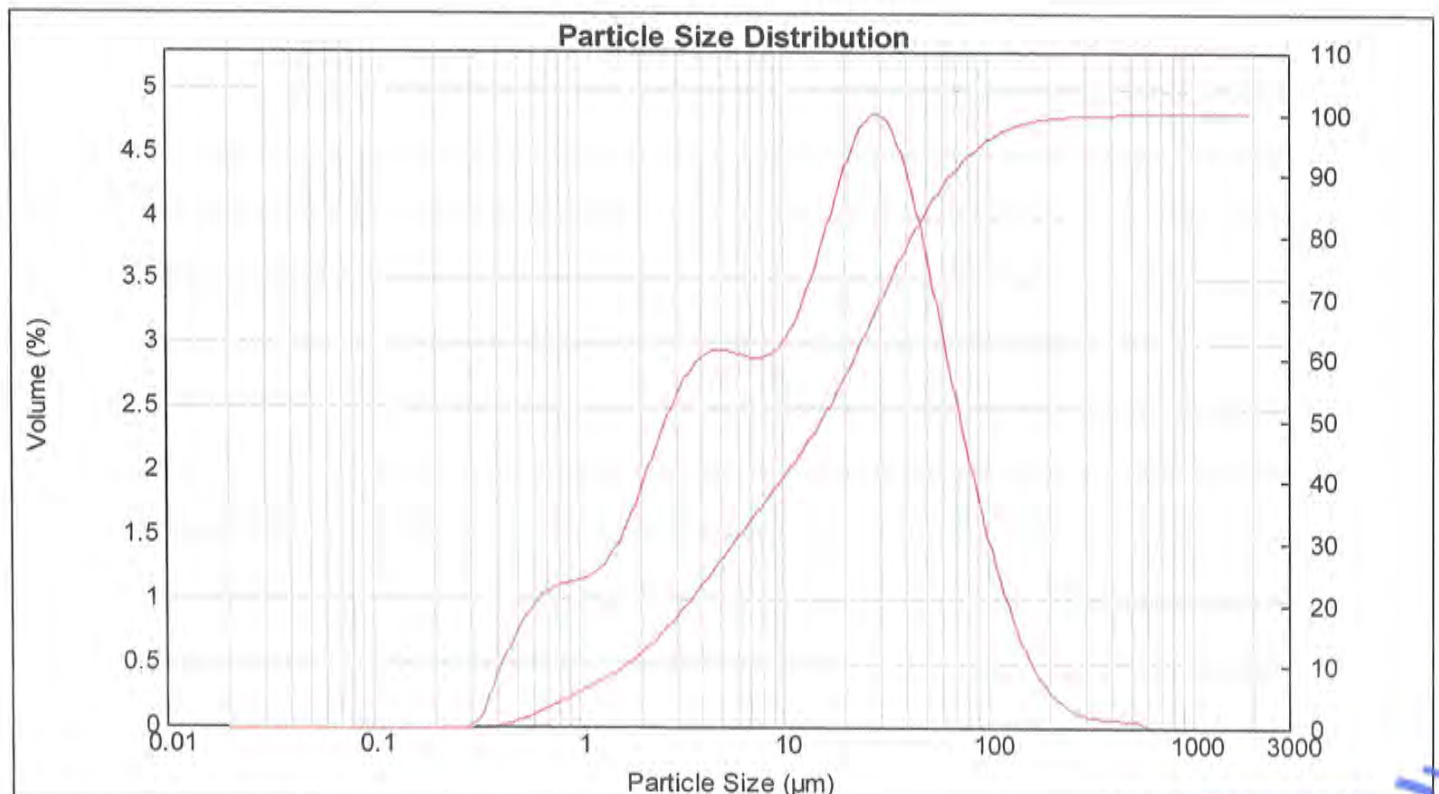
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.26 Residual (%) : 0.717
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0158 %Vol Specific Surface Area : 1.35 m²/g
Mean Diameters : D (0.1) : 1.67 um D (0.5) : 15.47 um D (0.9) : 66.63 um
D [4,3] : 27.86 um D [3,2] : 4.46 um Span : 4.199 Uniformity : 1.44

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.20	7.962	2.92	58.573	2.95	430.887	0.06
0.023	0.00	0.172	0.00	1.262	1.29	9.283	3.02	68.291	2.44	502.377	0.05
0.027	0.00	0.200	0.00	1.471	1.46	10.823	3.21	79.621	1.96	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.69	12.619	3.50	92.832	1.53	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.98	14.713	3.84	108.234	1.15	796.214	0.00
0.043	0.00	0.317	0.10	2.332	2.27	17.154	4.20	126.191	0.82	928.318	0.00
0.050	0.00	0.370	0.38	2.719	2.54	20.000	4.53	147.128	0.56	1082.339	0.00
0.059	0.00	0.431	0.62	3.170	2.76	23.318	4.75	171.539	0.37	1261.915	0.00
0.068	0.00	0.502	0.83	3.696	2.90	27.187	4.81	200.000	0.23	1471.285	0.00
0.080	0.00	0.586	0.99	4.309	2.96	31.698	4.70	233.183	0.15	1715.392	0.00
0.093	0.00	0.683	1.09	5.024	2.93	36.957	4.41	271.871	0.10	2000.000	0.00
0.108	0.00	0.796	1.13	5.857	2.90	43.089	3.98	316.979	0.08		
0.126	0.00	0.928	1.16	6.829	2.90	50.238	3.48	369.570	0.07		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 29

Sample Details

Sample ID : LAWA-3C1_2

Measured : Monday, April 24, 2023 16:24:17

Sample File : D:\Data Mastersizer2000\Technical
results\TS_66\MTEC0850_66_51sam_Tetrattech-1.mea

Analysed : Monday, April 24, 2023 16:24:19

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

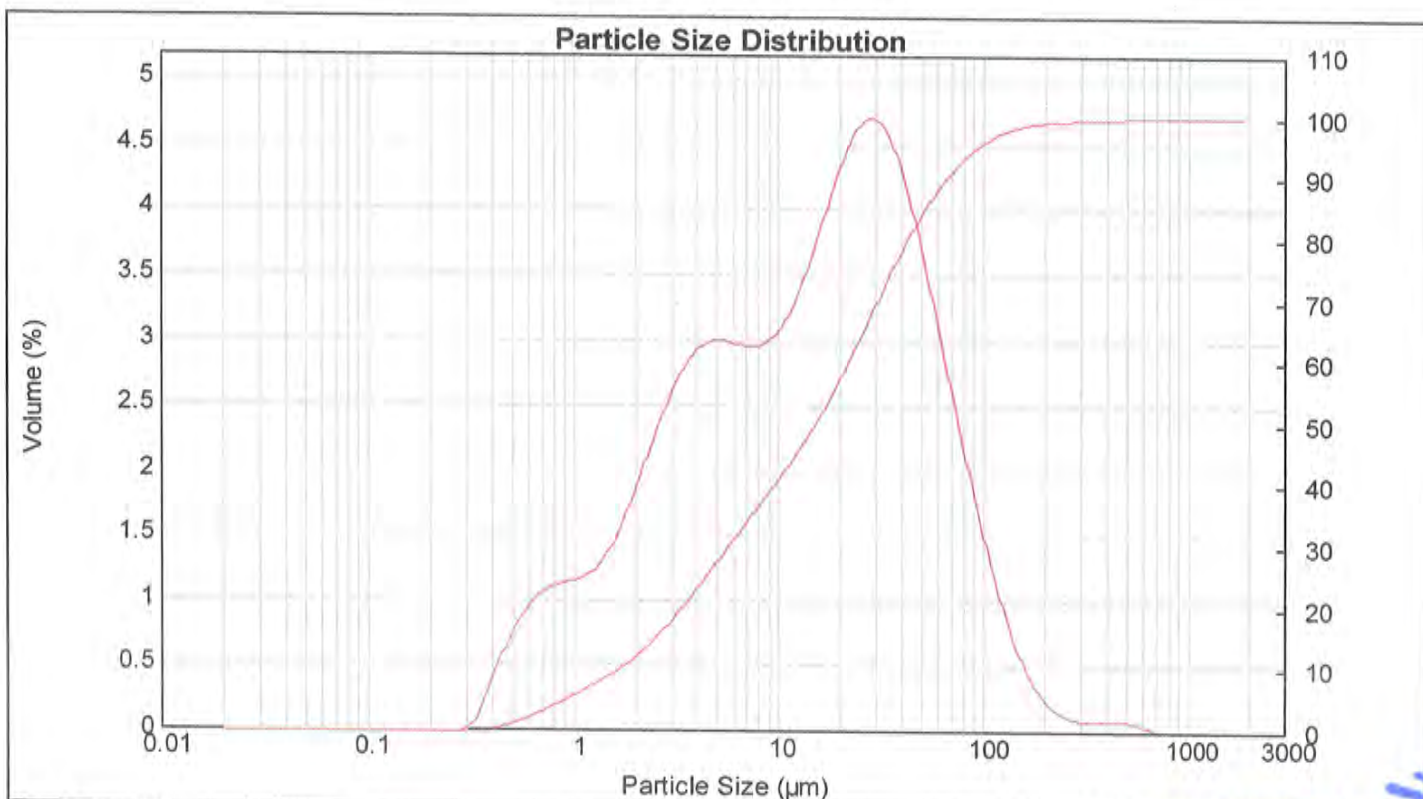
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.80 Residual (%) : 0.710
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0154 %Vol Specific Surface Area : 1.35 m²/g
Mean Diameters : D (0.1) : 1.68 um D (0.5) : 15.21 um D (0.9) : 66.62 um
D [4,3] : 27.99 um D [3,2] : 4.45 um Span : 4.271 Uniformity : 1.48

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.20	7.962	2.98	58.573	2.99	430.887	0.08
0.023	0.00	0.172	0.00	1.262	1.29	9.283	3.07	68.291	2.49	502.377	0.07
0.027	0.00	0.200	0.00	1.471	1.46	10.823	3.25	79.621	2.00	585.729	0.04
0.032	0.00	0.233	0.00	1.715	1.70	12.619	3.51	92.832	1.55	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.98	14.713	3.83	108.234	1.14	796.214	0.00
0.043	0.00	0.317	0.09	2.332	2.28	17.154	4.16	126.191	0.79	928.318	0.00
0.050	0.00	0.370	0.38	2.719	2.55	20.000	4.46	147.128	0.51	1082.339	0.00
0.059	0.00	0.431	0.61	3.170	2.77	23.318	4.66	171.539	0.32	1261.915	0.00
0.068	0.00	0.502	0.83	3.696	2.92	27.187	4.72	200.000	0.19	1471.285	0.00
0.080	0.00	0.586	0.99	4.309	2.99	31.698	4.62	233.183	0.12	1715.392	0.00
0.093	0.00	0.683	1.09	5.024	3.01	36.957	4.35	271.871	0.09	2000.000	0.00
0.108	0.00	0.796	1.13	5.857	2.98	43.089	3.96	316.979	0.08		
0.126	0.00	0.928	1.16	6.829	2.96	50.238	3.49	369.570	0.08		
0.147	0.00	1.082		7.962		58.573		430.887	0.08		



Result : Analysis Report

Attached page 30

Sample Details

Sample ID : LAWA-3C1_3

Measured : Monday, April 24, 2023 16:25:04

Sample File : D:\Data Mastersizer2000\Technical
session\TS_66\MTEC0859_66_51sam_Tetrattech-1.mea

Analysed : Monday, April 24, 2023 16:25:06

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

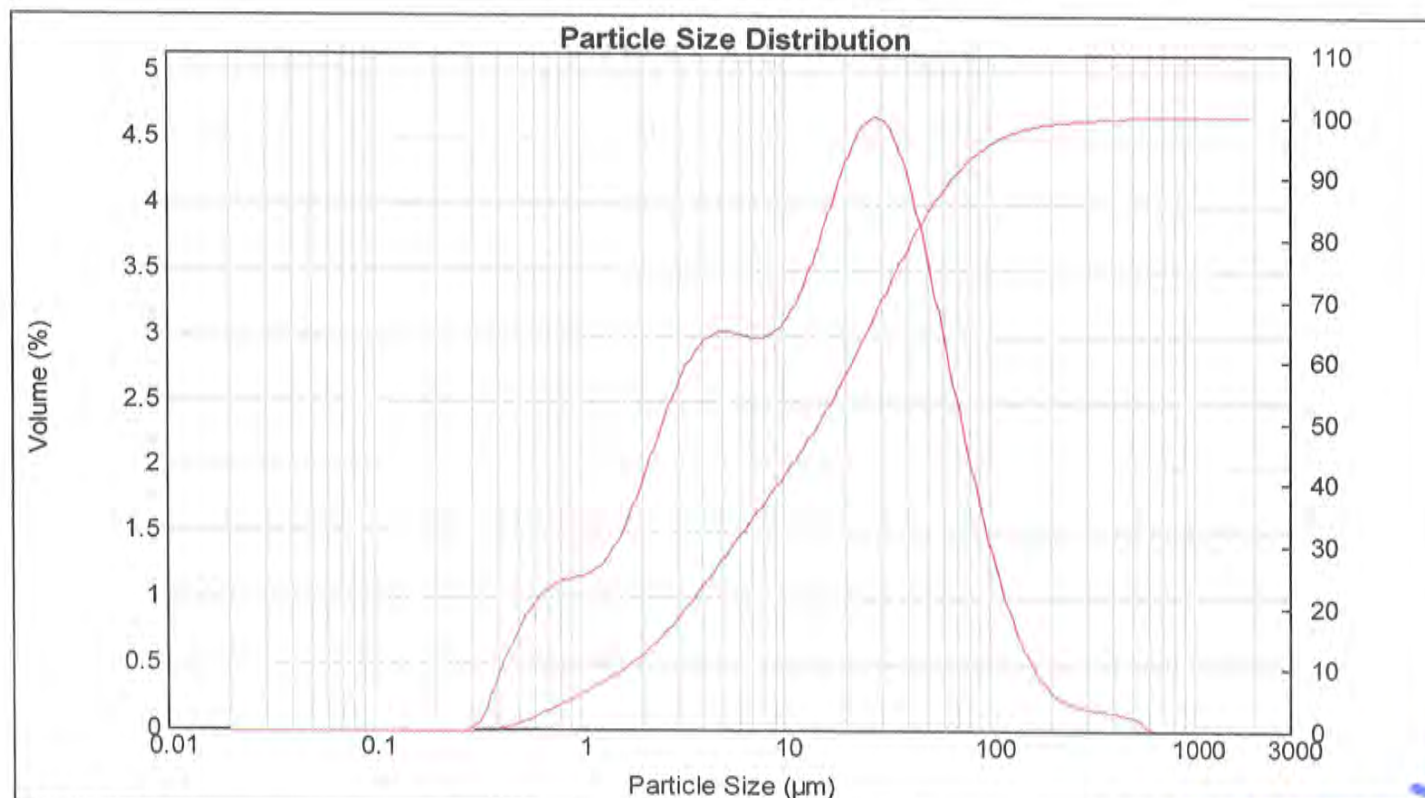
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.69 Residual (%) : 0.712
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0151 %Vol Specific Surface Area : 1.36 m²/g
Mean Diameters : D (0.1) : 1.66 um D (0.5) : 14.88 um D (0.9) : 66.79 um
D [4,3] : 28.63 um D [3,2] : 4.41 um Span : 4.377 Uniformity : 1.56

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.21	7.962	3.02	58.573	2.86	430.887	0.12
0.023	0.00	0.172	0.00	1.262	1.30	9.283	3.11	68.291	2.36	502.377	0.09
0.027	0.00	0.200	0.00	1.471	1.30	10.823	3.11	79.621	1.89	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.47	12.619	3.28	92.832	1.46	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.00	14.713	3.85	108.234	1.09	796.214	0.00
0.043	0.00	0.317	0.10	2.332	2.30	17.154	4.17	126.191	0.77	928.318	0.00
0.050	0.00	0.370	0.38	2.719	2.58	20.000	4.45	147.128	0.53	1082.339	0.00
0.059	0.00	0.431	0.62	3.170	2.80	23.318	4.63	171.539	0.37	1261.915	0.00
0.068	0.00	0.502	0.84	3.696	2.95	27.187	4.67	200.000	0.26	1471.285	0.00
0.080	0.00	0.586	1.00	4.309	3.02	31.698	4.54	233.183	0.21	1715.392	0.00
0.093	0.00	0.683	1.10	5.024	3.04	36.957	4.26	271.871	0.17	2000.000	0.00
0.108	0.00	0.796	1.15	5.857	3.01	43.089	3.85	316.979	0.16		
0.126	0.00	0.928	1.17	6.829	3.00	50.238	3.37	369.570	0.14		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 31

Sample Details

Sample ID : LAWA-3C2_1

Measured : Monday, April 24, 2023 16:38:03

Sample File : D:\Data Mastersizer2000\Technical
results\TS_66\MTEC0950_66_51sam_Tetrattech-1.mea

Analysed : Monday, April 24, 2023 16:38:05

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

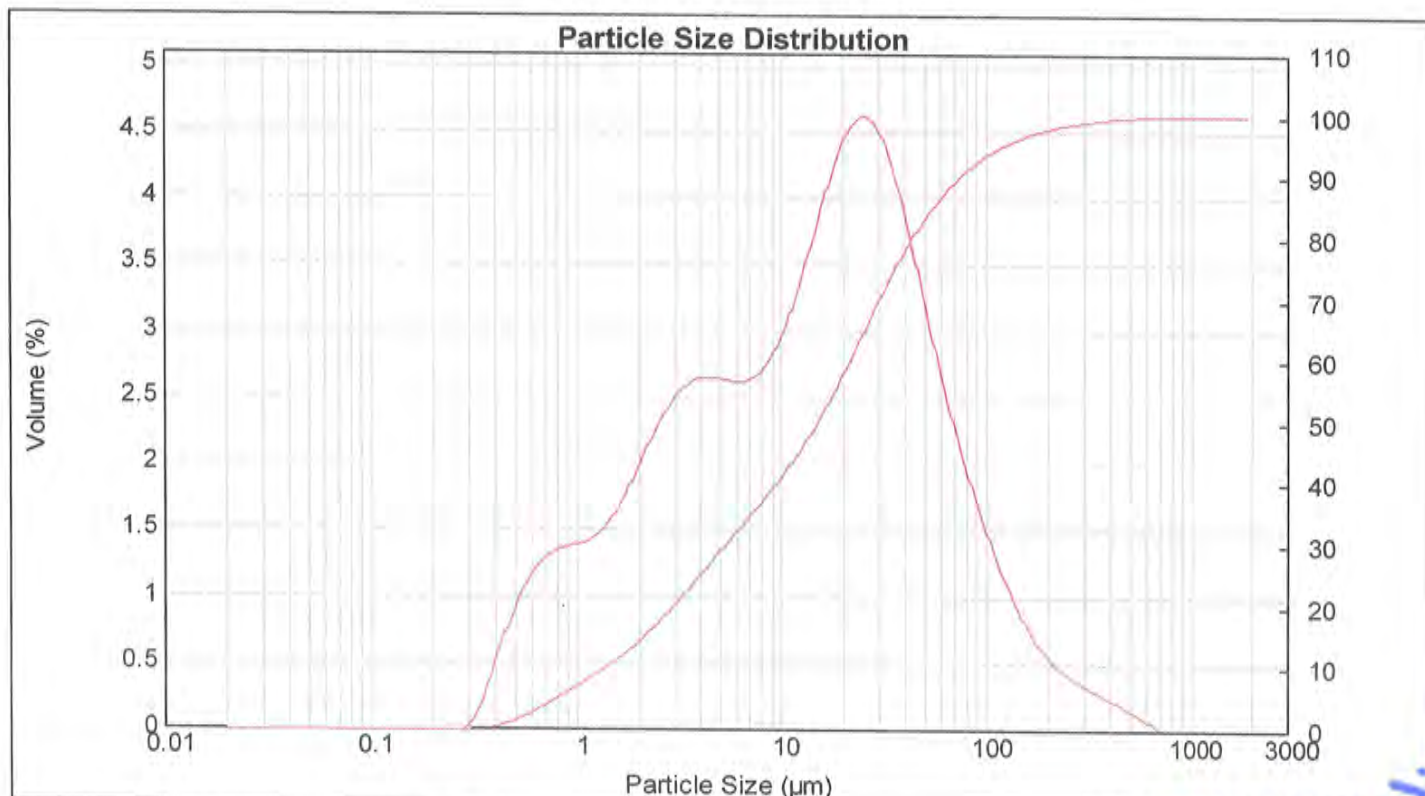
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.71 Residual (%) : 0.730
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0142 %Vol Specific Surface Area : 1.5 m²/g
Mean Diameters : D (0.1) : 1.38 um D (0.5) : 15.04 um D (0.9) : 74.5 um
D [4,3] : 32.11 um D [3,2] : 4 um Span : 4.863 Uniformity : 1.78

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.43	7.962	2.77	58.573	2.57	430.887	0.18
0.023	0.00	0.172	0.00	1.262	1.51	9.283	2.96	68.291	2.18	502.377	0.12
0.027	0.00	0.200	0.00	1.471	1.66	10.823	3.24	79.621	1.83	585.729	0.05
0.032	0.00	0.233	0.00	1.715	1.86	12.619	3.59	92.832	1.52	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.09	14.713	3.96	108.234	1.24	796.214	0.00
0.043	0.00	0.317	0.16	2.332	2.30	17.154	4.29	126.191	0.99	928.318	0.00
0.050	0.00	0.370	0.49	2.719	2.48	20.000	4.54	147.128	0.62	1082.339	0.00
0.059	0.00	0.431	0.76	3.170	2.60	23.318	4.63	171.539	0.50	1261.915	0.00
0.068	0.00	0.502	1.02	3.696	2.66	27.187	4.55	200.000	0.41	1471.285	0.00
0.080	0.00	0.585	1.20	4.309	2.64	31.698	3.93	233.183	0.29	1715.392	0.00
0.093	0.00	0.683	1.37	5.024	2.66	36.957	3.01	271.871	0.23	2000.000	0.00
0.108	0.00	0.796	1.40	5.857	2.63	43.089		316.979			
0.126	0.00	0.928		6.829		50.238		369.570			
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 32

Sample Details

Sample ID : LAWA-3C2_2

Measured : Monday, April 24, 2023 16:39:30

Sample File : D:\Data Mastersizer2000\Technical
000001TS 66MTEC0050 66 51sam Tetratech 1.mea

Analysed : Monday, April 24, 2023 16:39:31

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

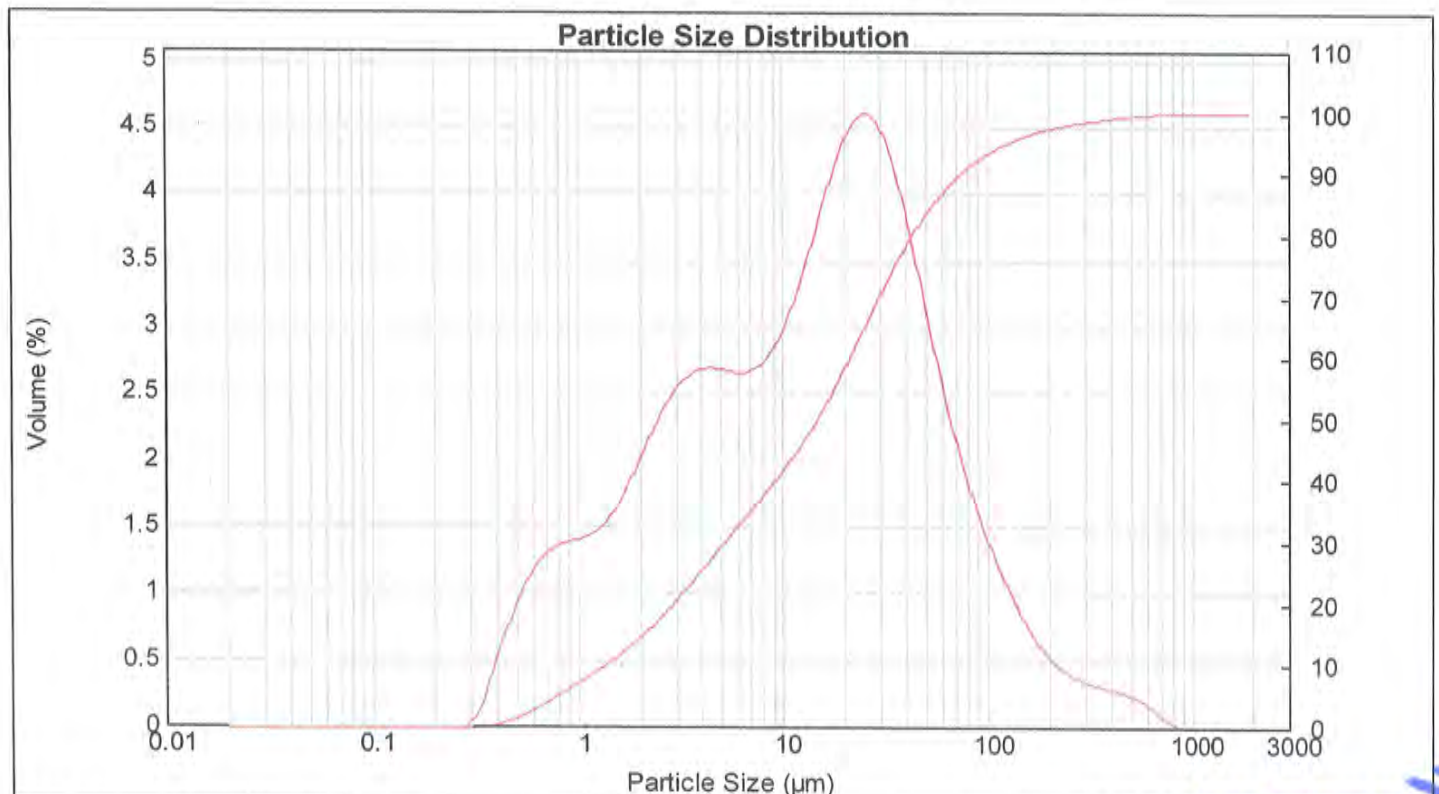
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.57 Residual (%) : 0.745
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0139 %Vol Specific Surface Area : 1.51 m²/g
Mean Diameters : D (0.1) : 1.36 um D (0.5) : 14.73 um D (0.9) : 74.28 um
D [4,3] : 33.67 um D [3,2] : 3.97 um Span : 4.952 Uniformity : 1.94

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.45	7.962	2.80	58.573	2.45	430.887	0.26
0.023	0.00	0.172	0.00	1.262	1.53	9.283	2.98	68.291	2.05	502.377	0.21
0.027	0.00	0.200	0.00	1.471	1.68	10.823	3.25	79.621	1.71	585.729	0.15
0.032	0.00	0.233	0.00	1.715	1.88	12.619	3.59	92.832	1.42	682.910	0.07
0.037	0.00	0.272	0.02	2.000	2.11	14.713	3.95	108.234	1.17	796.214	0.00
0.043	0.00	0.317	0.16	2.332	2.33	17.154	4.28	126.191	0.94	928.318	0.00
0.050	0.00	0.370	0.49	2.719	2.51	20.000	4.52	147.128	0.60	1082.339	0.00
0.059	0.00	0.431	0.77	3.170	2.63	23.318	4.62	171.539	0.48	1261.915	0.00
0.068	0.00	0.502	1.03	3.696	2.69	27.187	4.54	200.000	0.40	1471.285	0.00
0.080	0.00	0.586	1.21	4.309	2.70	31.698	4.28	233.183	0.35	1715.392	0.00
0.093	0.00	0.683	1.33	5.024	2.68	36.957	3.88	271.871	0.31	2000.000	0.00
0.108	0.00	0.796	1.38	5.857	2.67	43.089	3.41	316.979	0.29		
0.126	0.00	0.928	1.41	6.829	2.70	50.238	2.91	369.570			
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 33

Sample Details

Sample ID : LAWA-3C2_3

Measured : Monday, April 24, 2023 16:42:09

Sample File : D:\Data Mastersizer2000\Technical
sample\TS 66\MTEC0059_66_51um_Tetratech-1.mea

Analysed : Monday, April 24, 2023 16:42:10

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

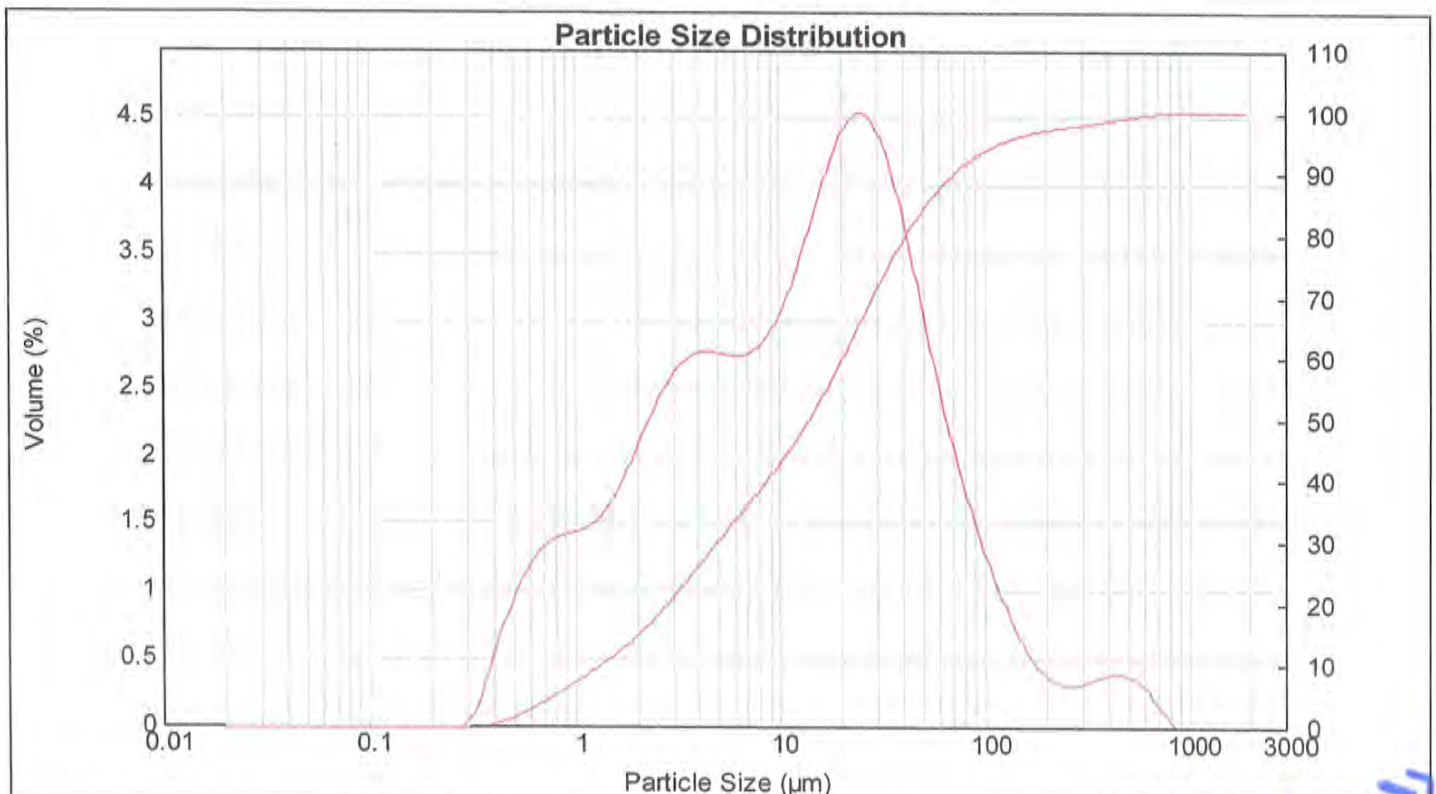
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.35 Residual (%) : 0.739
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0135 %Vol Specific Surface Area : 1.54 m²/g
Mean Diameters : D (0.1) : 1.34 um D (0.5) : 14 um D (0.9) : 71.04 um
D [4,3] : 34.7 um D [3,2] : 3.89 um Span : 4.979 Uniformity : 2.13

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.48	7.962	2.88	58.573	2.38	430.887	0.39
0.023	0.00	0.172	0.00	1.262	1.57	9.283	3.06	68.291	1.97	502.377	0.35
0.027	0.00	0.200	0.00	1.471	1.57	10.823	3.06	79.621	1.97	585.729	0.27
0.032	0.00	0.233	0.00	1.715	1.72	12.619	3.32	92.832	1.62	682.910	0.13
0.037	0.00	0.272	0.02	2.000	1.93	14.713	3.63	108.234	1.30	796.214	0.01
0.043	0.00	0.317	0.02	2.332	2.17	17.154	3.97	126.191	1.03	928.318	0.00
0.050	0.00	0.370	0.16	2.719	2.40	20.000	4.27	147.128	0.78	1082.339	0.00
0.059	0.00	0.431	0.50	3.170	2.58	23.318	4.48	171.539	0.58	1261.915	0.00
0.068	0.00	0.502	0.78	3.696	2.71	27.187	4.55	200.000	0.43	1471.285	0.00
0.080	0.00	0.586	1.04	4.309	2.77	31.698	4.45	233.183	0.34	1715.392	0.00
0.093	0.00	0.683	1.23	5.024	2.78	36.957	4.19	271.871	0.31	2000.000	0.00
0.108	0.00	0.796	1.35	5.857	2.76	43.089	3.80	316.979	0.31		
0.126	0.00	0.928	1.41	6.829	2.75	50.238	3.33	369.570	0.35		
0.147	0.00	1.082	1.44	7.962	2.78	58.573	2.84	430.887	0.38		



Result : Analysis Report

Attached page 34

Sample Details

Sample ID : LAWA-3C3_1

Measured : Monday, April 24, 2023 16:51:47

Sample File : D:\Data Mastersizer2000\Technical
sample\TS 66\MTEC0950_66_51sam_Tetratosh-1.mea

Analysed : Monday, April 24, 2023 16:51:49

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

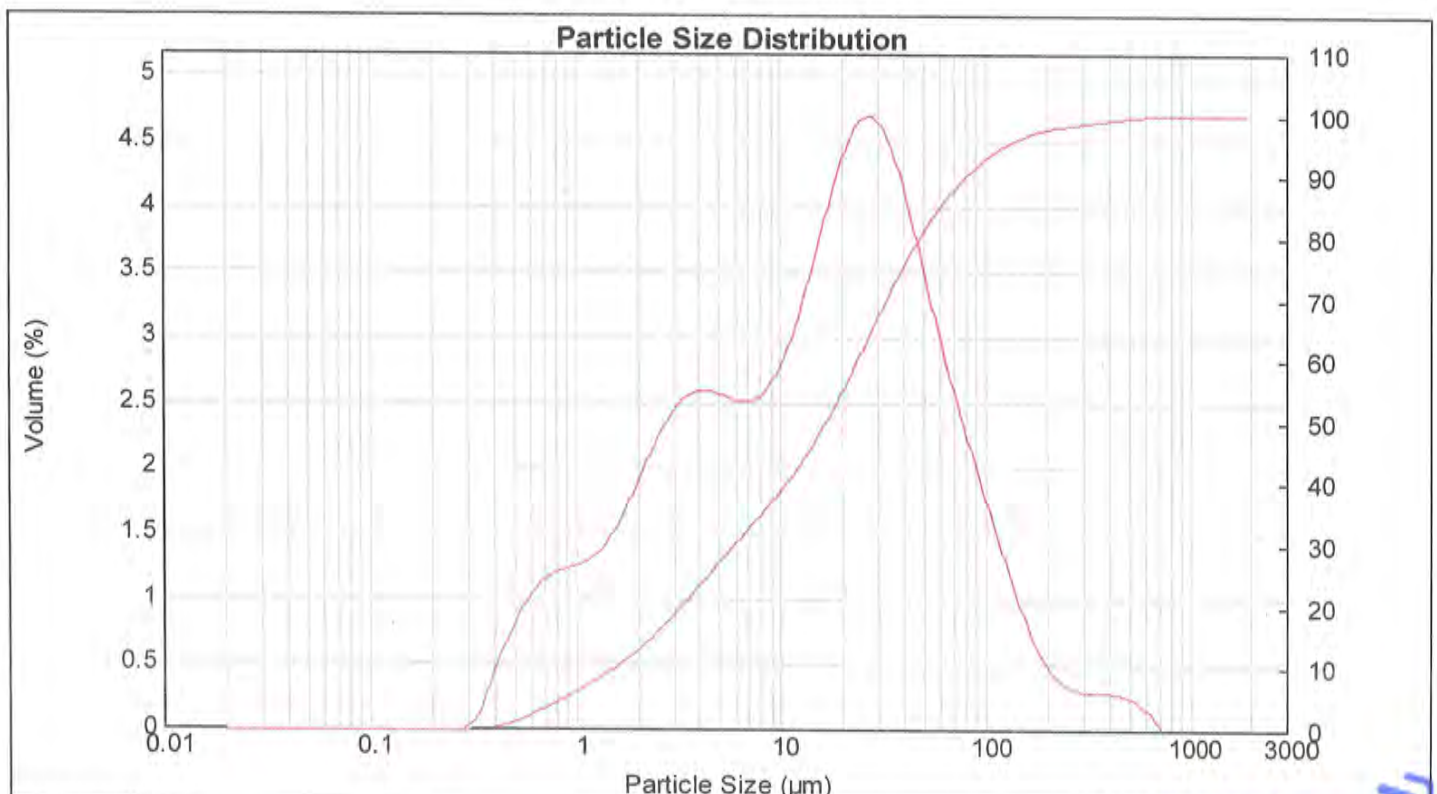
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.98 Residual (%) : 0.748
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0154 %Vol Specific Surface Area : 1.38 m²/g
Mean Diameters : D (0.1) : 1.54 um D (0.5) : 16.79 um D (0.9) : 80.6 um
D [4,3] : 35.13 um D [3,2] : 4.34 um Span : 4.709 Uniformity : 1.74

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.31	7.962	2.61	58.573	2.89	430.887	0.27
0.023	0.00	0.172	0.00	1.262	1.40	9.283	2.78	68.291	2.50	502.377	0.22
0.027	0.00	0.200	0.00	1.471	1.40	10.823	3.05	79.621	2.14	595.729	0.13
0.032	0.00	0.233	0.00	1.715	1.77	12.619	3.41	92.832	1.80	682.910	0.01
0.037	0.00	0.272	0.01	2.000	2.00	14.713	3.81	108.234	1.45	796.214	0.00
0.043	0.00	0.317	0.12	2.332	2.23	17.154	4.20	126.191	1.12	928.318	0.00
0.050	0.00	0.370	0.42	2.719	2.42	20.000	4.51	147.128	0.82	1082.339	0.00
0.059	0.00	0.431	0.67	3.170	2.54	23.318	4.69	171.539	0.59	1261.915	0.00
0.068	0.00	0.502	0.90	3.696	2.59	27.187	4.51	200.000	0.43	1471.285	0.00
0.080	0.00	0.586	1.07	4.309	2.56	31.698	4.18	233.183	0.29	1715.392	0.00
0.093	0.00	0.683	1.23	5.024	2.52	36.957	3.77	271.871	0.29	2000.000	0.00
0.108	0.00	0.796	1.26	5.857	2.53	43.089	3.32	316.979	0.29		
0.126	0.00	0.928		6.829		50.238		369.570			
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 35

Sample Details

Sample ID : LAWA-3C3_2

Measured : Monday, April 24, 2023 16:53:54

Sample File : D:\Data Mastersizer2000\Technical
session\TS_66\MTEC0859_66_51sam_Tetrastech 1.mps

Analysed : Monday, April 24, 2023 16:53:56

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

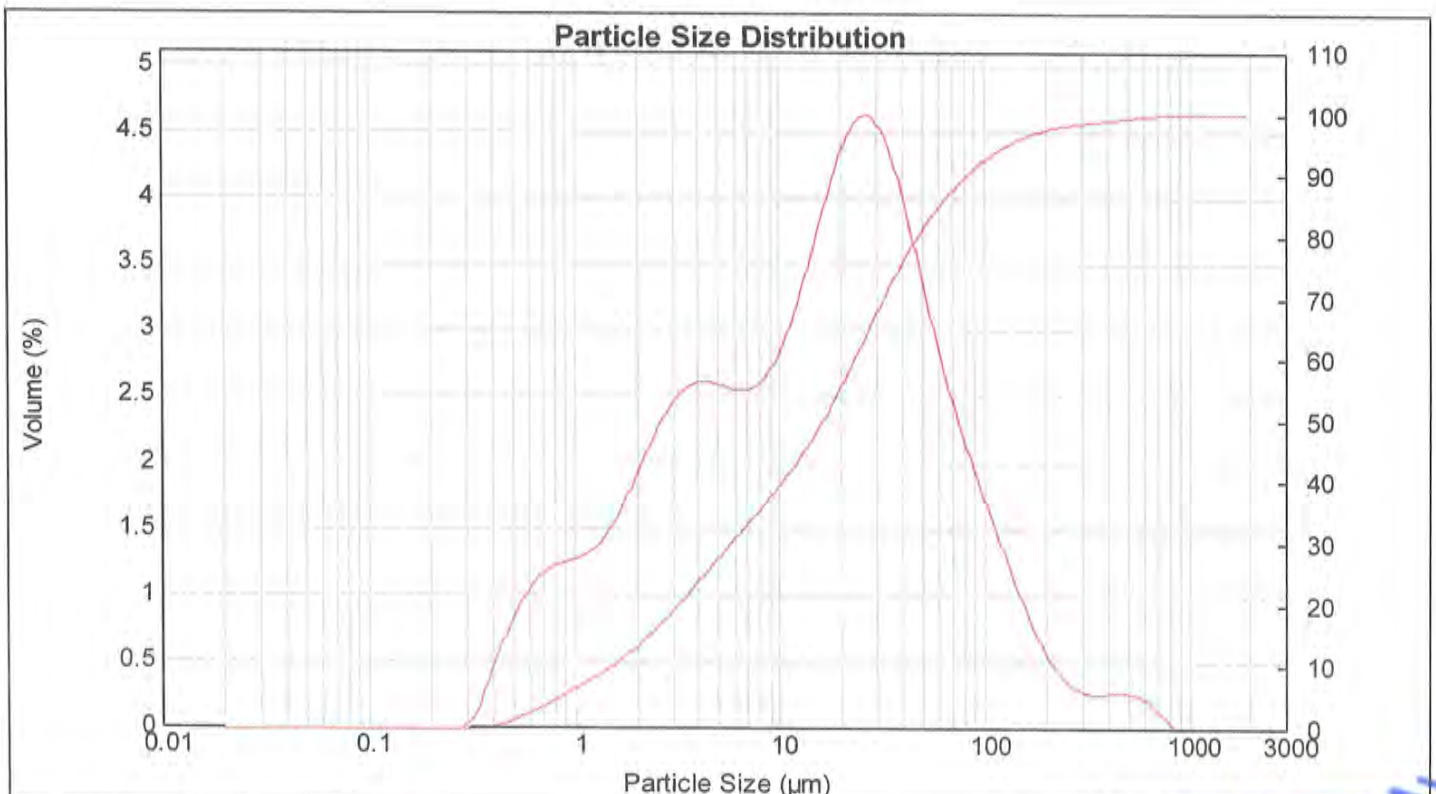
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.56 Residual (%) : 0.749
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0149 %Vol Specific Surface Area : 1.4 m²/g
Mean Diameters : D (0.1) : 1.52 um D (0.5) : 16.45 um D (0.9) : 82.84 um
D [4,3] : 36.46 um D [3,2] : 4.3 um Span : 4.945 Uniformity : 1.87

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.32	7.962	2.66	58.573	2.75	430.887	0.27
0.023	0.00	0.172	0.00	1.262	1.41	9.283	2.83	68.291	2.38	502.377	0.26
0.027	0.00	0.200	0.00	1.471	1.41	10.823	2.83	79.621	2.05	585.729	0.20
0.032	0.00	0.233	0.00	1.715	1.56	12.619	3.10	92.832	1.76	682.910	0.11
0.037	0.00	0.272	0.01	2.000	2.01	14.713	3.83	108.234	1.47	796.214	0.01
0.043	0.00	0.317	0.13	2.332	2.24	17.154	4.20	126.191	1.18	928.318	0.00
0.050	0.00	0.370	0.43	2.719	2.43	20.000	4.49	147.128	0.91	1082.339	0.00
0.059	0.00	0.431	0.68	3.170	2.56	23.318	4.64	171.539	0.68	1261.915	0.00
0.068	0.00	0.502	0.91	3.696	2.62	27.187	4.61	200.000	0.49	1471.285	0.00
0.080	0.00	0.586	1.08	4.309	2.62	31.698	4.41	233.183	0.36	1715.392	0.00
0.093	0.00	0.683	1.19	5.024	2.59	36.957	4.06	271.871	0.29	2000.000	0.00
0.108	0.00	0.796	1.24	5.857	2.56	43.069	3.63	316.979	0.26		
0.126	0.00	0.928	1.28	6.829	2.57	50.238	3.18	369.570	0.26		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 36

Sample Details

Sample ID : LAWA-3C3_3

Measured : Monday, April 24, 2023 16:54:58

Sample File : D:\Data Mastersizer2000\Technical
session\TS_66\MTEC0850_66_51sam_Tetrattech-1.mea

Analysed : Monday, April 24, 2023 16:55:00

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

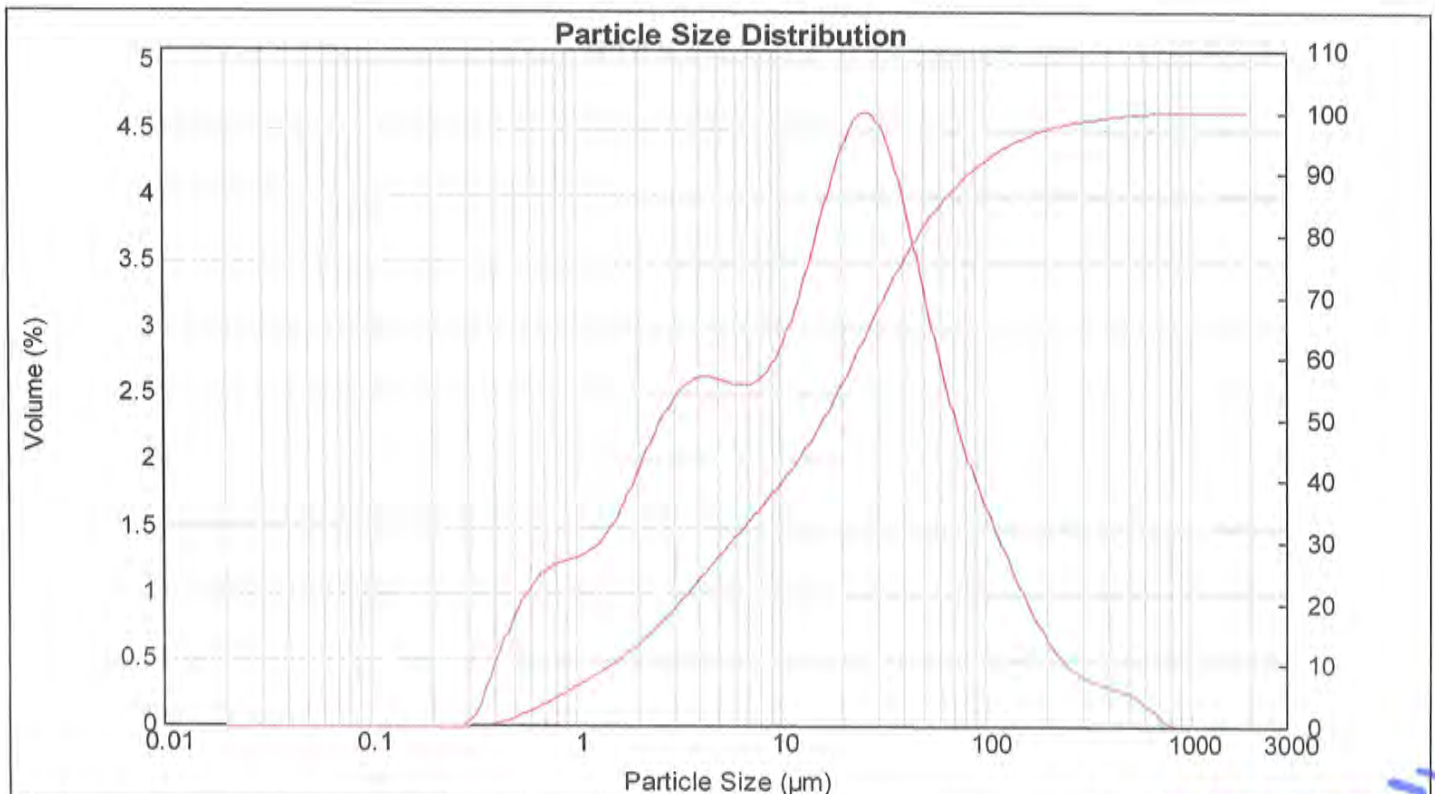
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.42 Residual (%) : 0.743
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0147 %Vol Specific Surface Area : 1.4 m²/g
Mean Diameters : D (0.1) : 1.52 um D (0.5) : 16.28 um D (0.9) : 84.26 um
D [4,3] : 36.38 um D [3,2] : 4.29 um Span : 5.081 Uniformity : 1.88

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.32	7.962	2.68	58.573	2.65	430.887	0.27
0.023	0.00	0.172	0.00	1.262	1.41	9.283	2.85	68.291	2.28	502.377	0.22
0.027	0.00	0.200	0.00	1.471	1.41	10.823	3.12	79.621	1.96	585.729	0.14
0.032	0.00	0.233	0.00	1.715	1.57	12.619	3.46	92.832	1.69	682.910	0.05
0.037	0.00	0.272	0.01	2.000	1.78	14.713	3.84	108.234	1.44	796.214	0.00
0.043	0.00	0.317	0.13	2.332	2.02	17.154	4.21	126.191	1.19	928.318	0.00
0.050	0.00	0.370	0.43	2.719	2.25	20.000	4.49	147.128	0.96	1082.339	0.00
0.059	0.00	0.431	0.68	3.170	2.45	23.318	4.63	171.539	0.76	1261.915	0.00
0.068	0.00	0.502	0.91	3.696	2.58	27.187	4.60	200.000	0.59	1471.285	0.00
0.080	0.00	0.586	1.08	4.309	2.64	31.698	4.38	233.183	0.47	1715.392	0.00
0.093	0.00	0.683	1.19	5.024	2.62	36.957	4.01	271.871	0.38	2000.000	0.00
0.108	0.00	0.796	1.24	5.857	2.59	43.089	3.56	316.979	0.33		
0.126	0.00	0.928	1.28	6.829	2.60	50.238	3.09	369.570	0.30		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 37

Sample Details

Sample ID : LAWA-3D1X_1

Measured : Monday, April 24, 2023 17:04:50

Sample File : D:\Data Mastersizer2000\Technical
session\TS_66\MTEC0950_66_51sam_Tetratosh-1.mea

Analysed : Monday, April 24, 2023 17:04:52

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

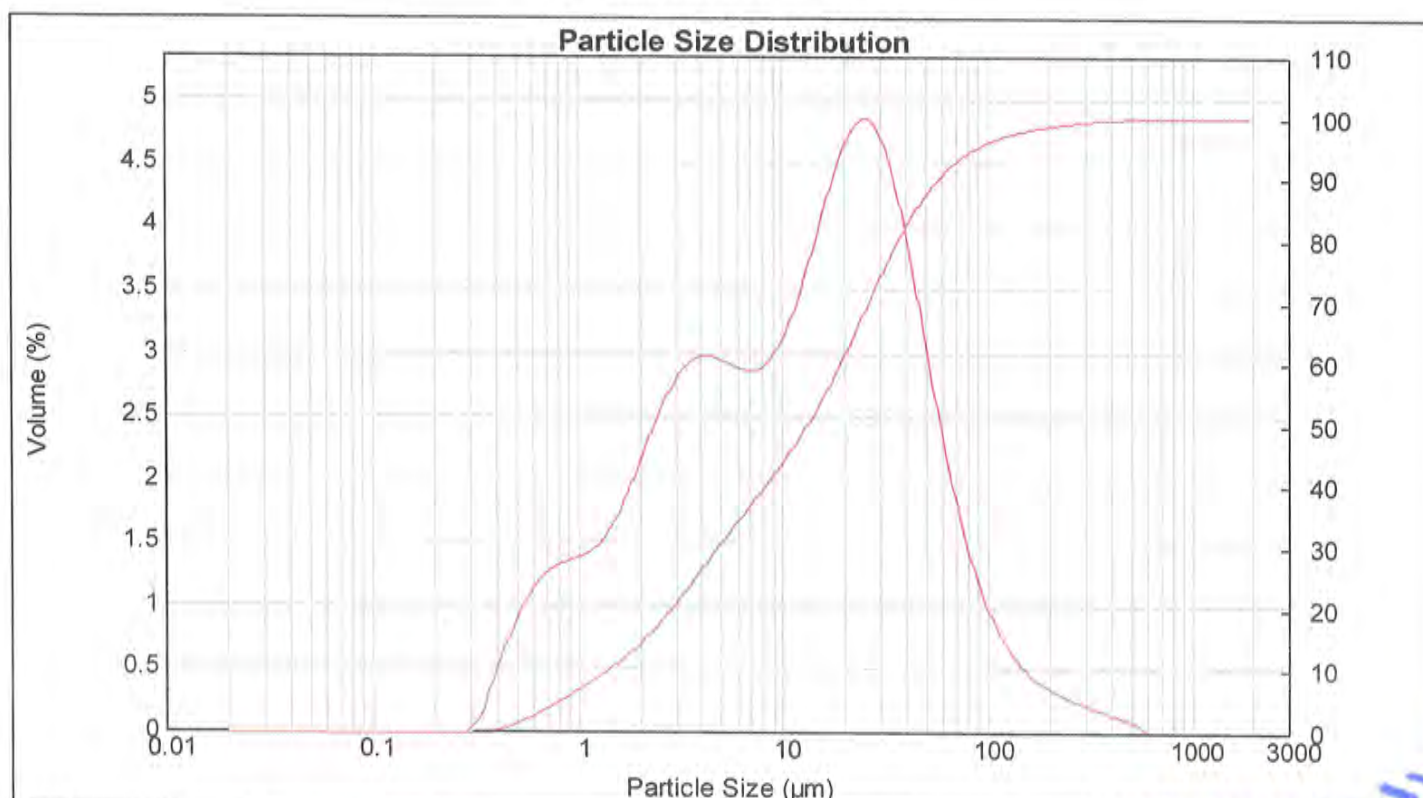
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.49 Residual (%) : 0.717
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0142 %Vol Specific Surface Area : 1.53 m²/g
Mean Diameters : D (0.1) : 1.4 um D (0.5) : 13.23 um D (0.9) : 57.58 um
D [4,3] : 26.05 um D [3,2] : 3.92 um Span : 4.247 Uniformity : 1.61

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.44	7.962	2.95	58.573	2.20	430.887	0.10
0.023	0.00	0.172	0.00	1.262	1.55	9.283	3.12	68.291	1.71	502.377	0.06
0.027	0.00	0.200	0.00	1.471	1.55	10.823	3.39	79.621	1.31	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.98	12.619	3.74	92.832	1.00	682.910	0.00
0.037	0.00	0.272	0.00	2.000	2.27	14.713	4.13	108.234	0.76	796.214	0.00
0.043	0.00	0.317	0.01	2.332	2.54	17.154	4.50	126.191	0.59	928.318	0.00
0.050	0.00	0.370	0.14	2.719	2.77	20.000	4.76	147.128	0.47	1082.339	0.00
0.059	0.00	0.431	0.47	3.170	2.92	23.318	4.87	171.539	0.38	1261.915	0.00
0.068	0.00	0.502	0.99	3.696	2.99	27.187	4.77	200.000	0.32	1471.285	0.00
0.080	0.00	0.586	1.17	4.309	2.98	31.698	4.46	233.183	0.27	1715.392	0.00
0.093	0.00	0.683	1.29	5.024	2.94	36.957	3.98	271.871	0.22	2000.000	0.00
0.108	0.00	0.796	1.35	5.857	2.89	43.089	3.40	316.979	0.18		
0.126	0.00	0.928	1.39	6.829	2.88	50.238	2.78	369.570	0.14		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 38

Sample Details

Sample ID : LAWA-3D1X_2

Measured : Monday, April 24, 2023 17:07:29

Sample File : D:\Data Mastersizer2000\Technical
serial\TS 66\MTEC00950_66_51sam_Tetratex-1.mes

Analysed : Monday, April 24, 2023 17:07:31

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

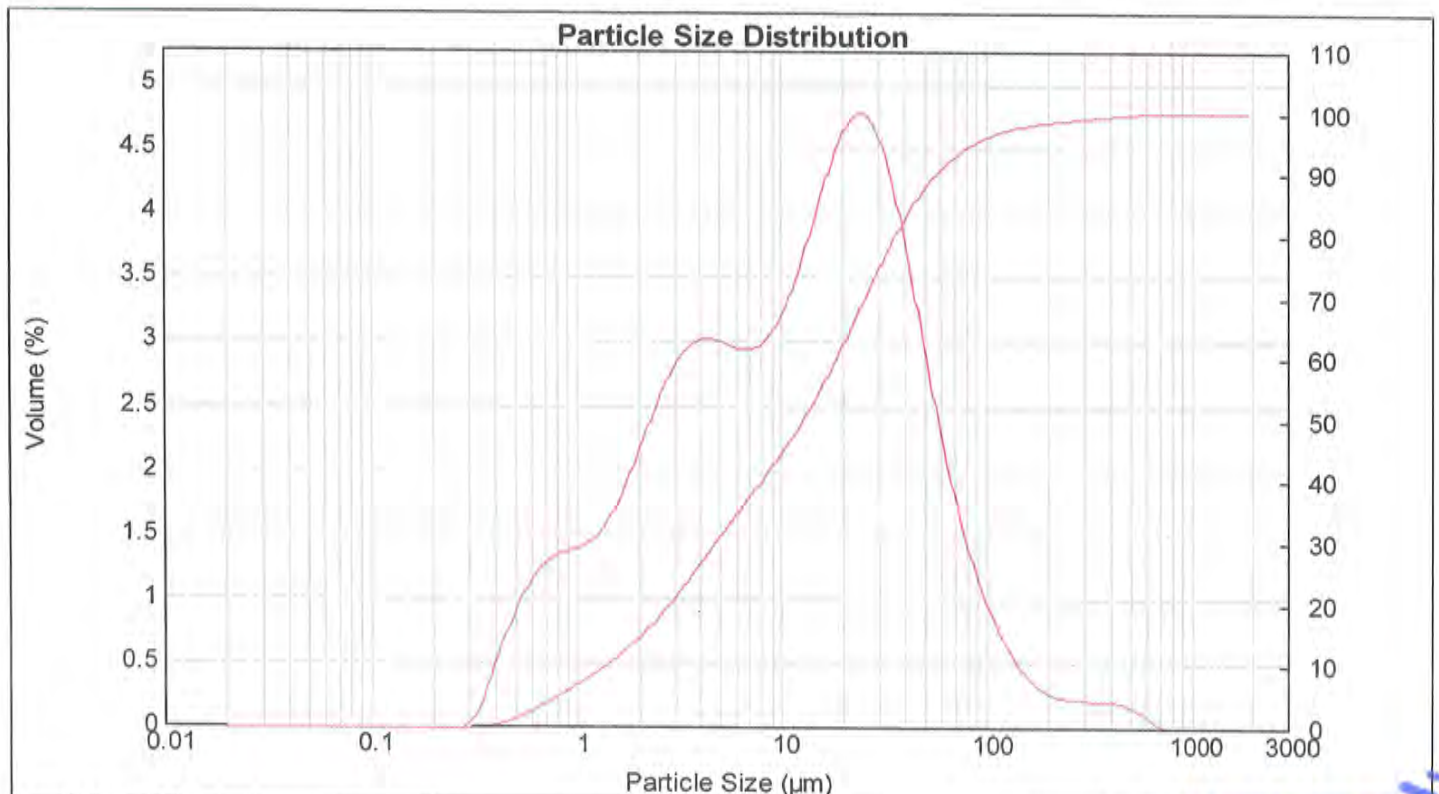
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.90 Residual (%) : 0.718
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0137 %Vol Specific Surface Area : 1.55 m²/g
Mean Diameters : D (0.1) : 1.38 um D (0.5) : 12.81 um D (0.9) : 56.98 um
D [4,3] : 26.62 um D [3,2] : 3.88 um Span : 4.342 Uniformity : 1.72

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.45	7.962	3.04	58.573	2.14	430.887	0.18
0.023	0.00	0.172	0.00	1.262	1.56	9.283	3.21	68.291	1.67	502.377	0.13
0.027	0.00	0.200	0.00	1.471	1.74	10.823	3.48	79.621	1.29	585.729	0.07
0.032	0.00	0.233	0.00	1.715	1.99	12.619	3.81	92.832	0.98	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.28	14.713	4.18	108.234	0.74	796.214	0.00
0.043	0.00	0.317	0.14	2.332	2.56	17.154	4.50	126.191	0.54	928.318	0.00
0.050	0.00	0.370	0.47	2.719	2.79	20.000	4.73	147.128	0.40	1082.339	0.00
0.059	0.00	0.431	0.75	3.170	2.95	23.318	4.79	171.539	0.30	1261.915	0.00
0.068	0.00	0.502	1.00	3.696	3.02	27.187	4.65	200.000	0.25	1471.285	0.00
0.080	0.00	0.586	1.18	4.309	3.03	31.668	4.32	233.183	0.21	1715.392	0.00
0.093	0.00	0.683	1.30	5.024	2.96	36.957	3.84	271.871	0.21	2000.000	0.00
0.108	0.00	0.796	1.36	5.857	2.96	43.089	3.27	316.979	0.20		
0.126	0.00	0.928	1.40	6.829	2.68	50.238	2.68	369.570	0.20		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 39

Sample Details

Sample ID : LAWA-3D1X_3

Measured : Monday, April 24, 2023 17:08:49

Sample File : D:\Data Mastersizer2000\Technical
series\TS_66\MTEC0859_66_51sam_Tetratosh 1.mea

Analysed : Monday, April 24, 2023 17:08:50

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

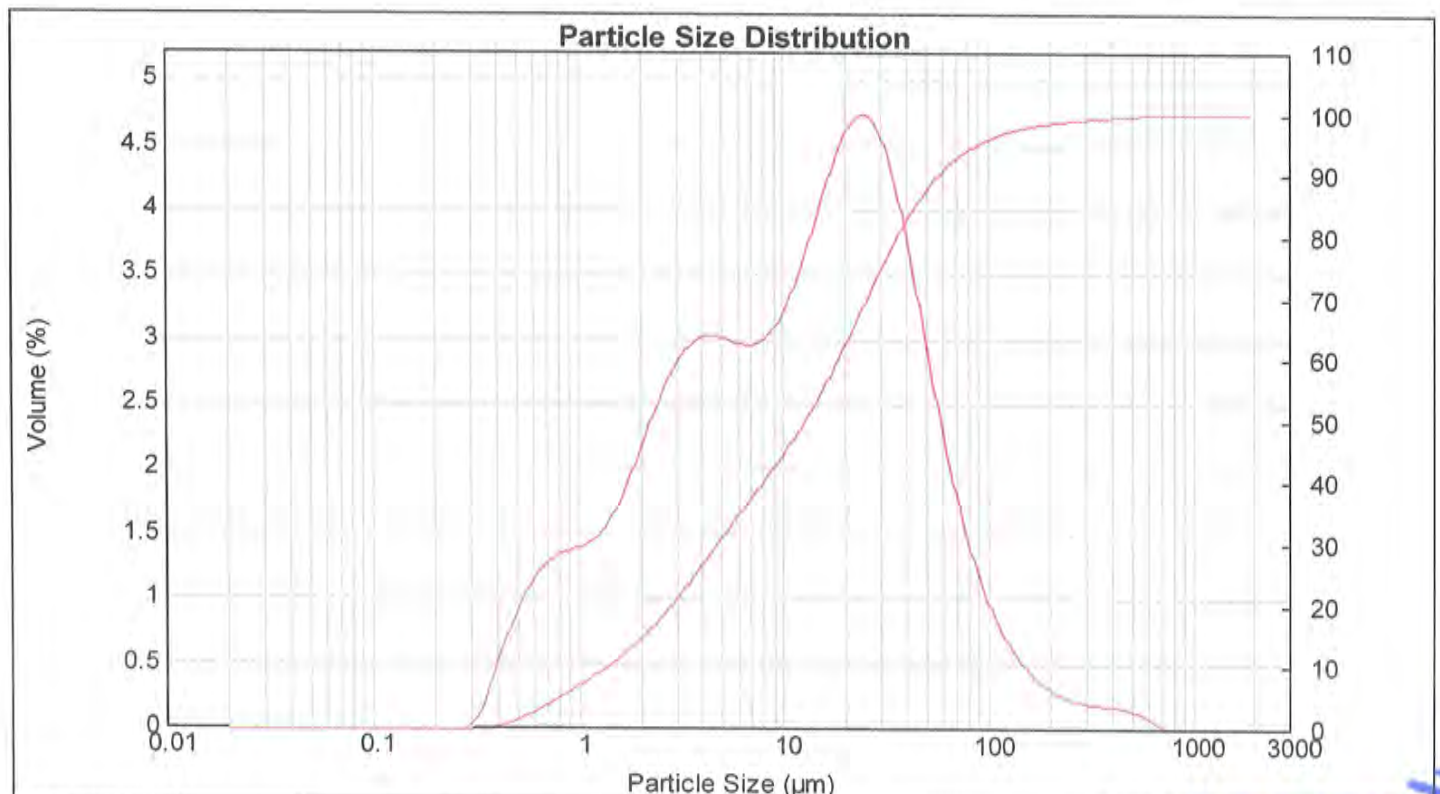
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.76 Residual (%) : 0.716
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0136 %Vol Specific Surface Area : 1.55 m²/g
Mean Diameters : D (0.1) : 1.38 um D (0.5) : 12.78 um D (0.9) : 57.46 um
D [4,3] : 26.5 um D [3,2] : 3.88 um Span : 4.389 Uniformity : 1.71

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.45	7.962	3.05	58.573	2.15	430.887	0.16
0.023	0.00	0.172	0.00	1.262	1.56	9.283	3.22	68.291	1.68	502.377	0.12
0.027	0.00	0.200	0.00	1.471	1.56	10.823	3.48	79.621	1.30	585.729	0.07
0.032	0.00	0.233	0.00	1.715	1.74	12.619	3.80	92.832	1.00	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.99	14.713	4.15	108.234	0.77	796.214	0.00
0.043	0.00	0.317	0.14	2.332	2.28	17.154	4.47	126.191	0.59	928.318	0.00
0.050	0.00	0.370	0.47	2.719	2.55	20.000	4.68	147.128	0.45	1082.339	0.00
0.059	0.00	0.431	0.75	3.170	2.78	23.318	4.75	171.539	0.35	1261.915	0.00
0.068	0.00	0.502	1.00	3.696	2.94	27.187	4.62	200.000	0.28	1471.285	0.00
0.080	0.00	0.586	1.19	4.309	3.02	31.698	4.31	233.183	0.23	1715.392	0.00
0.093	0.00	0.683	1.30	5.024	3.01	36.957	3.84	271.871	0.20	2000.000	0.00
0.108	0.00	0.796	1.37	5.857	2.97	43.089	3.28	316.979	0.18		
0.126	0.00	0.928	1.40	6.829	2.98	50.238	2.70	369.570	0.17		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 40

Sample Details

Sample ID : LAWA-3D2_1

Measured : Monday, April 24, 2023 17:20:13

Sample File : D:\Data Mastersizer2000\Technical
sample\TS_66\MTEC0950_66_51sam_Tetratosh 1.me

Analysed : Monday, April 24, 2023 17:20:15

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

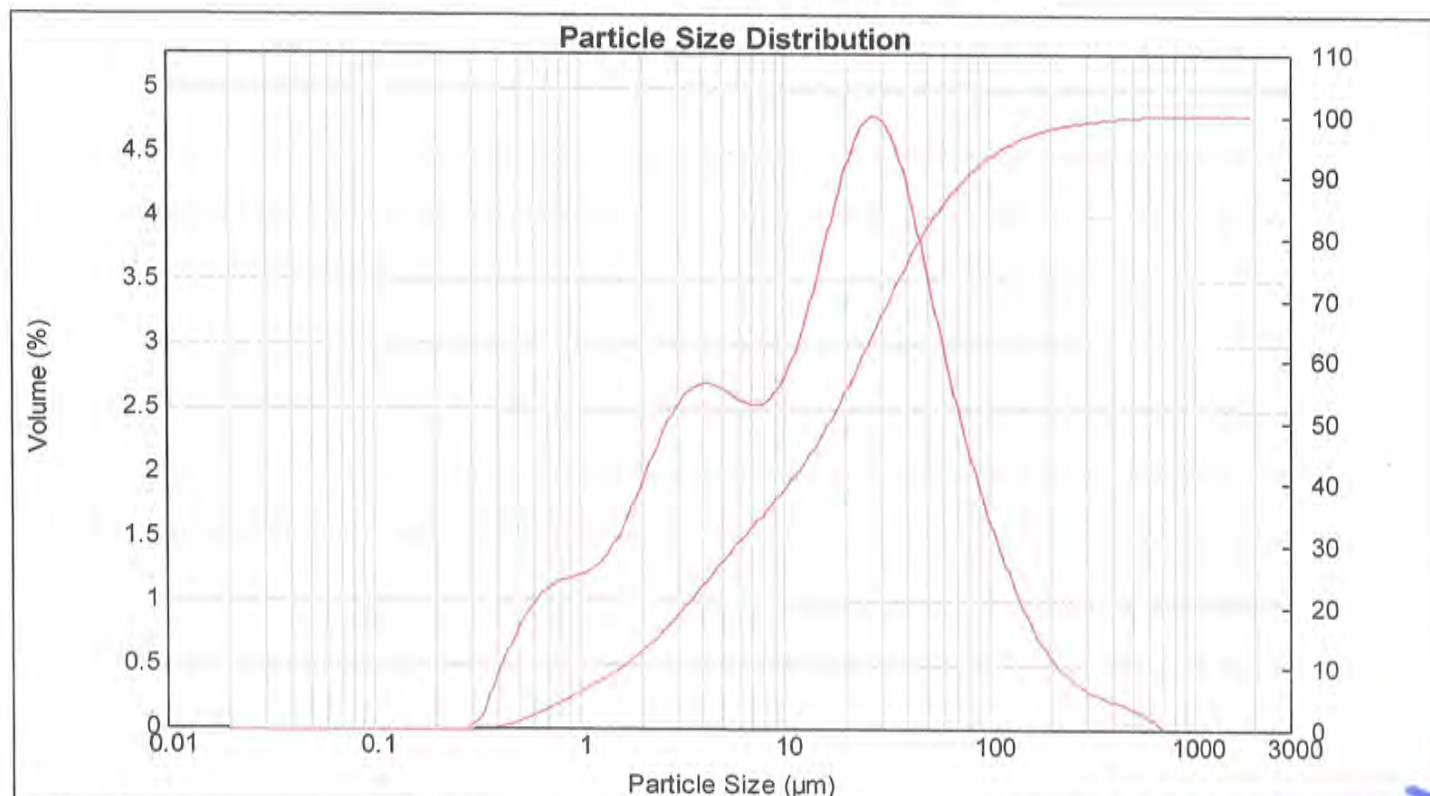
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.12 Residual (%) : 0.739
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0156 %Vol Specific Surface Area : 1.36 m²/g
Mean Diameters : D (0.1) : 1.6 um D (0.5) : 16.79 um D (0.9) : 78.55 um
D [4,3] : 33.91 um D [3,2] : 4.42 um Span : 4.582 Uniformity : 1.67

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.26	7.962	2.59	58.573	2.85	430.887	0.19
0.023	0.00	0.172	0.00	1.262	1.36	9.283	2.74	68.291	2.41	502.377	0.14
0.027	0.00	0.200	0.00	1.471	1.36	10.823	3.00	79.621	2.02	585.729	0.07
0.032	0.00	0.233	0.00	1.715	1.53	12.619	3.36	92.832	1.68	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.76	14.713	3.78	108.234	1.37	796.214	0.00
0.043	0.00	0.317	0.11	2.332	2.03	17.154	4.20	126.191	1.09	928.318	0.00
0.050	0.00	0.370	0.40	2.719	2.28	20.000	4.55	147.128	0.85	1082.339	0.00
0.059	0.00	0.431	0.64	3.170	2.64	23.318	4.77	171.539	0.66	1261.915	0.00
0.068	0.00	0.502	0.86	3.696	2.70	27.187	4.79	200.000	0.51	1471.285	0.00
0.080	0.00	0.586	1.02	4.309	2.69	31.698	4.62	233.183	0.40	1715.392	0.00
0.093	0.00	0.683	1.12	5.024	2.58	35.957	4.28	271.871	0.32	2000.000	0.00
0.108	0.00	0.796	1.18	5.857	2.55	43.089	3.83	316.979	0.27		
0.126	0.00	0.928	1.21	6.829		50.238	3.33	369.570	0.23		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 41

Sample Details

Sample ID : LAWA-3D2_2

Measured : Monday, April 24, 2023 17:22:21

Sample File : D:\Data Mastersizer2000\Technical
sample\TS_66\MTEC0859_66_51sam_Tetrastach 1.mea

Analysed : Monday, April 24, 2023 17:22:22

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

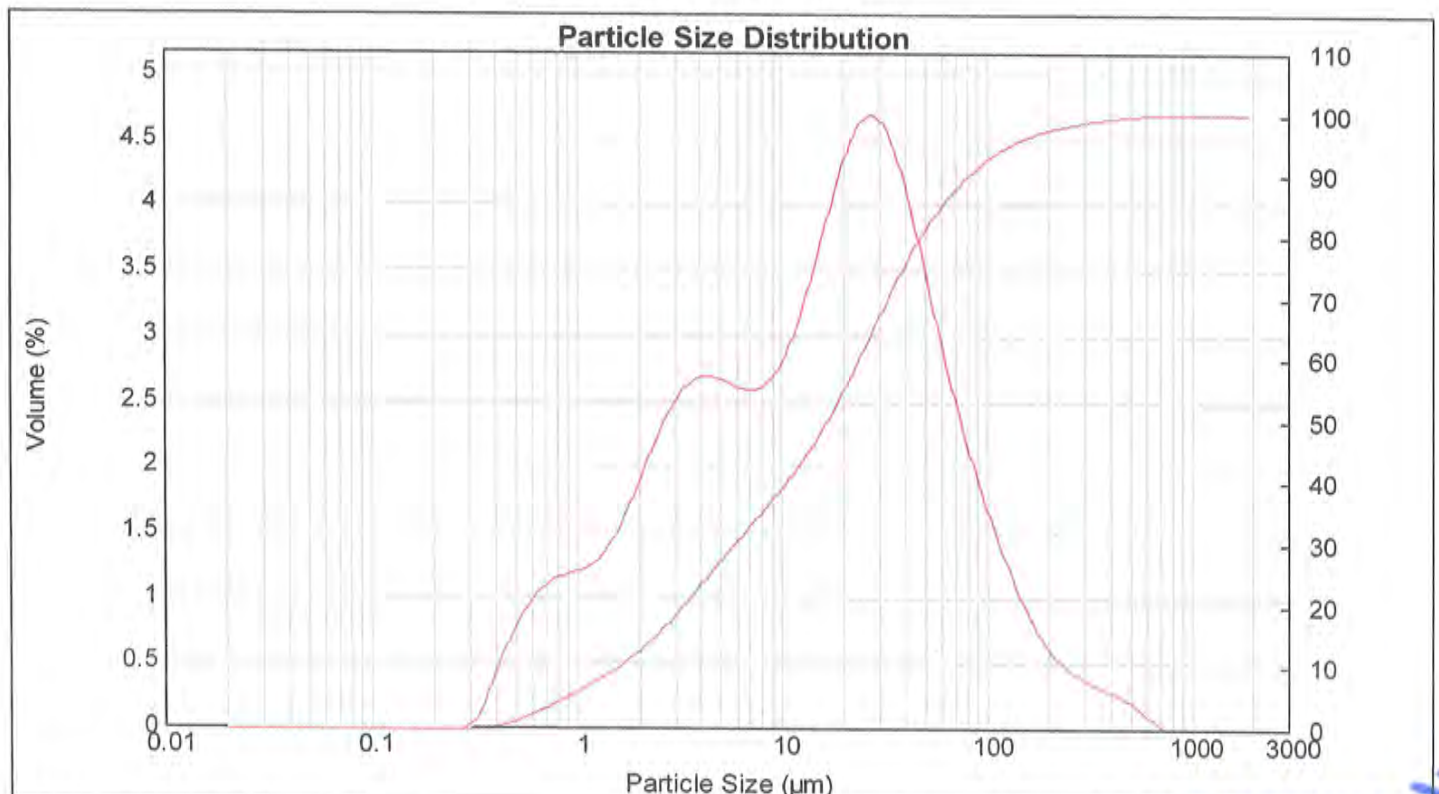
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.46 Residual (%) : 0.738
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0151 %Vol Specific Surface Area : 1.35 m²/g
Mean Diameters : D (0.1) : 1.61 um D (0.5) : 16.71 um D (0.9) : 81.7 um
D [4,3] : 35.32 um D [3,2] : 4.43 um Span : 4.793 Uniformity : 1.76

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.25	7.962	2.65	58.573	2.82	430.887	0.24
0.023	0.00	0.172	0.00	1.262	1.35	9.283	2.80	68.291	2.40	502.377	0.17
0.027	0.00	0.200	0.00	1.471	1.35	10.823	3.05	79.621	2.04	585.729	0.09
0.032	0.00	0.233	0.00	1.715	1.74	12.619	3.39	92.832	1.71	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.00	14.713	3.78	108.234	1.40	796.214	0.00
0.043	0.00	0.317	0.11	2.332	2.26	17.154	4.17	126.191	1.13	928.318	0.00
0.050	0.00	0.370	0.40	2.719	2.47	20.000	4.49	147.128	0.89	1082.339	0.00
0.059	0.00	0.431	0.64	3.170	2.62	23.318	4.68	171.539	0.70	1261.915	0.00
0.068	0.00	0.502	0.86	3.696	2.69	27.187	4.69	200.000	0.55	1471.285	0.00
0.080	0.00	0.586	1.02	4.309	2.70	31.698	4.52	233.183	0.45	1715.392	0.00
0.093	0.00	0.683	1.12	5.024	2.66	36.957	4.18	271.871	0.38	2000.000	0.00
0.108	0.00	0.796	1.17	5.857	2.61	43.069	3.75	316.979	0.33		
0.126	0.00	0.928	1.20	6.829	2.60	50.238	3.27	369.570	0.29		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 42

Sample Details

Sample ID : LAWA-3D2_3

Measured : Monday, April 24, 2023 17:23:41

Sample File : D:\Data Mastersizer2000\Technical
session\TS_66\MTEC0859_66_51sam_Tetratosh 1.mes

Analysed : Monday, April 24, 2023 17:23:43

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

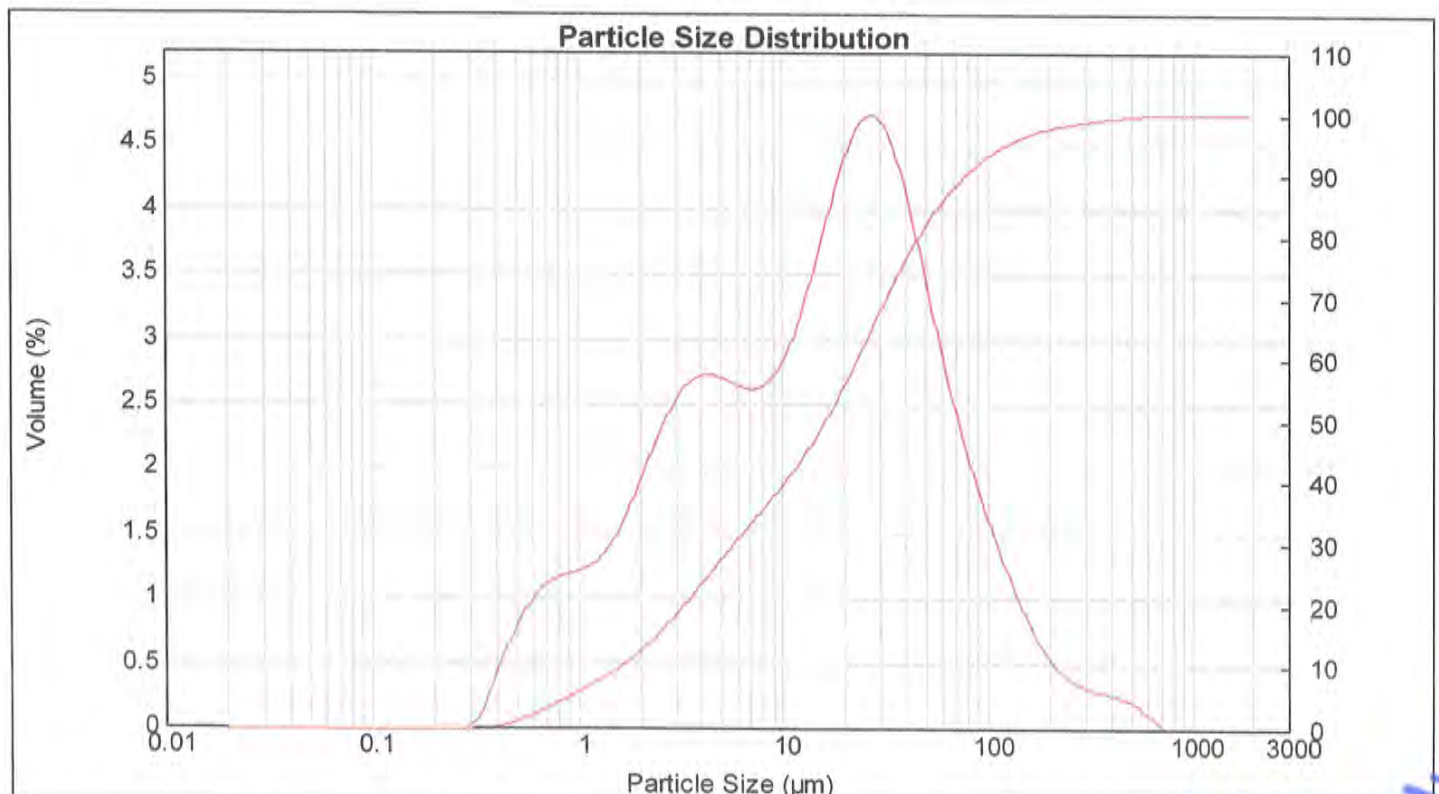
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.25 Residual (%) : 0.740
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0148 %Vol Specific Surface Area : 1.37 m²/g
Mean Diameters : D (0.1) : 1.59 um D (0.5) : 16.34 um D (0.9) : 78.22 um
D [4,3] : 34.17 um D [3,2] : 4.38 um Span : 4.691 Uniformity : 1.74

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.26	7.962	2.68	58.573	2.76	430.887	0.23
0.023	0.00	0.172	0.00	1.262	1.36	9.283	2.83	68.291	2.34	502.377	0.18
0.027	0.00	0.200	0.00	1.471	1.36	10.823	3.08	79.621	1.97	585.729	0.09
0.032	0.00	0.233	0.00	1.715	1.76	12.619	3.43	92.832	1.64	682.910	0.01
0.037	0.00	0.272	0.01	2.000	2.02	14.713	3.83	108.234	1.35	796.214	0.00
0.043	0.00	0.317	0.11	2.332	2.28	17.154	4.22	126.191	1.07	928.318	0.00
0.050	0.00	0.370	0.41	2.719	2.50	20.000	4.54	147.128	0.83	1082.339	0.00
0.059	0.00	0.431	0.65	3.170	2.65	23.318	4.72	171.539	0.63	1261.915	0.00
0.068	0.00	0.502	0.87	3.696	2.73	27.187	4.73	200.000	0.48	1471.285	0.00
0.080	0.00	0.586	1.03	4.309	2.69	31.698	4.19	233.183	0.39	1715.392	0.00
0.093	0.00	0.683	1.13	5.024	2.64	36.957	3.73	271.871	0.29	2000.000	0.00
0.108	0.00	0.796	1.19	5.857	2.63	43.089	3.24	316.979	0.27		
0.126	0.00	0.928	1.22	6.829		50.238		369.570			
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 43

Sample Details

Sample ID : LAWA-3D3_1

Measured : Monday, April 24, 2023 17:34:57

Sample File : D:\Data Mastersizer2000\Technical
 serial\TS 65\MTEC0950_65_51sam_Tetratex-1.mea

Analysed : Monday, April 24, 2023 17:34:59

Sample Notes : Dispersion medium : De-ionized water.
 Treatment : Ultrasound 10 minutes with ultrasonic bath before
 analysis and stirring at 2000 rpm during measurement.

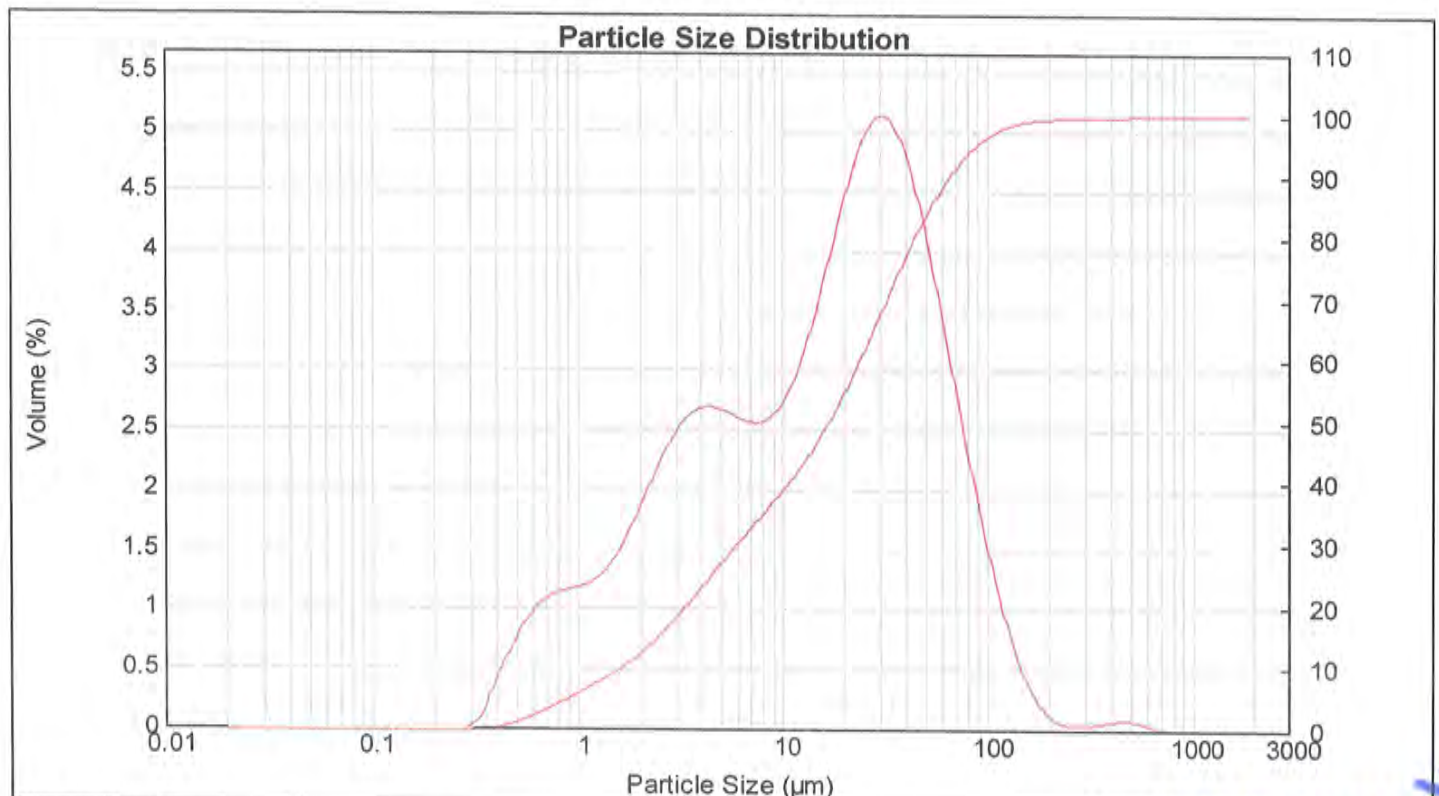
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.35 Residual (%) : 0.767
 Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0159 %Vol Specific Surface Area : 1.35 m²/g
 Mean Diameters : D (0.1) : 1.62 um D (0.5) : 16.98 um D (0.9) : 65.47 um
 D [4,3] : 27.88 um D [3,2] : 4.43 um Span : 3.760 Uniformity : 1.29

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.24	7.962	2.61	58.573	3.29	430.887	0.08
0.023	0.00	0.172	0.00	1.262	1.33	9.283	2.74	68.291	2.68	502.377	0.07
0.027	0.00	0.200	0.00	1.471	1.49	10.823	2.98	79.621	2.10	585.729	0.03
0.032	0.00	0.233	0.00	1.715	1.71	12.619	3.33	92.832	1.56	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.98	14.713	3.76	108.234	1.08	796.214	0.00
0.043	0.00	0.317	0.01	2.332	2.24	17.154	4.23	126.191	0.68	928.318	0.00
0.050	0.00	0.370	0.12	2.719	2.46	20.000	4.66	147.128	0.38	1082.339	0.00
0.059	0.00	0.431	0.41	3.170	2.61	23.318	4.99	171.539	0.19	1261.915	0.00
0.068	0.00	0.502	0.65	3.696	2.69	27.187	5.15	200.000	0.08	1471.285	0.00
0.080	0.00	0.586	1.02	4.309	2.70	31.698	5.10	233.183	0.04	1715.392	0.00
0.093	0.00	0.683	1.12	5.024	2.66	36.957	4.85	271.871	0.04	2000.000	0.00
0.108	0.00	0.796	1.17	5.857	2.60	43.089	4.43	316.979	0.05		
0.126	0.00	0.928	1.20	6.829	2.57	50.236	3.89	369.570	0.07		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 44

Sample Details

Sample ID : LAWA-3D3_2

Measured : Monday, April 24, 2023 17:36:48

Sample File : D:\Data Mastersizer2000\Technical
serial\TS 66\MTEC0859_66_51sam_Tetrattech 1.mea

Analysed : Monday, April 24, 2023 17:36:50

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

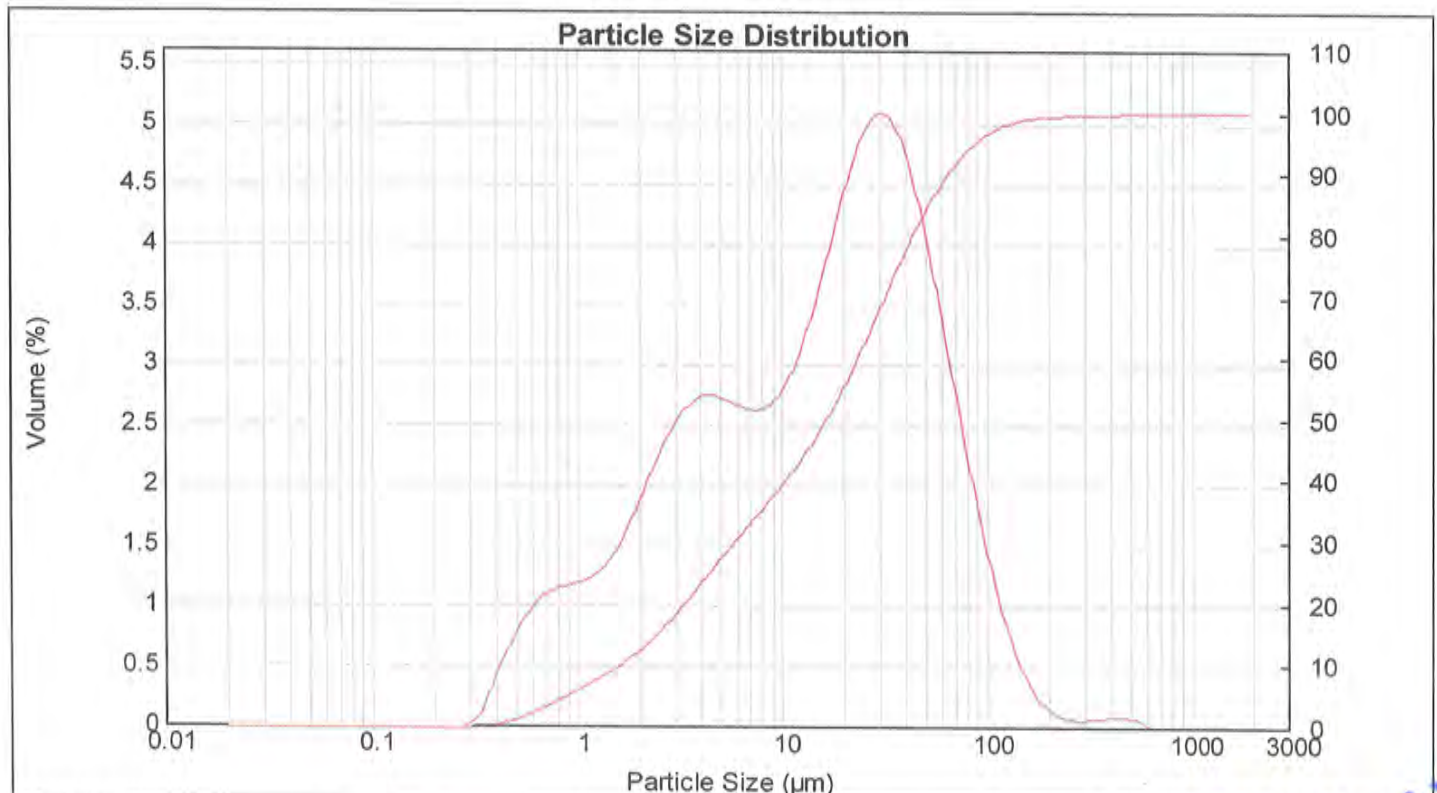
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.94 Residual (%) : 0.757
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0155 %Vol Specific Surface Area : 1.36 m²/g
Mean Diameters : D (0.1) : 1.61 um D (0.5) : 16.58 um D (0.9) : 64.62 um
D [4,3] : 27.57 um D [3,2] : 4.4 um Span : 3.801 Uniformity : 1.31

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.24	7.962	2.67	58.573	3.22	430.887	0.09
0.023	0.00	0.172	0.00	1.262	1.33	9.283	2.79	68.291	2.60	502.377	0.07
0.027	0.00	0.200	0.00	1.471	1.33	10.823	3.03	79.621	2.01	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.73	12.619	3.36	92.832	1.48	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.00	14.713	3.77	108.234	1.02	796.214	0.00
0.043	0.00	0.317	0.12	2.332	2.26	17.154	4.22	126.191	0.65	928.318	0.00
0.050	0.00	0.370	0.41	2.719	2.49	20.000	4.64	147.128	0.38	1082.339	0.00
0.059	0.00	0.431	0.65	3.170	2.65	23.318	4.95	171.539	0.21	1261.915	0.00
0.068	0.00	0.502	0.87	3.696	2.74	27.187	5.10	200.000	0.11	1471.285	0.00
0.080	0.00	0.586	1.03	4.309	2.75	31.698	5.06	233.183	0.07	1715.392	0.00
0.093	0.00	0.683	1.12	5.024	2.72	36.957	4.81	271.871	0.06	2000.000	0.00
0.108	0.00	0.796	1.17	5.857	2.66	43.089	4.38	316.979	0.07		
0.126	0.00	0.928	1.20	6.829	2.63	50.238	3.83	369.570	0.08		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 45

Sample Details

Sample ID : LAWA-3D3_3

Measured : Monday, April 24, 2023 17:38:07

Sample File : D:\Data Mastersizer2000\Technical
series\TS_66\MTEC0859_66_51mm_Tetratech_1.mn

Analysed : Monday, April 24, 2023 17:38:09

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

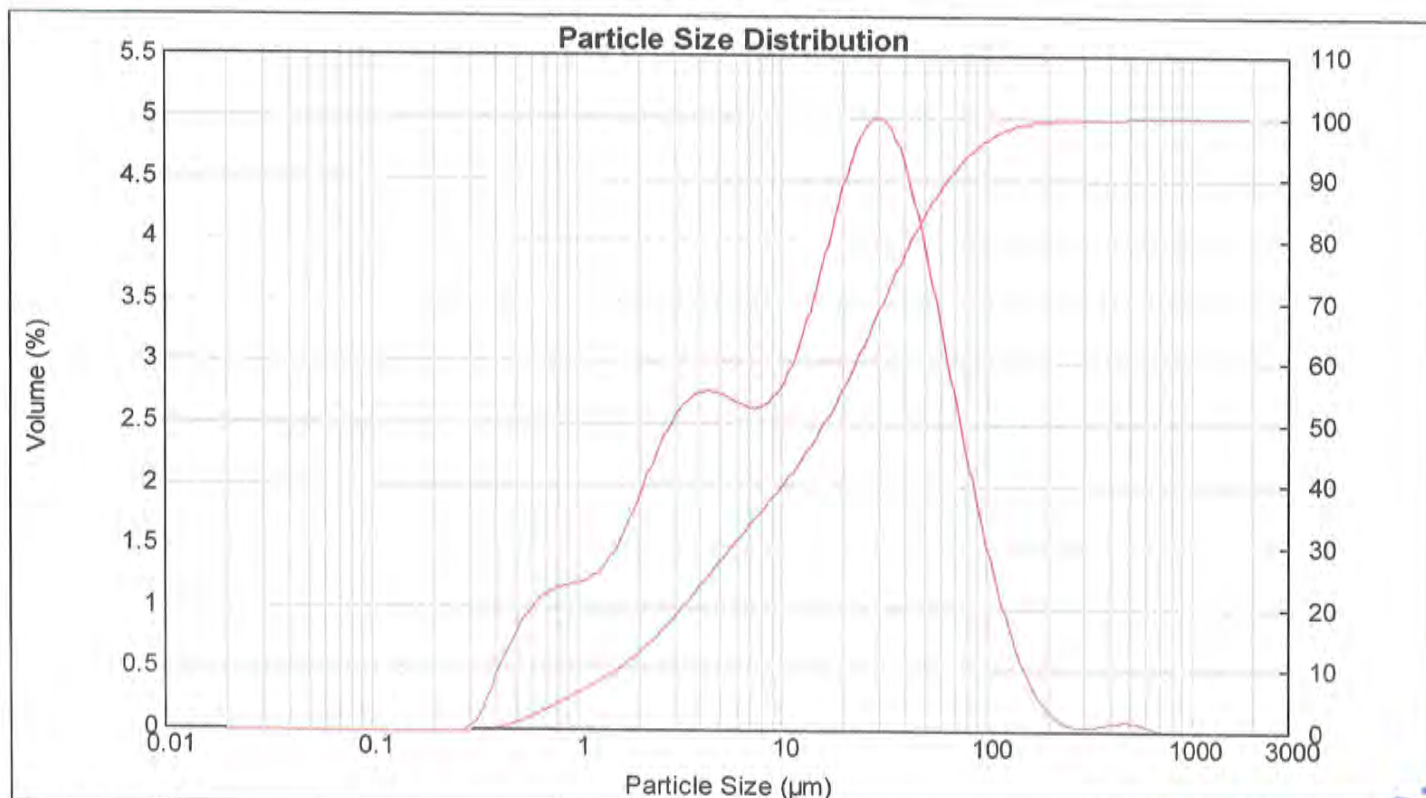
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.77 Residual (%) : 0.741
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0152 %Vol Specific Surface Area : 1.37 m²/g
Mean Diameters : D (0.1) : 1.6 um D (0.5) : 16.32 um D (0.9) : 65.55 um
D [4,3] : 27.71 um D [3,2] : 4.37 um Span : 3.918 Uniformity : 1.34

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.24	7.962	2.68	58.573	3.15	430.887	0.08
0.023	0.00	0.172	0.00	1.262	1.34	9.283	2.81	68.291	2.58	502.377	0.07
0.027	0.00	0.200	0.00	1.471	1.34	10.823	3.05	79.621	2.04	585.729	0.04
0.032	0.00	0.233	0.00	1.715	1.51	12.619	3.38	92.832	1.55	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.74	14.713	3.79	108.234	1.11	796.214	0.00
0.043	0.00	0.317	0.12	2.332	2.02	17.154	4.22	126.191	0.74	928.318	0.00
0.050	0.00	0.370	0.41	2.719	2.29	20.000	4.61	147.128	0.45	1082.339	0.00
0.059	0.00	0.431	0.66	3.170	2.52	23.318	4.90	171.539	0.24	1261.915	0.00
0.068	0.00	0.502	0.88	3.696	2.76	27.187	5.02	200.000	0.12	1471.285	0.00
0.080	0.00	0.586	1.03	4.309	2.77	31.698	4.94	233.183	0.06	1715.392	0.00
0.093	0.00	0.683	1.13	5.024	2.68	36.957	4.25	271.871	0.05	2000.000	0.00
0.108	0.00	0.796	1.18	5.857	2.65	43.089	3.73	316.979	0.07		
0.126	0.00	0.928	1.20	6.829		50.238		369.570			
0.147	0.00	1.082		7.962		58.573		430.887			



APPENDIX A

SEDIMENT ANALYTICAL LABORATORY REPORTS

ANALYTICAL REPORT

PREPARED FOR

Attn: Ted Donn
Tetra Tech, Inc.
3697 Mt. Diablo Blvd.
Suite 150
Lafayette, California 94549

Generated 6/15/2023 11:59:29 AM

JOB DESCRIPTION

Gulf of Thailand - 2023

JOB NUMBER

580-126682-7

Eurofins Seattle

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



Generated
6/15/2023 11:59:29 AM

Authorized for release by
Lilly-Anna LaCount, Project Manager
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(253)922-2310



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Case Narrative

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Job ID: 580-126682-7

Laboratory: Eurofins Seattle

Narrative

Job Narrative 580-126682-7

Comments

No additional comments.

Receipt

The samples were received on 5/2/2023 9:40 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 17 coolers at receipt time were -28.8° C, -23.9° C, -23.8° C, -20.9° C, -18.8° C, -18.5° C, -17.1° C, -16.9° C, -16.8° C, -16.0° C, -15.3° C, -14.8° C, -14.6° C, -10.8° C, -6.7° C, -3.9° C and 2.7° C.

Receipt Exceptions

The following samples did not have a sampling time listed on the chain of custody provided by the client: Control-3-A (580-126682-40), Control-3-B (580-126682-41) and Control-3-C (580-126682-42). The sampling time for these samples was assigned as 23:59 on the date of sampling.

Metals

Method 1631B: The continuing calibration blank (CCB) for analytical batch 580-428562 contained Mercury above the reporting limit (RL). All reported samples associated with this CCB contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Qualifiers

Metals

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWA-1C2

Lab Sample ID: 580-126682-14

Date Collected: 03/22/23 07:27

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	62	H H3	0.10	0.10	%			06/07/23 16:25	1
Percent Solids (SM Moisture - 2540)	38	H H3	0.10	0.10	%			06/07/23 16:25	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWA-1C2

Lab Sample ID: 580-126682-14

Date Collected: 03/22/23 07:27

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 38.2

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	31	B ^2	2.4	0.27	ng/g	☼	06/08/23 17:03	06/09/23 20:05	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWA-1CP2

Lab Sample ID: 580-126682-15

Date Collected: 03/22/23 13:29

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	55	H H3	0.10	0.10	%			06/07/23 16:25	1
Percent Solids (SM Moisture - 2540)	45	H H3	0.10	0.10	%			06/07/23 16:25	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWA-1CP2
Date Collected: 03/22/23 13:29
Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-15
Matrix: Solid
Percent Solids: 45.0

Method: EPA 1631B - Mercury, Low Level (CVAFS)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Mercury	38	B ^2	2.1	0.23	ng/g	☼	06/08/23 17:03	06/09/23 20:09	20	

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWA-2B2X

Lab Sample ID: 580-126682-16

Date Collected: 03/22/23 04:35

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	61	H H3	0.10	0.10	%			06/07/23 16:25	1
Percent Solids (SM Moisture - 2540)	39	H H3	0.10	0.10	%			06/07/23 16:25	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWA-2B2X

Lab Sample ID: 580-126682-16

Date Collected: 03/22/23 04:35

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 39.1

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	29	B ^2	2.6	0.28	ng/g	☼	06/08/23 17:03	06/09/23 20:13	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWA-3B2

Lab Sample ID: 580-126682-17

Date Collected: 03/21/23 23:28

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	49	H H3	0.10	0.10	%			06/07/23 16:25	1
Percent Solids (SM Moisture - 2540)	51	H H3	0.10	0.10	%			06/07/23 16:25	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWA-3B2

Lab Sample ID: 580-126682-17

Date Collected: 03/21/23 23:28

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 51.1

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	58	B ^2	1.8	0.20	ng/g	☼	06/08/23 17:03	06/09/23 20:17	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWA-3C2

Lab Sample ID: 580-126682-18

Date Collected: 03/21/23 23:07

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	59	H H3	0.10	0.10	%			06/07/23 16:25	1
Percent Solids (SM Moisture - 2540)	41	H H3	0.10	0.10	%			06/07/23 16:25	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWA-3C2

Lab Sample ID: 580-126682-18

Date Collected: 03/21/23 23:07

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 40.5

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	41	B ^2	2.4	0.26	ng/g	☼	06/08/23 17:03	06/09/23 20:21	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWA-4B2X

Lab Sample ID: 580-126682-19

Date Collected: 03/21/23 22:45

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	54	H H3	0.10	0.10	%			06/07/23 16:25	1
Percent Solids (SM Moisture - 2540)	46	H H3	0.10	0.10	%			06/07/23 16:25	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWA-4B2X

Lab Sample ID: 580-126682-19

Date Collected: 03/21/23 22:45

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 46.2

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	20	B ^2	2.0	0.22	ng/g	☼	06/08/23 17:03	06/09/23 20:25	20

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Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWB-1B2X

Lab Sample ID: 580-126682-20

Date Collected: 03/21/23 03:53

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	61	H H3	0.10	0.10	%			06/07/23 16:25	1
Percent Solids (SM Moisture - 2540)	39	H H3	0.10	0.10	%			06/07/23 16:25	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWB-1B2X

Lab Sample ID: 580-126682-20

Date Collected: 03/21/23 03:53

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 39.0

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	60	B ^2	2.4	0.27	ng/g	☼	06/08/23 17:03	06/09/23 20:30	20

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Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWB-1C2X

Lab Sample ID: 580-126682-21

Date Collected: 03/21/23 04:06

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	50	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	50	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWB-1C2X

Lab Sample ID: 580-126682-21

Date Collected: 03/21/23 04:06

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 50.2

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	44	B	1.9	0.21	ng/g	☼	06/08/23 17:09	06/12/23 14:51	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWB-2B2X

Lab Sample ID: 580-126682-22

Date Collected: 03/21/23 01:50

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	49	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	51	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWB-2B2X

Lab Sample ID: 580-126682-22

Date Collected: 03/21/23 01:50

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 50.8

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	68	B	1.8	0.20	ng/g	☼	06/08/23 17:09	06/12/23 14:55	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWB-3B2X

Lab Sample ID: 580-126682-23

Date Collected: 03/20/23 23:15

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	36	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	64	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWB-3B2X

Lab Sample ID: 580-126682-23

Date Collected: 03/20/23 23:15

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 63.8

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	870	B	15	1.6	ng/g	☼	06/08/23 17:09	06/12/23 20:37	200

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Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWB-3C2

Lab Sample ID: 580-126682-24

Date Collected: 03/20/23 22:52

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	52	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	48	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWB-3C2

Lab Sample ID: 580-126682-24

Date Collected: 03/20/23 22:52

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 48.1

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	100	B	2.0	0.22	ng/g	☼	06/08/23 17:09	06/12/23 20:41	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWB-4B2X

Lab Sample ID: 580-126682-25

Date Collected: 03/20/23 21:37

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	52	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	48	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWB-4B2X

Lab Sample ID: 580-126682-25

Date Collected: 03/20/23 21:37

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 48.2

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	60	B	2.0	0.22	ng/g	☼	06/08/23 17:09	06/12/23 17:35	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWC-1B2X

Lab Sample ID: 580-126682-26

Date Collected: 03/20/23 03:53

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	50	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	50	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWC-1B2X

Lab Sample ID: 580-126682-26

Date Collected: 03/20/23 03:53

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 50.1

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	150	B	1.9	0.21	ng/g	☼	06/08/23 17:09	06/12/23 17:39	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWC-1C2

Lab Sample ID: 580-126682-27

Date Collected: 03/20/23 05:16

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	54	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	46	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWC-1C2

Lab Sample ID: 580-126682-27

Date Collected: 03/20/23 05:16

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 45.8

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	80	B	2.0	0.22	ng/g	☼	06/08/23 17:09	06/12/23 17:43	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWC-1C2-FD

Lab Sample ID: 580-126682-28

Date Collected: 03/20/23 05:27

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	52	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	48	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWC-1C2-FD

Lab Sample ID: 580-126682-28

Date Collected: 03/20/23 05:27

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 47.7

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	130	B	2.0	0.22	ng/g	☼	06/08/23 17:09	06/12/23 17:47	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWC-2B2X

Lab Sample ID: 580-126682-29

Date Collected: 03/20/23 01:41

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	52	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	48	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWC-2B2X

Lab Sample ID: 580-126682-29

Date Collected: 03/20/23 01:41

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 47.9

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	97	B	1.9	0.21	ng/g	☼	06/08/23 17:09	06/12/23 17:51	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWC-3B2X

Lab Sample ID: 580-126682-30

Date Collected: 03/19/23 23:32

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	52	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	48	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWC-3B2X

Lab Sample ID: 580-126682-30

Date Collected: 03/19/23 23:32

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 47.7

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	90	B	1.9	0.21	ng/g	☼	06/08/23 17:09	06/12/23 17:55	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWC-3C2

Lab Sample ID: 580-126682-31

Date Collected: 03/19/23 23:18

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	52	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	48	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWC-3C2

Lab Sample ID: 580-126682-31

Date Collected: 03/19/23 23:18

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 48.3

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	72	B	2.0	0.22	ng/g	☼	06/08/23 17:09	06/12/23 18:08	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWC-4B2X

Lab Sample ID: 580-126682-32

Date Collected: 03/19/23 23:01

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	49	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	51	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWC-4B2X

Lab Sample ID: 580-126682-32

Date Collected: 03/19/23 23:01

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 50.7

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	22	B	1.9	0.21	ng/g	☼	06/08/23 17:09	06/12/23 18:12	20

1

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Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWD-1B2X

Lab Sample ID: 580-126682-33

Date Collected: 03/23/23 01:09

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	53	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	47	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWD-1B2X

Lab Sample ID: 580-126682-33

Date Collected: 03/23/23 01:09

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 47.2

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	91	B	2.0	0.22	ng/g	☼	06/08/23 17:09	06/12/23 18:16	20

1

2

3

4

5

6

7

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Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWD-1C2

Lab Sample ID: 580-126682-34

Date Collected: 03/23/23 03:36

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	54	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	46	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWD-1C2
Date Collected: 03/23/23 03:36
Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-34
Matrix: Solid
Percent Solids: 46.1

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	41	B	2.0	0.22	ng/g	☼	06/08/23 17:09	06/12/23 18:20	20

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWD-2C2X

Lab Sample ID: 580-126682-35

Date Collected: 03/23/23 05:07

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	54	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	46	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWD-2C2X

Lab Sample ID: 580-126682-35

Date Collected: 03/23/23 05:07

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 46.1

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	36	B	2.2	0.24	ng/g	☼	06/08/23 17:09	06/12/23 18:24	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWD-3B2

Lab Sample ID: 580-126682-36

Date Collected: 03/22/23 23:16

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	50	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	50	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWD-3B2

Lab Sample ID: 580-126682-36

Date Collected: 03/22/23 23:16

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 50.1

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	200	B	1.9	0.21	ng/g	☼	06/08/23 17:09	06/12/23 18:29	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWD-3C2X

Lab Sample ID: 580-126682-37

Date Collected: 03/22/23 23:29

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	56	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	44	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWD-3C2X

Lab Sample ID: 580-126682-37

Date Collected: 03/22/23 23:29

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 44.1

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	59	B	2.2	0.25	ng/g	☼	06/08/23 17:09	06/12/23 18:33	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWD-3C2X-FD

Lab Sample ID: 580-126682-38

Date Collected: 03/22/23 23:38

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	53	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	47	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWD-3C2X-FD

Lab Sample ID: 580-126682-38

Date Collected: 03/22/23 23:38

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 46.6

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	98	B	2.1	0.24	ng/g	☼	06/08/23 17:09	06/12/23 18:37	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWD-4B2X

Lab Sample ID: 580-126682-39

Date Collected: 03/22/23 22:57

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	54	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	46	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWD-4B2X

Lab Sample ID: 580-126682-39

Date Collected: 03/22/23 22:57

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 46.3

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	27	B	2.0	0.22	ng/g	☼	06/08/23 17:09	06/12/23 18:41	20

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Method: 1631B - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 580-428179/1-A

Matrix: Solid

Analysis Batch: 428562

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 428179

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.410	J	1.0	0.11	ng/g		06/08/23 17:03	06/09/23 16:03	20

Lab Sample ID: MB 580-428179/2-A

Matrix: Solid

Analysis Batch: 428562

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 428179

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.412	J	1.0	0.11	ng/g		06/08/23 17:03	06/09/23 16:07	20

Lab Sample ID: MB 580-428179/3-A

Matrix: Solid

Analysis Batch: 428562

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 428179

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.387	J	1.0	0.11	ng/g		06/08/23 17:03	06/09/23 16:11	20

Lab Sample ID: LCS 580-428179/4-A

Matrix: Solid

Analysis Batch: 428562

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 428179

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	396	360		ng/g		91	75 - 125

Lab Sample ID: LCSD 580-428179/5-A

Matrix: Solid

Analysis Batch: 428562

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 428179

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	396	363		ng/g		92	75 - 125	1	24

Lab Sample ID: MB 580-428188/1-A

Matrix: Solid

Analysis Batch: 428772

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 428188

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.115	J	1.0	0.11	ng/g		06/08/23 17:09	06/12/23 15:12	20

Lab Sample ID: MB 580-428188/2-A

Matrix: Solid

Analysis Batch: 428772

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 428188

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.11	ng/g		06/08/23 17:09	06/12/23 15:16	20

Lab Sample ID: MB 580-428188/3-A

Matrix: Solid

Analysis Batch: 428772

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 428188

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.11	ng/g		06/08/23 17:09	06/12/23 15:20	20

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Method: 1631B - Mercury, Low Level (CVAFS)

Lab Sample ID: LCS 580-428188/4-A
Matrix: Solid
Analysis Batch: 428772

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 428188

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	396	397		ng/g		100	75 - 125

Lab Sample ID: LCSD 580-428188/5-A
Matrix: Solid
Analysis Batch: 428772

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 428188

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	396	450		ng/g		114	75 - 125	13	24

Lab Sample ID: 580-126682-21 MS
Matrix: Solid
Analysis Batch: 428772

Client Sample ID: MAWB-1C2X
Prep Type: Total/NA
Prep Batch: 428188

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	44	B	750	787		ng/g	✱	99	71 - 125

Lab Sample ID: 580-126682-21 MSD
Matrix: Solid
Analysis Batch: 428772

Client Sample ID: MAWB-1C2X
Prep Type: Total/NA
Prep Batch: 428188

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	44	B	753	789		ng/g	✱	99	71 - 125	0	24

Lab Sample ID: 580-126682-22 MS
Matrix: Solid
Analysis Batch: 428772

Client Sample ID: MAWB-2B2X
Prep Type: Total/NA
Prep Batch: 428188

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	68	B	745	800		ng/g	✱	98	71 - 125

Lab Sample ID: 580-126682-22 MSD
Matrix: Solid
Analysis Batch: 428772

Client Sample ID: MAWB-2B2X
Prep Type: Total/NA
Prep Batch: 428188

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	68	B	741	771		ng/g	✱	95	71 - 125	4	24

Method: Moisture - 2540 - Percent Moisture

Lab Sample ID: 580-126682-21 DU
Matrix: Solid
Analysis Batch: 428198

Client Sample ID: MAWB-1C2X
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	50	H H3	50		%		1	20
Percent Solids	50	H H3	50		%		1	20

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Method: Moisture - 2540 - Percent Moisture (Continued)

Lab Sample ID: 580-126682-22 DU

Matrix: Solid

Analysis Batch: 428198

Client Sample ID: MAWB-2B2X

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	49	H H3	49		%		0.3	20
Percent Solids	51	H H3	51		%		0.3	20

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWA-1C2

Lab Sample ID: 580-126682-14

Date Collected: 03/22/23 07:27

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428197	CL	EET SEA	06/07/23 16:25

Client Sample ID: MAWA-1C2

Lab Sample ID: 580-126682-14

Date Collected: 03/22/23 07:27

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 38.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428179	CL	EET SEA	06/08/23 17:03
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 20:05

Client Sample ID: MAWA-1CP2

Lab Sample ID: 580-126682-15

Date Collected: 03/22/23 13:29

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428197	CL	EET SEA	06/07/23 16:25

Client Sample ID: MAWA-1CP2

Lab Sample ID: 580-126682-15

Date Collected: 03/22/23 13:29

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 45.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428179	CL	EET SEA	06/08/23 17:03
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 20:09

Client Sample ID: MAWA-2B2X

Lab Sample ID: 580-126682-16

Date Collected: 03/22/23 04:35

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428197	CL	EET SEA	06/07/23 16:25

Client Sample ID: MAWA-2B2X

Lab Sample ID: 580-126682-16

Date Collected: 03/22/23 04:35

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 39.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428179	CL	EET SEA	06/08/23 17:03
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 20:13

Client Sample ID: MAWA-3B2

Lab Sample ID: 580-126682-17

Date Collected: 03/21/23 23:28

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428197	CL	EET SEA	06/07/23 16:25

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWA-3B2

Date Collected: 03/21/23 23:28

Date Received: 05/02/23 09:20

Lab Sample ID: 580-126682-17

Matrix: Solid

Percent Solids: 51.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428179	CL	EET SEA	06/08/23 17:03
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 20:17

Client Sample ID: MAWA-3C2

Date Collected: 03/21/23 23:07

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-18

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428197	CL	EET SEA	06/07/23 16:25

Client Sample ID: MAWA-3C2

Date Collected: 03/21/23 23:07

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-18

Matrix: Solid

Percent Solids: 40.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428179	CL	EET SEA	06/08/23 17:03
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 20:21

Client Sample ID: MAWA-4B2X

Date Collected: 03/21/23 22:45

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-19

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428197	CL	EET SEA	06/07/23 16:25

Client Sample ID: MAWA-4B2X

Date Collected: 03/21/23 22:45

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-19

Matrix: Solid

Percent Solids: 46.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428179	CL	EET SEA	06/08/23 17:03
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 20:25

Client Sample ID: MAWB-1B2X

Date Collected: 03/21/23 03:53

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-20

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428197	CL	EET SEA	06/07/23 16:25

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWB-1B2X

Lab Sample ID: 580-126682-20

Date Collected: 03/21/23 03:53

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 39.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428179	CL	EET SEA	06/08/23 17:03
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 20:30

Client Sample ID: MAWB-1C2X

Lab Sample ID: 580-126682-21

Date Collected: 03/21/23 04:06

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428198	CL	EET SEA	06/08/23 17:31

Client Sample ID: MAWB-1C2X

Lab Sample ID: 580-126682-21

Date Collected: 03/21/23 04:06

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 50.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428188	CL	EET SEA	06/08/23 17:09
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 14:51

Client Sample ID: MAWB-2B2X

Lab Sample ID: 580-126682-22

Date Collected: 03/21/23 01:50

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428198	CL	EET SEA	06/08/23 17:31

Client Sample ID: MAWB-2B2X

Lab Sample ID: 580-126682-22

Date Collected: 03/21/23 01:50

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 50.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428188	CL	EET SEA	06/08/23 17:09
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 14:55

Client Sample ID: MAWB-3B2X

Lab Sample ID: 580-126682-23

Date Collected: 03/20/23 23:15

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428198	CL	EET SEA	06/08/23 17:31

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWB-3B2X

Lab Sample ID: 580-126682-23

Date Collected: 03/20/23 23:15

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 63.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428188	CL	EET SEA	06/08/23 17:09
Total/NA	Analysis	1631B		200	428772	COW	EET SEA	06/12/23 20:37

Client Sample ID: MAWB-3C2

Lab Sample ID: 580-126682-24

Date Collected: 03/20/23 22:52

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428198	CL	EET SEA	06/08/23 17:31

Client Sample ID: MAWB-3C2

Lab Sample ID: 580-126682-24

Date Collected: 03/20/23 22:52

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 48.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428188	CL	EET SEA	06/08/23 17:09
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 20:41

Client Sample ID: MAWB-4B2X

Lab Sample ID: 580-126682-25

Date Collected: 03/20/23 21:37

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428198	CL	EET SEA	06/08/23 17:31

Client Sample ID: MAWB-4B2X

Lab Sample ID: 580-126682-25

Date Collected: 03/20/23 21:37

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 48.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428188	CL	EET SEA	06/08/23 17:09
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 17:35

Client Sample ID: MAWC-1B2X

Lab Sample ID: 580-126682-26

Date Collected: 03/20/23 03:53

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428198	CL	EET SEA	06/08/23 17:31

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWC-1B2X

Lab Sample ID: 580-126682-26

Date Collected: 03/20/23 03:53

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 50.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428188	CL	EET SEA	06/08/23 17:09
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 17:39

Client Sample ID: MAWC-1C2

Lab Sample ID: 580-126682-27

Date Collected: 03/20/23 05:16

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428198	CL	EET SEA	06/08/23 17:31

Client Sample ID: MAWC-1C2

Lab Sample ID: 580-126682-27

Date Collected: 03/20/23 05:16

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 45.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428188	CL	EET SEA	06/08/23 17:09
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 17:43

Client Sample ID: MAWC-1C2-FD

Lab Sample ID: 580-126682-28

Date Collected: 03/20/23 05:27

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428198	CL	EET SEA	06/08/23 17:31

Client Sample ID: MAWC-1C2-FD

Lab Sample ID: 580-126682-28

Date Collected: 03/20/23 05:27

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 47.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428188	CL	EET SEA	06/08/23 17:09
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 17:47

Client Sample ID: MAWC-2B2X

Lab Sample ID: 580-126682-29

Date Collected: 03/20/23 01:41

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428198	CL	EET SEA	06/08/23 17:31

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWC-2B2X

Lab Sample ID: 580-126682-29

Date Collected: 03/20/23 01:41

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 47.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428188	CL	EET SEA	06/08/23 17:09
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 17:51

Client Sample ID: MAWC-3B2X

Lab Sample ID: 580-126682-30

Date Collected: 03/19/23 23:32

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428198	CL	EET SEA	06/08/23 17:31

Client Sample ID: MAWC-3B2X

Lab Sample ID: 580-126682-30

Date Collected: 03/19/23 23:32

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 47.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428188	CL	EET SEA	06/08/23 17:09
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 17:55

Client Sample ID: MAWC-3C2

Lab Sample ID: 580-126682-31

Date Collected: 03/19/23 23:18

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428198	CL	EET SEA	06/08/23 17:31

Client Sample ID: MAWC-3C2

Lab Sample ID: 580-126682-31

Date Collected: 03/19/23 23:18

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 48.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428188	CL	EET SEA	06/08/23 17:09
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 18:08

Client Sample ID: MAWC-4B2X

Lab Sample ID: 580-126682-32

Date Collected: 03/19/23 23:01

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428198	CL	EET SEA	06/08/23 17:31

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWC-4B2X

Date Collected: 03/19/23 23:01

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-32

Matrix: Solid

Percent Solids: 50.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428188	CL	EET SEA	06/08/23 17:09
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 18:12

Client Sample ID: MAWD-1B2X

Date Collected: 03/23/23 01:09

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-33

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428198	CL	EET SEA	06/08/23 17:31

Client Sample ID: MAWD-1B2X

Date Collected: 03/23/23 01:09

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-33

Matrix: Solid

Percent Solids: 47.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428188	CL	EET SEA	06/08/23 17:09
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 18:16

Client Sample ID: MAWD-1C2

Date Collected: 03/23/23 03:36

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-34

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428198	CL	EET SEA	06/08/23 17:31

Client Sample ID: MAWD-1C2

Date Collected: 03/23/23 03:36

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-34

Matrix: Solid

Percent Solids: 46.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428188	CL	EET SEA	06/08/23 17:09
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 18:20

Client Sample ID: MAWD-2C2X

Date Collected: 03/23/23 05:07

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-35

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428198	CL	EET SEA	06/08/23 17:31

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWD-2C2X

Lab Sample ID: 580-126682-35

Date Collected: 03/23/23 05:07

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 46.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428188	CL	EET SEA	06/08/23 17:09
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 18:24

Client Sample ID: MAWD-3B2

Lab Sample ID: 580-126682-36

Date Collected: 03/22/23 23:16

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428198	CL	EET SEA	06/08/23 17:31

Client Sample ID: MAWD-3B2

Lab Sample ID: 580-126682-36

Date Collected: 03/22/23 23:16

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 50.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428188	CL	EET SEA	06/08/23 17:09
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 18:29

Client Sample ID: MAWD-3C2X

Lab Sample ID: 580-126682-37

Date Collected: 03/22/23 23:29

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428198	CL	EET SEA	06/08/23 17:31

Client Sample ID: MAWD-3C2X

Lab Sample ID: 580-126682-37

Date Collected: 03/22/23 23:29

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 44.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428188	CL	EET SEA	06/08/23 17:09
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 18:33

Client Sample ID: MAWD-3C2X-FD

Lab Sample ID: 580-126682-38

Date Collected: 03/22/23 23:38

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428198	CL	EET SEA	06/08/23 17:31

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Client Sample ID: MAWD-3C2X-FD

Lab Sample ID: 580-126682-38

Date Collected: 03/22/23 23:38

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 46.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428188	CL	EET SEA	06/08/23 17:09
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 18:37

Client Sample ID: MAWD-4B2X

Lab Sample ID: 580-126682-39

Date Collected: 03/22/23 22:57

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428198	CL	EET SEA	06/08/23 17:31

Client Sample ID: MAWD-4B2X

Lab Sample ID: 580-126682-39

Date Collected: 03/22/23 22:57

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 46.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428188	CL	EET SEA	06/08/23 17:09
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 18:41

Laboratory References:

EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Laboratory: Eurofins Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
ANAB	Dept. of Defense ELAP	L2236	01-19-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
ANAB	Dept. of Energy	L2236	01-19-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
ANAB	ISO/IEC 17025	L2236	01-19-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
California	State	2954	07-07-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	1631B CAR Prep	Solid	Mercury
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
Florida	NELAP	E87575	06-30-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
Louisiana (All)	NELAP	03073	06-30-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
Maine	State	WA01273	05-02-24

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Laboratory: Eurofins Seattle (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	1631B CAR Prep	Solid	Mercury
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
Montana (UST)	State	NA	04-14-27
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	1631B CAR Prep	Solid	Mercury
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
New Jersey	NELAP	WA014	06-30-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	1631B CAR Prep	Solid	Mercury
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
New York	NELAP	11662	03-31-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	1631B CAR Prep	Solid	Mercury
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
Oregon	NELAP	4167	07-07-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
Moisture - 2540		Solid	Percent Solids
US Fish & Wildlife	US Federal Programs	A20571	06-30-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	1631B CAR Prep	Solid	Mercury
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
USDA	US Federal Programs	525-23-4-22573	01-04-26
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	1631B CAR Prep	Solid	Mercury
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-7

Laboratory: Eurofins Seattle (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	1631B CAR Prep	Solid	Mercury
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
Wisconsin	State	399133460	08-31-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

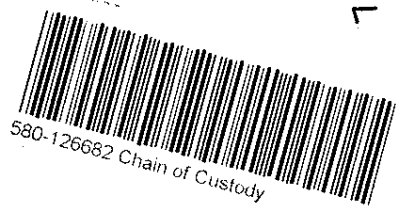
Job ID: 580-126682-7

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-126682-14	MAWA-1C2	Solid	03/22/23 07:27	05/02/23 09:40
580-126682-15	MAWA-1CP2	Solid	03/22/23 13:29	05/02/23 09:40
580-126682-16	MAWA-2B2X	Solid	03/22/23 04:35	05/02/23 09:40
580-126682-17	MAWA-3B2	Solid	03/21/23 23:28	05/02/23 09:40
580-126682-18	MAWA-3C2	Solid	03/21/23 23:07	05/02/23 09:40
580-126682-19	MAWA-4B2X	Solid	03/21/23 22:45	05/02/23 09:40
580-126682-20	MAWB-1B2X	Solid	03/21/23 03:53	05/02/23 09:40
580-126682-21	MAWB-1C2X	Solid	03/21/23 04:06	05/02/23 09:40
580-126682-22	MAWB-2B2X	Solid	03/21/23 01:50	05/02/23 09:40
580-126682-23	MAWB-3B2X	Solid	03/20/23 23:15	05/02/23 09:40
580-126682-24	MAWB-3C2	Solid	03/20/23 22:52	05/02/23 09:40
580-126682-25	MAWB-4B2X	Solid	03/20/23 21:37	05/02/23 09:40
580-126682-26	MAWC-1B2X	Solid	03/20/23 03:53	05/02/23 09:40
580-126682-27	MAWC-1C2	Solid	03/20/23 05:16	05/02/23 09:40
580-126682-28	MAWC-1C2-FD	Solid	03/20/23 05:27	05/02/23 09:40
580-126682-29	MAWC-2B2X	Solid	03/20/23 01:41	05/02/23 09:40
580-126682-30	MAWC-3B2X	Solid	03/19/23 23:32	05/02/23 09:40
580-126682-31	MAWC-3C2	Solid	03/19/23 23:18	05/02/23 09:40
580-126682-32	MAWC-4B2X	Solid	03/19/23 23:01	05/02/23 09:40
580-126682-33	MAWD-1B2X	Solid	03/23/23 01:09	05/02/23 09:40
580-126682-34	MAWD-1C2	Solid	03/23/23 03:36	05/02/23 09:40
580-126682-35	MAWD-2C2X	Solid	03/23/23 05:07	05/02/23 09:40
580-126682-36	MAWD-3B2	Solid	03/22/23 23:16	05/02/23 09:40
580-126682-37	MAWD-3C2X	Solid	03/22/23 23:29	05/02/23 09:40
580-126682-38	MAWD-3C2X-FD	Solid	03/22/23 23:38	05/02/23 09:40
580-126682-39	MAWD-4B2X	Solid	03/22/23 22:57	05/02/23 09:40

CHAIN OF CUSTODY

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5755 8th St. E
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General Notes:

Program: Gulf of Thailand (2020-2023)
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1720 0847 3120

Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.20	LAWA-1C1	SED	FREEZE	19-Mar-23	4:40	1	1	1		
T423.20	LAWA-1C2	SED	FREEZE	19-Mar-23	5:44	1	1	1		
T423.20	LAWA-1C2-FD	SED	FREEZE	19-Mar-23	5:55	1	1	1		
T423.20	LAWA-1C3X	SED	FREEZE	19-Mar-23	7:33	1	1	1		
T423.20	LAWA-1D1	SED	FREEZE	18-Mar-23	11:03	1	1	1		
T423.20	LAWA-1D2	SED	FREEZE	18-Mar-23	22:49	1	1	1		
T423.20	LAWA-1D3X	SED	FREEZE	18-Mar-23	22:13	1	1	1		
T423.20	LAWA-3C1	SED	FREEZE	17-Mar-23	19:07	1	1	1		
T423.20	LAWA-3C2	SED	FREEZE	17-Mar-23	19:55	1	1	1		
T423.20	LAWA-3C3	SED	FREEZE	17-Mar-23	20:23	1	1	1		
T423.20	LAWA-3D1X	SED	FREEZE	17-Mar-23	22:15	1	1	1		
T423.20	LAWA-3D2	SED	FREEZE	17-Mar-23	23:06	1	1	1		
T423.20	LAWA-3D3	SED	FREEZE	18-Mar-23	1:00	1	1	1		

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T423.20	G4/43REF-SW-1	SW	FREEZE	23-Mar-23	10:11				1	1
T423.20	G4/43REF-SW-20	SW	FREEZE	23-Mar-23	10:17				1	1
T423.20	G4/43REF-SW-40	SW	FREEZE	23-Mar-23	10:25				1	1
T423.20	G4/43REF-SW-B	SW	FREEZE	23-Mar-23	10:37				1	1
T423.20	LAWA-1C1-SW-1	SW	FREEZE	18-Mar-23	4:36				1	
T423.20	LAWA-1C1-SW-20	SW	FREEZE	18-Mar-23	4:44				1	
T423.20	LAWA-1C1-SW-40	SW	FREEZE	18-Mar-23	4:56				1	
T423.20	LAWA-1C1-SW-B	SW	FREEZE	18-Mar-23	5:08				1	
T423.20	LAWA-1C1-SW-B-FD	SW	FREEZE	18-Mar-23	5:20				1	
T423.20	LAWA-1C2-SW-1	SW	FREEZE	18-Mar-23	7:08				1	
T423.20	LAWA-1C2-SW-20	SW	FREEZE	18-Mar-23	7:45				1	

Relinquished by:

[Signature] 5/5/23

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Received by:

6/15/2023

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.20	LAWA-1C2-SW-40	SW	FREEZE	18-Mar-23	7:55				1	1
T423.20	LAWA-1C2-SW-B	SW	FREEZE	18-Mar-23	8:07				1	1
T423.20	LAWA-1C3X-SW-1	SW	FREEZE	18-Mar-23	19:21				1	1
T423.20	LAWA-1C3X-SW-20	SW	FREEZE	18-Mar-23	19:29				1	1
T423.20	LAWA-1C3X-SW-40	SW	FREEZE	18-Mar-23	19:40				1	1
T423.20	LAWA-1C3X-SW-B	SW	FREEZE	18-Mar-23	19:52				1	1
T423.20	LAWA-1D1-SW-1	SW	FREEZE	19-Mar-23	2:31				1	1
T423.20	LAWA-1D1-SW-20	SW	FREEZE	19-Mar-23	2:37				1	1
T423.20	LAWA-1D1-SW-40	SW	FREEZE	19-Mar-23	2:46				1	1
T423.20	LAWA-1D1-SW-B	SW	FREEZE	19-Mar-23	2:59				1	1
T423.20	LAWA-1D2-SW-1	SW	FREEZE	19-Mar-23	0:28				1	1
T423.20	LAWA-1D2-SW-1-FD	SW	FREEZE	19-Mar-23	0:36				1	1
T423.20	LAWA-1D2-SW-20	SW	FREEZE	19-Mar-23	0:43				1	1
T423.20	LAWA-1D2-SW-40	SW	FREEZE	19-Mar-23	0:52				1	1
T423.20	LAWA-1D2-SW-B	SW	FREEZE	19-Mar-23	1:05				1	1
T423.20	LAWA-1D3X-SW-1	SW	FREEZE	18-Mar-23	20:43				1	1
T423.20	LAWA-1D3X-SW-20	SW	FREEZE	18-Mar-23	20:51				1	1
T423.20	LAWA-1D3X-SW-40	SW	FREEZE	18-Mar-23	21:01				1	1
T423.20	LAWA-1D3X-SW-B	SW	FREEZE	18-Mar-23	21:14				1	1
T423.20	LAWA-3C1-SW-1	SW	FREEZE	17-Mar-23	16:43				1	1
T423.20	LAWA-3C1-SW-20	SW	FREEZE	17-Mar-23	16:50				1	1
T423.20	LAWA-3C1-SW-40	SW	FREEZE	17-Mar-23	17:00				1	1
T423.20	LAWA-3C1-SW-B	SW	FREEZE	17-Mar-23	17:13				1	1
T423.20	LAWA-3C2-SW-1	SW	FREEZE	18-Mar-23	3:47				1	1
T423.20	LAWA-3C2-SW-20	SW	FREEZE	18-Mar-23	3:04				1	1

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.20	LAWA-3C2-SW-40	SW	FREEZE	18-Mar-23	4:03				1	1
T423.20	LAWA-3C2-SW-B	SW	FREEZE	18-Mar-23	4:15				1	1
T423.20	LAWA-3C3-SW-1	SW	FREEZE	18-Mar-23	2:01				1	1
T423.20	LAWA-3C3-SW-20	SW	FREEZE	18-Mar-23	2:08				1	1
T423.20	LAWA-3C3-SW-40	SW	FREEZE	18-Mar-23	2:07				1	1
T423.20	LAWA-3C3-SW-B	SW	FREEZE	18-Mar-23	2:33				1	1
T423.20	LAWA-3D1X-SW-1	SW	FREEZE	17-Mar-23	12:21				1	1
T423.20	LAWA-3D1X-SW-20	SW	FREEZE	17-Mar-23	12:29				1	1
T423.20	LAWA-3D1X-SW-40	SW	FREEZE	17-Mar-23	12:39				1	1
T423.20	LAWA-3D1X-SW-B	SW	FREEZE	17-Mar-23	12:51				1	1
T423.20	LAWA-3D2-SW-1	SW	FREEZE	17-Mar-23	4:33				1	1
T423.20	LAWA-3D2-SW-1-FD	SW	FREEZE	17-Mar-23	4:41				1	1
T423.20	LAWA-3D2-SW-20	SW	FREEZE	17-Mar-23	4:48				1	1
T423.20	LAWA-3D2-SW-40	SW	FREEZE	17-Mar-23	4:58				1	1
T423.20	LAWA-3D2-SW-B	SW	FREEZE	17-Mar-23	5:10				1	1
T423.20	LAWA-3D3-SW-1	SW	FREEZE	17-Mar-23	3:38				1	1
T423.20	LAWA-3D3-SW-20	SW	FREEZE	17-Mar-23	3:49				1	1
T423.20	LAWA-3D3-SW-40	SW	FREEZE	17-Mar-23	3:59				1	1
T423.20	LAWA-3D3-SW-B	SW	FREEZE	17-Mar-23	4:14				1	1
T423.20	LAWA-EQ	SW	FREEZE	17-Mar-23	3:25				1	1
T423.20	LAWA-WB	SW	FREEZE	17-Mar-23	3:30				1	1

T423.18	MAWA-1C2	SED	FREEZE	22-Mar-23	7:27	1	1	1		
T423.18	MAWA-1CP2	SED	FREEZE	22-Mar-23	13:29	1	1	1		
T423.18	MAWA-2B2X	SED	FREEZE	22-Mar-23	4:35	1	1	1		

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Patrick Garcia-Strickland

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.18	MAWA-3B2	SED	FREEZE	21-Mar-23	23:28	1	1	1	1	
T423.18	MAWA-3C2	SED	FREEZE	21-Mar-23	23:07	1	1	1	1	
T423.18	MAWA-4B2X	SED	FREEZE	21-Mar-23	22:45	1	1	1	1	
T423.18	MAWB-1B2X	SED	FREEZE	21-Mar-23	3:53	1	1	1	1	
T423.18	MAWB-1C2X	SED	FREEZE	21-Mar-23	4:06	1	1	1	1	
T423.18	MAWB-2B2X	SED	FREEZE	21-Mar-23	1:50	1	1	1	1	
T423.18	MAWB-3B2X	SED	FREEZE	20-Mar-23	23:15	1	1	1	1	
T423.18	MAWB-3C2	SED	FREEZE	20-Mar-23	22:52	1	1	1	1	
T423.18	MAWB-4B2X	SED	FREEZE	20-Mar-23	21:37	1	1	1	1	
T423.18	MAWC-1B2X	SED	FREEZE	20-Mar-23	3:53	1	1	1	1	
T423.18	MAWC-1C2	SED	FREEZE	20-Mar-23	5:16	1	1	1	1	
T423.18	MAWC-1C2-FD	SED	FREEZE	20-Mar-23	5:27	1	1	1	1	
T423.18	MAWC-2B2X	SED	FREEZE	20-Mar-23	1:41	1	1	1	1	
T423.18	MAWC-3B2X	SED	FREEZE	19-Mar-23	23:32	1	1	1	1	
T423.18	MAWC-3C2	SED	FREEZE	19-Mar-23	23:18	1	1	1	1	
T423.18	MAWC-4B2X	SED	FREEZE	19-Mar-23	23:01	1	1	1	1	
T423.18	MAWD-1B2X	SED	FREEZE	23-Mar-23	1:09	1	1	1	1	
T423.18	MAWD-1C2	SED	FREEZE	23-Mar-23	3:36	1	1	1	1	
T423.18	MAWD-2C2X	SED	FREEZE	23-Mar-23	5:07	1	1	1	1	
T423.18	MAWD-3B2	SED	FREEZE	22-Mar-23	23:16	1	1	1	1	
T423.18	MAWD-3C2X	SED	FREEZE	22-Mar-23	23:29	1	1	1	1	
T423.18	MAWD-3C2X-FD	SED	FREEZE	22-Mar-23	23:38	1	1	1	1	
T423.18	MAWD-4B2X	SED	FREEZE	22-Mar-23	22:57	1	1	1	1	

T423.18	MAWA-1C2-SW-1	SW	COLD	22-Mar-23	5:30				1	1
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Ship To:

Patrick Garcia-Strickland

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.18	MAWA-1C2-SW-20	SW	COLD	22-Mar-23	5:36				1	1
T423.18	MAWA-1C2-SW-40	SW	COLD	22-Mar-23	5:46				1	1
T423.18	MAWA-1C2-SW-B	SW	COLD	22-Mar-23	5:57				1	1
T423.18	MAWA-1CP2-SW-1	SW	COLD	22-Mar-23	12:26				1	1
T423.18	MAWA-1CP2-SW-20	SW	COLD	22-Mar-23	12:32				1	1
T423.18	MAWA-1CP2-SW-40	SW	COLD	22-Mar-23	12:41				1	1
T423.18	MAWA-1CP2-SW-B	SW	COLD	22-Mar-23	12:52				1	1
T423.18	MAWA-2B2X-SW-1	SW	COLD	22-Mar-23	3:52				1	1
T423.18	MAWA-2B2X-SW-20	SW	COLD	22-Mar-23	3:58				1	1
T423.18	MAWA-2B2X-SW-40	SW	COLD	22-Mar-23	4:07				1	1
T423.18	MAWA-2B2X-SW-B	SW	COLD	22-Mar-23	4:19				1	1
T423.18	MAWA-3B2-SW-1	SW	COLD	22-Mar-23	2:12				1	1
T423.18	MAWA-3B2-SW-20	SW	COLD	22-Mar-23	2:19				1	1
T423.18	MAWA-3B2-SW-20-FD	SW	COLD	22-Mar-23	2:26				1	1
T423.18	MAWA-3B2-SW-40	SW	COLD	22-Mar-23	2:35				1	1
T423.18	MAWA-3B2-SW-B	SW	COLD	22-Mar-23	2:48				1	1
T423.18	MAWA-3C2-SW-1	SW	COLD	22-Mar-23	0:21				1	1
T423.18	MAWA-3C2-SW-20	SW	COLD	22-Mar-23	0:27				1	1
T423.18	MAWA-3C2-SW-40	SW	COLD	22-Mar-23	0:36				1	1
T423.18	MAWA-3C2-SW-B	SW	COLD	22-Mar-23	0:47				1	1
T423.18	MAWA-4B2X-SW-1	SW	COLD	21-Mar-23	21:43				1	1
T423.18	MAWA-4B2X-SW-20	SW	COLD	21-Mar-23	21:49				1	1
T423.18	MAWA-4B2X-SW-40	SW	COLD	21-Mar-23	21:57				1	1
T423.18	MAWA-4B2X-SW-B	SW	COLD	21-Mar-23	22:09				1	1
T423.18	MAWA-EQ	SW	COLD	21-Mar-23	21:33				1	1

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T423.18	MAWB-WB	SW	COLD	21-Mar-23	21:28				1	1
T423.18	MAWB-1B2X-SW-1	SW	FREEZE	21-Mar-23	3:08				1	1
T423.18	MAWB-1B2X-SW-1-FD	SW	FREEZE	21-Mar-23	3:13				1	1
T423.18	MAWB-1B2X-SW-20	SW	FREEZE	21-Mar-23	3:19				1	1
T423.18	MAWB-1B2X-SW-40	SW	FREEZE	21-Mar-23	3:27				1	1
T423.18	MAWB-1B2X-SW-B	SW	FREEZE	21-Mar-23	3:38				1	1
T423.18	MAWB-1C2X-SW-1	SW	FREEZE	20-Mar-23	16:42				1	1
T423.18	MAWB-1C2X-SW-20	SW	FREEZE	20-Mar-23	16:48				1	1
T423.18	MAWB-1C2X-SW-40	SW	FREEZE	20-Mar-23	16:59				1	1
T423.18	MAWB-1C2X-SW-B	SW	FREEZE	20-Mar-23	17:11				1	1
T423.18	MAWB-2B2X-SW-1	SW	FREEZE	21-Mar-23	1:06				1	1
T423.18	MAWB-2B2X-SW-20	SW	FREEZE	21-Mar-23	1:11				1	1
T423.18	MAWB-2B2X-SW-20-FD	SW	FREEZE	21-Mar-23	1:18				1	1
T423.18	MAWB-2B2X-SW-40	SW	FREEZE	21-Mar-23	1:26				1	1
T423.18	MAWB-2B2X-SW-B	SW	FREEZE	21-Mar-23	1:37				1	1
T423.18	MAWB-3B2X-SW-1	SW	FREEZE	20-Mar-23	19:17				1	1
T423.18	MAWB-3B2X-SW-20	SW	FREEZE	20-Mar-23	19:23				1	1
T423.18	MAWB-3B2X-SW-40	SW	FREEZE	20-Mar-23	19:31				1	1
T423.18	MAWB-3B2X-SW-B	SW	FREEZE	20-Mar-23	19:43				1	1
T423.18	MAWB-3C2-SW-1	SW	FREEZE	20-Mar-23	10:55				1	1
T423.18	MAWB-3C2-SW-20	SW	FREEZE	20-Mar-23	11:00				1	1
T423.18	MAWB-3C2-SW-40	SW	FREEZE	20-Mar-23	11:13				1	1
T423.18	MAWB-3C2-SW-B	SW	FREEZE	20-Mar-23	11:24				1	1
T423.18	MAWB-4B2X-SW-1	SW	FREEZE	20-Mar-23	20:25				1	1
T423.18	MAWB-4B2X-SW-20	SW	FREEZE	20-Mar-23	20:30				1	1

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CHAIN OF CUSTODY

Ship To:

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T423.18	MAWB-4B2X-SW-40	SW	FREEZE	20-Mar-23	20:39				1	1
T423.18	MAWB-4B2X-SW-B	SW	FREEZE	20-Mar-23	20:50				1	1
T423.18	MAWB-4B2X-SW-B-FD	SW	FREEZE	20-Mar-23	21:03				1	1
T423.18	MAWC-1B2X-SW-1	SW	FREEZE	20-Mar-23	2:37				1	1
T423.18	MAWC-1B2X-SW-20	SW	FREEZE	20-Mar-23	2:43				1	1
T423.18	MAWC-1B2X-SW-40	SW	FREEZE	20-Mar-23	2:52				1	1
T423.18	MAWC-1B2X-SW-B	SW	FREEZE	20-Mar-23	3:04				1	1
T423.18	MAWC-1C2-SW-1	SW	FREEZE	20-Mar-23	4:37				1	1
T423.18	MAWC-1C2-SW-20	SW	FREEZE	20-Mar-23	4:43				1	1
T423.18	MAWC-1C2-SW-40	SW	FREEZE	20-Mar-23	4:52				1	1
T423.18	MAWC-1C2-SW-B	SW	FREEZE	20-Mar-23	5:04				1	1
T423.18	MAWC-2B2X-SW-1	SW	FREEZE	20-Mar-23	1:02				1	1
T423.18	MAWC-2B2X-SW-20	SW	FREEZE	20-Mar-23	1:08				1	1
T423.18	MAWC-2B2X-SW-40	SW	FREEZE	20-Mar-23	1:17				1	1
T423.18	MAWC-2B2X-SW-B	SW	FREEZE	20-Mar-23	1:28				1	1
T423.18	MAWC-3B2X-SW-1	SW	FREEZE	19-Mar-23	20:13				1	1
T423.18	MAWC-3B2X-SW-20	SW	FREEZE	19-Mar-23	20:23				1	1
T423.18	MAWC-3B2X-SW-40	SW	FREEZE	19-Mar-23	20:32				1	1
T423.18	MAWC-3B2X-SW-B	SW	FREEZE	19-Mar-23	20:43				1	1
T423.18	MAWC-3C2-SW-1	SW	FREEZE	19-Mar-23	19:09				1	1
T423.18	MAWC-3C2-SW-20	SW	FREEZE	19-Mar-23	19:26				1	1
T423.18	MAWC-3C2-SW-40	SW	FREEZE	19-Mar-23	19:04				1	1
T423.18	MAWC-3C2-SW-B	SW	FREEZE	19-Mar-23	19:46				1	1
T423.18	MAWC-4B2X-SW-1	SW	FREEZE	19-Mar-23	21:02				1	1
T423.18	MAWC-4B2X-SW-20	SW	FREEZE	19-Mar-23	21:52				1	1

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T423.18	MAWC-4B2X-SW-40	SW	FREEZE	19-Mar-23	22:01				1	1
T423.18	MAWC-4B2X-SW-B	SW	FREEZE	19-Mar-23	22:12				1	1
T423.18	MAWC-4B2X-SW-B-FD	SW	FREEZE	19-Mar-23	22:25				1	1
T423.18	MAWC-EQ	SW	FREEZE	19-Mar-23	9:07				1	1
T423.18	MAWC-WB	SW	FREEZE	19-Mar-23	19:00				1	1
T423.18	MAWD-1B2X-SW-1	SW	COLD	23-Mar-23	0:50				1	1
T423.18	MAWD-1B2X-SW-20	SW	COLD	23-Mar-23	0:56				1	1
T423.18	MAWD-1B2X-SW-40	SW	COLD	23-Mar-23	1:05				1	1
T423.18	MAWD-1B2X-SW-B	SW	COLD	23-Mar-23	1:17				1	1
T423.18	MAWD-1C2-SW-1	SW	COLD	23-Mar-23	2:22				1	1
T423.18	MAWD-1C2-SW-20	SW	COLD	23-Mar-23	2:28				1	1
T423.18	MAWD-1C2-SW-40	SW	COLD	23-Mar-23	2:37				1	1
T423.18	MAWD-1C2-SW-B	SW	COLD	23-Mar-23	2:48				1	1
T423.18	MAWD-2C2X-SW-1	SW	COLD	23-Mar-23	4:27				1	1
T423.18	MAWD-2C2X-SW-20	SW	COLD	23-Mar-23	4:34				1	1
T423.18	MAWD-2C2X-SW-40	SW	COLD	23-Mar-23	4:43				1	1
T423.18	MAWD-2C2X-SW-B	SW	COLD	23-Mar-23	4:55				1	1
T423.18	MAWD-3B2-SW-1	SW	COLD	22-Mar-23	20:25				1	1
T423.18	MAWD-3B2-SW-20	SW	COLD	22-Mar-23	20:31				1	1
T423.18	MAWD-3B2-SW-40	SW	COLD	22-Mar-23	20:42				1	1
T423.18	MAWD-3B2-SW-B	SW	COLD	22-Mar-23	20:54				1	1
T423.18	MAWD-3C2X-SW-1	SW	COLD	22-Mar-23	19:15				1	1
T423.18	MAWD-3C2X-SW-20	SW	COLD	22-Mar-23	19:24				1	1
T423.18	MAWD-3C2X-SW-40	SW	COLD	22-Mar-23	19:33				1	1
T423.18	MAWD-3C2X-SW-B	SW	COLD	22-Mar-23	19:44				1	1

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T423.18	MAWD-4B2X-SW-1	SW	COLD	22-Mar-23	22:18				1	1
T423.18	MAWD-4B2X-SW-20	SW	COLD	22-Mar-23	22:24				1	1
T423.18	MAWD-4B2X-SW-40	SW	COLD	22-Mar-23	22:33				1	1
T423.18	MAWD-4B2X-SW-B	SW	COLD	22-Mar-23	22:44				1	1
T423.19	Control-3-A	SED	FREEZE	23-Mar-23		1	1	1		
T423.19	Control-3-B	SED	FREEZE	23-Mar-23		1	1	1		
T423.19	Control-3-C	SED	FREEZE	23-Mar-23		1	1	1		
T423.19	MAWG-1B1X	SED	FREEZE	21-Mar-23	18:15	1	1	1		
T423.19	MAWG-1B2X	SED	FREEZE	21-Mar-23	17:14	1	1	1		
T423.19	MAWG-1B3X	SED	FREEZE	21-Mar-23	19:04	1	1	1		
T423.19	MAWG-1C1	SED	FREEZE	21-Mar-23	19:44	1	1	1		
T423.19	MAWG-1C2	SED	FREEZE	21-Mar-23	19:09	1	1	1		
T423.19	MAWG-1C3	SED	FREEZE	21-Mar-23	19:15	1	1	1		
T423.19	MAWG-1D1	SED	FREEZE	21-Mar-23	20:12	1	1	1		
T423.19	MAWG-1D2	SED	FREEZE	21-Mar-23	20:32	1	1	1		
T423.19	MAWG-1D3	SED	FREEZE	21-Mar-23	20:50	1	1	1		
T423.19	MAWG-2B2X	SED	FREEZE	21-Mar-23	13:25	1	1	1		
T423.19	MAWG-2B2X-FD	SED	FREEZE	21-Mar-23	13:35	1	1	1		
T423.19	MAWG-2C2	SED	FREEZE	21-Mar-23	13:08	1	1	1		
T423.19	MAWG-3B1X	SED	FREEZE	21-Mar-23	8:02	1	1	1		
T423.19	MAWG-3B2X	SED	FREEZE	21-Mar-23	8:08	1	1	1		
T423.19	MAWG-3B3X	SED	FREEZE	21-Mar-23	8:52	1	1	1		
T423.19	MAWG-3C1	SED	FREEZE	21-Mar-23	10:28	1	1	1		
T423.19	MAWG-3C2	SED	FREEZE	21-Mar-23	9:00	1	1	1		
T423.19	MAWG-3C2-FD	SED	FREEZE	21-Mar-23	9:45	1	1	1		

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T423.19	MAWG-3C3	SED	FREEZE	21-Mar-23	9:11	1	1	1		
T423.19	MAWG-3D1	SED	FREEZE	21-Mar-23	11:02	1	1	1		
T423.19	MAWG-3D2	SED	FREEZE	21-Mar-23	11:26	1	1	1		
T423.19	MAWG-3D3	SED	FREEZE	21-Mar-23	11:48	1	1	1		
T423.19	MAWG-4B2X	SED	FREEZE	21-Mar-23	12:46	1	1	1		
T423.19	MAWG-4C2	SED	FREEZE	21-Mar-23	12:28	1	1	1		

T423.19	Control-3-SW-1	SW	COLD	23-Mar-23	19:18				1	1
T423.19	Control-3-SW-20	SW	COLD	23-Mar-23	19:27				1	1
T423.19	Control-3-SW-40	SW	COLD	23-Mar-23	19:39				1	1
T423.19	Control-3-SW-B	SW	COLD	23-Mar-23	19:50				1	1
T423.19	MAWG-1B2X-SW-1	SW	COLD	21-Mar-23	15:44				1	1
T423.19	MAWG-1B2X-SW-20	SW	COLD	21-Mar-23	15:50				1	1
T423.19	MAWG-1B2X-SW-40	SW	COLD	21-Mar-23	16:01				1	1
T423.19	MAWG-1B2X-SW-B	SW	COLD	21-Mar-23	16:16				1	1
T423.19	MAWG-3B2X-SW-1	SW	COLD	21-Mar-23	5:13				1	1
T423.19	MAWG-3B2X-SW-1-FD	SW	COLD	21-Mar-23	5:18				1	1
T423.19	MAWG-3B2X-SW-20	SW	COLD	21-Mar-23	5:24				1	1
T423.19	MAWG-3B2X-SW-40	SW	COLD	21-Mar-23	5:39				1	1
T423.19	MAWG-3B2X-SW-B	SW	COLD	21-Mar-23	5:50				1	1
T423.19	MAWG-EQ	SW	COLD	21-Mar-23	4:05				1	1
T423.19	MAWG-WB	SW	COLD	21-Mar-23	5:00				1	1

T423.21	TFPSO-1B2	SED	FREEZE	25-Mar-23	4:33	1	1		1	
T423.21	TFPSO-1C2	SED	FREEZE	25-Mar-23	2:39	1	1		1	

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T423.21	TFPSO-1CP2	SED	FREEZE	25-Mar-23	2:19	1	1	1		
T423.21	TFPSO-1D2	SED	FREEZE	25-Mar-23	1:48	1	1	1		
T423.21	TFPSO-1D2-FD	SED	FREEZE	25-Mar-23	2:00	1	1	1		
T423.21	TFPSO-2B2	SED	FREEZE	25-Mar-23	7:42	1	1	1		
T423.21	TFPSO-2CP2	SED	FREEZE	25-Mar-23	7:19	1	1	1		
T423.21	TFPSO-3B2	SED	FREEZE	25-Mar-23	8:01	1	1	1		
T423.21	TFPSO-3CP2	SED	FREEZE	25-Mar-23	8:47	1	1	1		
T423.21	TFPSO-4B2	SED	FREEZE	25-Mar-23	8:20	1	1	1		
T423.21	TFPSO-4CP2	SED	FREEZE	25-Mar-23	9:10	1	1	1		
T423.21	YAREF-A2	SED	FREEZE	25-Mar-23	12:54	1	1	1		
T423.21	YAREF-B2	SED	FREEZE	25-Mar-23	13:04	1	1	1		
T423.21	YAREF-C2	SED	FREEZE	25-Mar-23	13:14	1	1	1		
T423.21	TFPSO-1B2-SW-1	SW	COLD	25-Mar-23	2:57				1	1
T423.21	TFPSO-1B2-SW-20	SW	COLD	25-Mar-23	3:04				1	1
T423.21	TFPSO-1B2-SW-20-FD	SW	COLD	25-Mar-23	3:10				1	1
T423.21	TFPSO-1B2-SW-40	SW	COLD	25-Mar-23	3:17				1	1
T423.21	TFPSO-1B2-SW-B	SW	COLD	25-Mar-23	3:28				1	1
T423.21	TFPSO-3B2-SW-1	SW	COLD	25-Mar-23	4:51				1	1
T423.21	TFPSO-3B2-SW-20	SW	COLD	25-Mar-23	4:57				1	1
T423.21	TFPSO-3B2-SW-40	SW	COLD	25-Mar-23	5:05				1	1
T423.21	TFPSO-3B2-SW-B	SW	COLD	25-Mar-23	5:21				1	1
T423.21	TFPSO-EQ	SW	COLD	25-Mar-23	1:00				1	1
T423.21	TFPSO-WB	SW	COLD	25-Mar-23	1:05				1	1
T423.21	YAREF-SW-1	SW	COLD	25-Mar-23	12:16				1	1

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.21	YAREF-SW-20	SW	COLD	25-Mar-23	12:23				1	1
T423.21	YAREF-SW-40	SW	COLD	25-Mar-23	12:31				1	1
T423.21	YAREF-SW-B	SW	COLD	25-Mar-23	12:42				1	1
T423.17	CBREF-A	SED	FREEZE	25-Mar-23	19:20	1	1	1		
T423.17	CBREF-B	SED	FREEZE	25-Mar-23	19:30	1	1	1		
T423.17	CBREF-C	SED	FREEZE	25-Mar-23	19:39	1	1	1		
T423.17	YUWA-1B1X	SED	FREEZE	16-Mar-23	17:20	1	1	1		
T423.17	YUWA-1B2X	SED	FREEZE	16-Mar-23	16:50	1	1	1		
T423.17	YUWA-1B3X	SED	FREEZE	16-Mar-23	17:03	1	1	1		
T423.17	YUWA-1C1	SED	FREEZE	16-Mar-23	19:30	1	1	1		
T423.17	YUWA-1C2	SED	FREEZE	16-Mar-23	19:43	1	1	1		
T423.17	YUWA-1C3	SED	FREEZE	16-Mar-23	19:55	1	1	1		
T423.17	YUWA-1D1	SED	FREEZE	16-Mar-23	20:13	1	1	1		
T423.17	YUWA-1D2	SED	FREEZE	16-Mar-23	20:19	1	1	1		
T423.17	YUWA-1D3	SED	FREEZE	16-Mar-23	20:44	1	1	1		
T423.17	YUWA-2B2X	SED	FREEZE	16-Mar-23	18:57	1	1	1		
T423.17	YUWA-2C2	SED	FREEZE	16-Mar-23	19:13	1	1	1		
T423.17	YUWA-3B1X	SED	FREEZE	16-Mar-23	10:09	1	1	1		
T423.17	YUWA-3B1X-FD	SED	FREEZE	16-Mar-23	10:19	1	1	1		
T423.17	YUWA-3B2X	SED	FREEZE	16-Mar-23	9:07	1	1	1		
T423.17	YUWA-3B3X	SED	FREEZE	16-Mar-23	10:49	1	1	1		
T423.17	YUWA-3C1	SED	FREEZE	16-Mar-23	13:00	1	1	1		
T423.17	YUWA-3C1-FD	SED	FREEZE	16-Mar-23	13:09	1	1	1		
T423.17	YUWA-3C2	SED	FREEZE	16-Mar-23	12:03	1	1	1		

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Recieved by:  5/15/23 Recieved by:

CHAIN OF CUSTODY

Ship To:

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Eurofins Specialty Metals Testing

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Lafayette, CA

ted.donn@tetratech.com

General Notes:
Program: Gulf of Thailand (2020-2023)
Please report all results to the MDL, J-flag results between MDL and RL
Please report results and invoice separately for each Project ID
Please report results in pdf format with Excel EDD deliverable
Please report results on a dry weight basis.

Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.17	YUWA-3C3	SED	FREEZE	16-Mar-23	11:19	1	1	1		
T423.17	YUWA-3D1	SED	FREEZE	16-Mar-23	13:34	1	1	1		
T423.17	YUWA-3D2	SED	FREEZE	16-Mar-23	13:04	1	1	1		
T423.17	YUWA-3D3	SED	FREEZE	16-Mar-23	14:17	1	1	1		
T423.17	YUWA-4B2X	SED	FREEZE	16-Mar-23	6:03	1	1	1		
T423.17	YUWA-4C2	SED	FREEZE	16-Mar-23	6:24	1	1	1		
T423.17	CBREF-SW-1	SW	FREEZE	25-Mar-23	17:03				1	1
T423.17	CBREF-SW-20	SW	FREEZE	25-Mar-23	17:10				1	1
T423.17	CBREF-SW-40	SW	FREEZE	25-Mar-23	17:18				1	1
T423.17	CBREF-SW-B	SW	FREEZE	25-Mar-23	17:30				1	1
T423.17	YUWA-1B2X-SW-1	SW	FREEZE	16-Mar-23	15:09				1	1
T423.17	YUWA-1B2X-SW-20	SW	FREEZE	16-Mar-23	15:16				1	1
T423.17	YUWA-1B2X-SW-40	SW	FREEZE	16-Mar-23	15:04				1	1
T423.17	YUWA-1B2X-SW-40-FD	SW	FREEZE	16-Mar-23	15:34				1	1
T423.17	YUWA-1B2X-SW-B	SW	FREEZE	16-Mar-23	15:45				1	1
T423.17	YUWA-3B2X-SW-1	SW	FREEZE	16-Mar-23	7:04				1	1
T423.17	YUWA-3B2X-SW-20	SW	FREEZE	16-Mar-23	7:58				1	1
T423.17	YUWA-3B2X-SW-40	SW	FREEZE	16-Mar-23	8:19				1	1
T423.17	YUWA-3B2X-SW-B	SW	FREEZE	16-Mar-23	8:33				1	1
T423.17	YUWA-EQ	SW	FREEZE	16-Mar-23	5:55				1	1
T423.17	YUWA-WB	SW	FREEZE	16-Mar-23	6:00				1	1

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Recieved by:  5/5/23

Recieved by:

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CHAIN OF CUSTODY

Dr. Ted Donn
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Lafayette, CA
ted.donn@tetratech.com

General Notes:
Program: Gulf of Thailand (2020-2023)
Please report all results to the MDL, J-flag results between MDL and RL
Please report results and invoice separately for each Project ID
Please report results in pdf format with Excel EDD deliverable
Please report results on a dry weight basis.

Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.21	YAREF-SW-20	SW	COLD	25-Mar-23	12:23				1	1
T423.21	YAREF-SW-40	SW	COLD	25-Mar-23	12:31				1	1
T423.21	YAREF-SW-B	SW	COLD	25-Mar-23	12:42				1	1

Page 8 of 88

T423.17	CBREF-A	SED	FREEZE	25-Mar-23	19:20	1	1	1		
T423.17	CBREF-B	SED	FREEZE	25-Mar-23	19:30	1	1	1		
T423.17	CBREF-C	SED	FREEZE	25-Mar-23	19:39	1	1	1		
T423.17	YUWA-1B1X	SED	FREEZE	16-Mar-23	17:20	1	1	1		
T423.17	YUWA-1B2X	SED	FREEZE	16-Mar-23	16:50	1	1	1		
T423.17	YUWA-1B3X	SED	FREEZE	16-Mar-23	17:03	1	1	1		
T423.17	YUWA-1C1	SED	FREEZE	16-Mar-23	19:30	1	1	1		
T423.17	YUWA-1C2	SED	FREEZE	16-Mar-23	19:43	1	1	1		
T423.17	YUWA-1C3	SED	FREEZE	16-Mar-23	19:55	1	1	1		
T423.17	YUWA-1D1	SED	FREEZE	16-Mar-23	20:13	1	1	1		
T423.17	YUWA-1D2	SED	FREEZE	16-Mar-23	20:19	1	1	1		
T423.17	YUWA-1D3	SED	FREEZE	16-Mar-23	20:44	1	1	1		
T423.17	YUWA-2B2X	SED	FREEZE	16-Mar-23	18:57	1	1	1		
T423.17	YUWA-2C2	SED	FREEZE	16-Mar-23	19:13	1	1	1		
T423.17	YUWA-3B1X	SED	FREEZE	16-Mar-23	10:09	1	1	1		
T423.17	YUWA-3B1X-FD	SED	FREEZE	16-Mar-23	10:19	1	1	1		
T423.17	YUWA-3B2X	SED	FREEZE	16-Mar-23	9:07	1	1	1		
T423.17	YUWA-3B3X	SED	FREEZE	16-Mar-23	10:49	1	1	1		
T423.17	YUWA-3C1	SED	FREEZE	16-Mar-23	13:00	1	1	1		
T423.17	YUWA-3C1-FD	SED	FREEZE	16-Mar-23	13:09	1	1	1		
T423.17	YUWA-3C2	SED	FREEZE	16-Mar-23	12:03	1	1	1		

Relinquished by:

Relinquished by:

Received by:  5/15/23

Received by:

6/15/2023

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 580-126682-7

Login Number: 126682

List Source: Eurofins Seattle

List Number: 1

Creator: Groden, Kyle J

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

PREPARED FOR

Attn: Ted Donn
Tetra Tech, Inc.
3697 Mt. Diablo Blvd.
Suite 150
Lafayette, California 94549

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JOB DESCRIPTION

Gulf of Thailand - 2023

JOB NUMBER

580-126682-8

Eurofins Seattle

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



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Authorized for release by
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(253)922-2310



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Case Narrative

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Job ID: 580-126682-8

Laboratory: Eurofins Seattle

Narrative

Job Narrative 580-126682-8

Receipt

The samples were received on 5/2/2023 9:40 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 17 coolers at receipt time were -28.8°C, -23.9°C, -23.8°C, -20.9°C, -18.8°C, -18.5°C, -17.1°C, -16.9°C, -16.8°C, -16.0°C, -15.3°C, -14.8°C, -14.6°C, -10.8°C, -6.7°C, -3.9°C and 2.7°C

Receipt Exceptions

The following samples did not have a sampling time listed on the chain of custody provided by the client: Control-3-A (580-126682-40), Control-3-B (580-126682-41) and Control-3-C (580-126682-42). The sampling time for these samples was assigned as 23:59 on the date of sampling.

Metals

Method 1631B: The continuing calibration blank (CCB) for analytical batch 580-428562 contained Mercury above the reporting limit (RL). All reported samples associated with this CCB contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Qualifiers

Metals

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: Control-3-A

Lab Sample ID: 580-126682-40

Date Collected: 03/23/23 11:59

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	56	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	44	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: Control-3-A

Lab Sample ID: 580-126682-40

Date Collected: 03/23/23 11:59

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 43.8

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	25	B	2.3	0.25	ng/g	☼	06/08/23 17:09	06/12/23 18:45	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: Control-3-B

Lab Sample ID: 580-126682-41

Date Collected: 03/23/23 11:59

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	53	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	47	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: Control-3-B

Lab Sample ID: 580-126682-41

Date Collected: 03/23/23 11:59

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 47.1

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	19	B	2.0	0.22	ng/g	☼	06/08/23 17:11	06/09/23 18:45	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: Control-3-C

Lab Sample ID: 580-126682-42

Date Collected: 03/23/23 11:59

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	52	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	48	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: Control-3-C

Lab Sample ID: 580-126682-42

Date Collected: 03/23/23 11:59

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 47.7

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	18	B	2.1	0.23	ng/g	☼	06/08/23 17:11	06/09/23 18:49	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-1B1X

Lab Sample ID: 580-126682-43

Date Collected: 03/21/23 18:15

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	50	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	50	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-1B1X

Lab Sample ID: 580-126682-43

Date Collected: 03/21/23 18:15

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 49.8

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	110	B ^2	1.9	0.20	ng/g	☼	06/08/23 17:11	06/09/23 20:34	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-1B2X

Lab Sample ID: 580-126682-44

Date Collected: 03/21/23 17:14

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	49	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	51	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-1B2X

Lab Sample ID: 580-126682-44

Date Collected: 03/21/23 17:14

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 51.3

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	350	B	8.8	0.97	ng/g	☼	06/08/23 17:11	06/12/23 20:45	100

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-1B3X

Lab Sample ID: 580-126682-45

Date Collected: 03/21/23 19:04

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	45	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	55	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-1B3X
Date Collected: 03/21/23 19:04
Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-45
Matrix: Solid
Percent Solids: 55.3

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	490	B	17	1.9	ng/g	☼	06/08/23 17:11	06/12/23 20:50	200

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-1C1

Lab Sample ID: 580-126682-46

Date Collected: 03/21/23 19:44

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	50	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	50	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-1C1
Date Collected: 03/21/23 19:44
Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-46
Matrix: Solid
Percent Solids: 50.3

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	34	B	1.8	0.20	ng/g	☼	06/08/23 17:11	06/12/23 20:54	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-1C2

Lab Sample ID: 580-126682-47

Date Collected: 03/21/23 19:09

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	50	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	50	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-1C2

Lab Sample ID: 580-126682-47

Date Collected: 03/21/23 19:09

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 49.5

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	75	B ^2	2.0	0.22	ng/g	☼	06/08/23 17:11	06/09/23 21:04	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-1C3

Lab Sample ID: 580-126682-48

Date Collected: 03/21/23 19:15

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	48	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	52	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-1C3

Lab Sample ID: 580-126682-48

Date Collected: 03/21/23 19:15

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 52.0

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	62	B ^2	1.8	0.20	ng/g	☼	06/08/23 17:11	06/09/23 21:08	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-1D1

Lab Sample ID: 580-126682-49

Date Collected: 03/21/23 20:12

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	52	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	48	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-1D1

Lab Sample ID: 580-126682-49

Date Collected: 03/21/23 20:12

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 48.3

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	23	B ^2	1.9	0.21	ng/g	☼	06/08/23 17:11	06/09/23 21:13	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-1D2

Lab Sample ID: 580-126682-50

Date Collected: 03/21/23 20:32

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	51	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	49	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-1D2

Lab Sample ID: 580-126682-50

Date Collected: 03/21/23 20:32

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 48.6

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	21	B ^2	2.0	0.22	ng/g	☼	06/08/23 17:11	06/09/23 21:17	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-1D3

Lab Sample ID: 580-126682-51

Date Collected: 03/21/23 20:50

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	54	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	46	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-1D3

Lab Sample ID: 580-126682-51

Date Collected: 03/21/23 20:50

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 45.7

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	26	B ^2	2.1	0.23	ng/g	☼	06/08/23 17:11	06/09/23 21:21	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-2B2X

Lab Sample ID: 580-126682-52

Date Collected: 03/21/23 13:25

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	50	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	50	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-2B2X

Lab Sample ID: 580-126682-52

Date Collected: 03/21/23 13:25

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 49.9

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	46	B ^2	1.9	0.21	ng/g	☼	06/08/23 17:11	06/09/23 21:25	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-2B2X-FD

Lab Sample ID: 580-126682-53

Date Collected: 03/21/23 13:35

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	52	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	48	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-2B2X-FD

Lab Sample ID: 580-126682-53

Date Collected: 03/21/23 13:35

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 48.5

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	74	B ^2	2.0	0.22	ng/g	☼	06/08/23 17:11	06/09/23 21:29	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-2C2

Lab Sample ID: 580-126682-54

Date Collected: 03/21/23 13:08

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	51	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	49	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-2C2

Lab Sample ID: 580-126682-54

Date Collected: 03/21/23 13:08

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 48.7

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	45	B ^2	1.9	0.20	ng/g	☼	06/08/23 17:11	06/09/23 21:33	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-3B1X

Lab Sample ID: 580-126682-55

Date Collected: 03/21/23 08:02

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	48	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	52	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-3B1X

Lab Sample ID: 580-126682-55

Date Collected: 03/21/23 08:02

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 51.8

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	84	B ^2	1.9	0.21	ng/g	☼	06/08/23 17:11	06/09/23 21:46	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-3B2X

Lab Sample ID: 580-126682-56

Date Collected: 03/21/23 08:08

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	46	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	54	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-3B2X

Lab Sample ID: 580-126682-56

Date Collected: 03/21/23 08:08

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 54.0

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	300	B	4.1	0.46	ng/g	☼	06/08/23 17:11	06/12/23 20:58	50

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-3B3X

Lab Sample ID: 580-126682-57

Date Collected: 03/21/23 08:52

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	43	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	57	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-3B3X

Lab Sample ID: 580-126682-57

Date Collected: 03/21/23 08:52

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 57.3

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	120	B	1.7	0.19	ng/g	☼	06/08/23 17:11	06/12/23 21:02	20

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Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-3C1

Lab Sample ID: 580-126682-58

Date Collected: 03/21/23 10:28

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	49	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	51	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-3C1

Lab Sample ID: 580-126682-58

Date Collected: 03/21/23 10:28

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 51.3

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	77	B ^2	1.8	0.20	ng/g	☼	06/08/23 17:11	06/09/23 21:58	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-3C2

Lab Sample ID: 580-126682-59

Date Collected: 03/21/23 09:00

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	50	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	50	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-3C2

Lab Sample ID: 580-126682-59

Date Collected: 03/21/23 09:00

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 50.5

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	110	B ^2	1.8	0.20	ng/g	☼	06/08/23 17:11	06/09/23 22:02	20

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Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-3C2-FD

Lab Sample ID: 580-126682-60

Date Collected: 03/21/23 09:45

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	51	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	49	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-3C2-FD

Lab Sample ID: 580-126682-60

Date Collected: 03/21/23 09:45

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 49.3

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	89	B ^2	2.0	0.22	ng/g	☼	06/08/23 17:11	06/09/23 22:07	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-3C3

Lab Sample ID: 580-126682-61

Date Collected: 03/21/23 09:11

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	49	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	51	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-3C3

Lab Sample ID: 580-126682-61

Date Collected: 03/21/23 09:11

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 51.2

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	44	B	1.8	0.19	ng/g	☼	06/08/23 17:23	06/12/23 15:00	20

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Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-3D1

Lab Sample ID: 580-126682-62

Date Collected: 03/21/23 11:02

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	52	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	48	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-3D1

Lab Sample ID: 580-126682-62

Date Collected: 03/21/23 11:02

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 47.9

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	22	B	1.9	0.21	ng/g	☼	06/08/23 17:23	06/12/23 15:04	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-3D2

Lab Sample ID: 580-126682-63

Date Collected: 03/21/23 11:26

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	51	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	49	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-3D2

Lab Sample ID: 580-126682-63

Date Collected: 03/21/23 11:26

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 48.7

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	29	B	1.9	0.21	ng/g	☼	06/08/23 17:23	06/12/23 18:58	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-3D3

Lab Sample ID: 580-126682-64

Date Collected: 03/21/23 11:48

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	54	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	46	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-3D3

Lab Sample ID: 580-126682-64

Date Collected: 03/21/23 11:48

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 46.4

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	26	B	2.0	0.21	ng/g	☼	06/08/23 17:23	06/12/23 19:02	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-4B2X

Lab Sample ID: 580-126682-65

Date Collected: 03/21/23 12:46

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	51	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	49	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-4B2X

Lab Sample ID: 580-126682-65

Date Collected: 03/21/23 12:46

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 49.0

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	29	B	2.0	0.21	ng/g	☼	06/08/23 17:23	06/12/23 19:06	20

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Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-4C2

Lab Sample ID: 580-126682-66

Date Collected: 03/21/23 12:28

Matrix: Solid

Date Received: 05/02/23 09:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM Moisture - 2540)	54	H H3	0.10	0.10	%			06/08/23 17:31	1
Percent Solids (SM Moisture - 2540)	46	H H3	0.10	0.10	%			06/08/23 17:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-4C2

Lab Sample ID: 580-126682-66

Date Collected: 03/21/23 12:28

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 45.9

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	37	B	2.0	0.22	ng/g	☼	06/08/23 17:23	06/12/23 19:10	20

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Method: 1631B - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 580-428188/1-A
Matrix: Solid
Analysis Batch: 428772

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 428188

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.115	J	1.0	0.11	ng/g		06/08/23 17:09	06/12/23 15:12	20

Lab Sample ID: MB 580-428188/2-A
Matrix: Solid
Analysis Batch: 428772

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 428188

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.11	ng/g		06/08/23 17:09	06/12/23 15:16	20

Lab Sample ID: MB 580-428188/3-A
Matrix: Solid
Analysis Batch: 428772

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 428188

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.11	ng/g		06/08/23 17:09	06/12/23 15:20	20

Lab Sample ID: LCS 580-428188/4-A
Matrix: Solid
Analysis Batch: 428772

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 428188

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	396	397		ng/g		100	75 - 125

Lab Sample ID: LCSD 580-428188/5-A
Matrix: Solid
Analysis Batch: 428772

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 428188

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	396	450		ng/g		114	75 - 125	13	24

Lab Sample ID: MB 580-428189/1-A
Matrix: Solid
Analysis Batch: 428562

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 428189

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.524	J	1.0	0.11	ng/g		06/08/23 17:11	06/09/23 16:32	20

Lab Sample ID: MB 580-428189/2-A
Matrix: Solid
Analysis Batch: 428562

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 428189

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.393	J	1.0	0.11	ng/g		06/08/23 17:11	06/09/23 16:36	20

Lab Sample ID: MB 580-428189/3-A
Matrix: Solid
Analysis Batch: 428562

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 428189

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.733	J	1.0	0.11	ng/g		06/08/23 17:11	06/09/23 16:40	20

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Method: 1631B - Mercury, Low Level (CVAFS)

Lab Sample ID: LCS 580-428189/4-A
Matrix: Solid
Analysis Batch: 428562

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 428189

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	396	376		ng/g		95	75 - 125

Lab Sample ID: LCSD 580-428189/5-A
Matrix: Solid
Analysis Batch: 428562

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 428189

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Mercury	396	385		ng/g		97	75 - 125	2	24

Lab Sample ID: 580-126682-41 MS
Matrix: Solid
Analysis Batch: 428562

Client Sample ID: Control-3-B
Prep Type: Total/NA
Prep Batch: 428189

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	19	B	828	782		ng/g	✱	92	71 - 125

Lab Sample ID: 580-126682-41 MSD
Matrix: Solid
Analysis Batch: 428562

Client Sample ID: Control-3-B
Prep Type: Total/NA
Prep Batch: 428189

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Mercury	19	B	823	768		ng/g	✱	91	71 - 125	2	24

Lab Sample ID: 580-126682-42 MS
Matrix: Solid
Analysis Batch: 428562

Client Sample ID: Control-3-C
Prep Type: Total/NA
Prep Batch: 428189

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	18	B	748	715		ng/g	✱	93	71 - 125

Lab Sample ID: 580-126682-42 MSD
Matrix: Solid
Analysis Batch: 428562

Client Sample ID: Control-3-C
Prep Type: Total/NA
Prep Batch: 428189

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Mercury	18	B	825	784		ng/g	✱	93	71 - 125	9	24

Lab Sample ID: MB 580-428190/1-A
Matrix: Solid
Analysis Batch: 428772

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 428190

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.138	J	1.0	0.11	ng/g		06/08/23 17:23	06/12/23 15:41	20

Lab Sample ID: MB 580-428190/2-A
Matrix: Solid
Analysis Batch: 428772

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 428190

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.11	ng/g		06/08/23 17:23	06/12/23 15:45	20

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Method: 1631B - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 580-428190/3-A

Matrix: Solid

Analysis Batch: 428772

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 428190

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.11	ng/g		06/08/23 17:23	06/12/23 15:49	20

Lab Sample ID: LCS 580-428190/4-A

Matrix: Solid

Analysis Batch: 428772

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 428190

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	396	396		ng/g		100	75 - 125

Lab Sample ID: LCSD 580-428190/5-A

Matrix: Solid

Analysis Batch: 428772

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 428190

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	396	410		ng/g		103	75 - 125	3	24

Lab Sample ID: 580-126682-61 MS

Matrix: Solid

Analysis Batch: 428772

Client Sample ID: MAWG-3C3

Prep Type: Total/NA

Prep Batch: 428190

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	44	B	768	829		ng/g	✱	102	71 - 125

Lab Sample ID: 580-126682-61 MSD

Matrix: Solid

Analysis Batch: 428772

Client Sample ID: MAWG-3C3

Prep Type: Total/NA

Prep Batch: 428190

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	44	B	703	766		ng/g	✱	103	71 - 125	8	24

Lab Sample ID: 580-126682-62 MS

Matrix: Solid

Analysis Batch: 428772

Client Sample ID: MAWG-3D1

Prep Type: Total/NA

Prep Batch: 428190

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	22	B	790	811		ng/g	✱	100	71 - 125

Lab Sample ID: 580-126682-62 MSD

Matrix: Solid

Analysis Batch: 428772

Client Sample ID: MAWG-3D1

Prep Type: Total/NA

Prep Batch: 428190

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	22	B	791	791		ng/g	✱	97	71 - 125	3	24

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Method: Moisture - 2540 - Percent Moisture

Lab Sample ID: 580-126682-41 DU

Matrix: Solid

Analysis Batch: 428209

Client Sample ID: Control-3-B

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Percent Moisture	53	H H3	53		%		0.5	20
Percent Solids	47	H H3	47		%		0.6	20

Lab Sample ID: 580-126682-42 DU

Matrix: Solid

Analysis Batch: 428209

Client Sample ID: Control-3-C

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Percent Moisture	52	H H3	53		%		2	20
Percent Solids	48	H H3	47		%		2	20

Lab Sample ID: 580-126682-61 DU

Matrix: Solid

Analysis Batch: 428210

Client Sample ID: MAWG-3C3

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Percent Moisture	49	H H3	50		%		2	20
Percent Solids	51	H H3	50		%		2	20

Lab Sample ID: 580-126682-62 DU

Matrix: Solid

Analysis Batch: 428210

Client Sample ID: MAWG-3D1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Percent Moisture	52	H H3	52		%		0.8	20
Percent Solids	48	H H3	48		%		0.9	20

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: Control-3-A

Lab Sample ID: 580-126682-40

Date Collected: 03/23/23 11:59

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428198	CL	EET SEA	06/08/23 17:31

Client Sample ID: Control-3-A

Lab Sample ID: 580-126682-40

Date Collected: 03/23/23 11:59

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 43.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428188	CL	EET SEA	06/08/23 17:09
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 18:45

Client Sample ID: Control-3-B

Lab Sample ID: 580-126682-41

Date Collected: 03/23/23 11:59

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428209	CL	EET SEA	06/08/23 17:31

Client Sample ID: Control-3-B

Lab Sample ID: 580-126682-41

Date Collected: 03/23/23 11:59

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 47.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428189	CL	EET SEA	06/08/23 17:11
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 18:45

Client Sample ID: Control-3-C

Lab Sample ID: 580-126682-42

Date Collected: 03/23/23 11:59

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428209	CL	EET SEA	06/08/23 17:31

Client Sample ID: Control-3-C

Lab Sample ID: 580-126682-42

Date Collected: 03/23/23 11:59

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 47.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428189	CL	EET SEA	06/08/23 17:11
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 18:49

Client Sample ID: MAWG-1B1X

Lab Sample ID: 580-126682-43

Date Collected: 03/21/23 18:15

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428209	CL	EET SEA	06/08/23 17:31

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-1B1X

Lab Sample ID: 580-126682-43

Date Collected: 03/21/23 18:15

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 49.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428189	CL	EET SEA	06/08/23 17:11
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 20:34

Client Sample ID: MAWG-1B2X

Lab Sample ID: 580-126682-44

Date Collected: 03/21/23 17:14

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428209	CL	EET SEA	06/08/23 17:31

Client Sample ID: MAWG-1B2X

Lab Sample ID: 580-126682-44

Date Collected: 03/21/23 17:14

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 51.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428189	CL	EET SEA	06/08/23 17:11
Total/NA	Analysis	1631B		100	428772	COW	EET SEA	06/12/23 20:45

Client Sample ID: MAWG-1B3X

Lab Sample ID: 580-126682-45

Date Collected: 03/21/23 19:04

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428209	CL	EET SEA	06/08/23 17:31

Client Sample ID: MAWG-1B3X

Lab Sample ID: 580-126682-45

Date Collected: 03/21/23 19:04

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 55.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428189	CL	EET SEA	06/08/23 17:11
Total/NA	Analysis	1631B		200	428772	COW	EET SEA	06/12/23 20:50

Client Sample ID: MAWG-1C1

Lab Sample ID: 580-126682-46

Date Collected: 03/21/23 19:44

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428209	CL	EET SEA	06/08/23 17:31

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-1C1

Lab Sample ID: 580-126682-46

Date Collected: 03/21/23 19:44

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 50.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428189	CL	EET SEA	06/08/23 17:11
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 20:54

Client Sample ID: MAWG-1C2

Lab Sample ID: 580-126682-47

Date Collected: 03/21/23 19:09

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428209	CL	EET SEA	06/08/23 17:31

Client Sample ID: MAWG-1C2

Lab Sample ID: 580-126682-47

Date Collected: 03/21/23 19:09

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 49.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428189	CL	EET SEA	06/08/23 17:11
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 21:04

Client Sample ID: MAWG-1C3

Lab Sample ID: 580-126682-48

Date Collected: 03/21/23 19:15

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428209	CL	EET SEA	06/08/23 17:31

Client Sample ID: MAWG-1C3

Lab Sample ID: 580-126682-48

Date Collected: 03/21/23 19:15

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 52.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428189	CL	EET SEA	06/08/23 17:11
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 21:08

Client Sample ID: MAWG-1D1

Lab Sample ID: 580-126682-49

Date Collected: 03/21/23 20:12

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428209	CL	EET SEA	06/08/23 17:31

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-1D1

Lab Sample ID: 580-126682-49

Date Collected: 03/21/23 20:12

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 48.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428189	CL	EET SEA	06/08/23 17:11
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 21:13

Client Sample ID: MAWG-1D2

Lab Sample ID: 580-126682-50

Date Collected: 03/21/23 20:32

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428209	CL	EET SEA	06/08/23 17:31

Client Sample ID: MAWG-1D2

Lab Sample ID: 580-126682-50

Date Collected: 03/21/23 20:32

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 48.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428189	CL	EET SEA	06/08/23 17:11
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 21:17

Client Sample ID: MAWG-1D3

Lab Sample ID: 580-126682-51

Date Collected: 03/21/23 20:50

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428209	CL	EET SEA	06/08/23 17:31

Client Sample ID: MAWG-1D3

Lab Sample ID: 580-126682-51

Date Collected: 03/21/23 20:50

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 45.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428189	CL	EET SEA	06/08/23 17:11
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 21:21

Client Sample ID: MAWG-2B2X

Lab Sample ID: 580-126682-52

Date Collected: 03/21/23 13:25

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428209	CL	EET SEA	06/08/23 17:31

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-2B2X

Date Collected: 03/21/23 13:25

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-52

Matrix: Solid

Percent Solids: 49.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428189	CL	EET SEA	06/08/23 17:11
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 21:25

Client Sample ID: MAWG-2B2X-FD

Date Collected: 03/21/23 13:35

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-53

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428209	CL	EET SEA	06/08/23 17:31

Client Sample ID: MAWG-2B2X-FD

Date Collected: 03/21/23 13:35

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-53

Matrix: Solid

Percent Solids: 48.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428189	CL	EET SEA	06/08/23 17:11
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 21:29

Client Sample ID: MAWG-2C2

Date Collected: 03/21/23 13:08

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-54

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428209	CL	EET SEA	06/08/23 17:31

Client Sample ID: MAWG-2C2

Date Collected: 03/21/23 13:08

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-54

Matrix: Solid

Percent Solids: 48.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428189	CL	EET SEA	06/08/23 17:11
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 21:33

Client Sample ID: MAWG-3B1X

Date Collected: 03/21/23 08:02

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-55

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428209	CL	EET SEA	06/08/23 17:31

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-3B1X

Date Collected: 03/21/23 08:02

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-55

Matrix: Solid

Percent Solids: 51.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428189	CL	EET SEA	06/08/23 17:11
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 21:46

Client Sample ID: MAWG-3B2X

Date Collected: 03/21/23 08:08

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-56

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428209	CL	EET SEA	06/08/23 17:31

Client Sample ID: MAWG-3B2X

Date Collected: 03/21/23 08:08

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-56

Matrix: Solid

Percent Solids: 54.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428189	CL	EET SEA	06/08/23 17:11
Total/NA	Analysis	1631B		50	428772	COW	EET SEA	06/12/23 20:58

Client Sample ID: MAWG-3B3X

Date Collected: 03/21/23 08:52

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-57

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428209	CL	EET SEA	06/08/23 17:31

Client Sample ID: MAWG-3B3X

Date Collected: 03/21/23 08:52

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-57

Matrix: Solid

Percent Solids: 57.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428189	CL	EET SEA	06/08/23 17:11
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 21:02

Client Sample ID: MAWG-3C1

Date Collected: 03/21/23 10:28

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-58

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428209	CL	EET SEA	06/08/23 17:31

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-3C1

Date Collected: 03/21/23 10:28

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-58

Matrix: Solid

Percent Solids: 51.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428189	CL	EET SEA	06/08/23 17:11
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 21:58

Client Sample ID: MAWG-3C2

Date Collected: 03/21/23 09:00

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-59

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428209	CL	EET SEA	06/08/23 17:31

Client Sample ID: MAWG-3C2

Date Collected: 03/21/23 09:00

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-59

Matrix: Solid

Percent Solids: 50.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428189	CL	EET SEA	06/08/23 17:11
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 22:02

Client Sample ID: MAWG-3C2-FD

Date Collected: 03/21/23 09:45

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-60

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428209	CL	EET SEA	06/08/23 17:31

Client Sample ID: MAWG-3C2-FD

Date Collected: 03/21/23 09:45

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-60

Matrix: Solid

Percent Solids: 49.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428189	CL	EET SEA	06/08/23 17:11
Total/NA	Analysis	1631B		20	428562	AJD	EET SEA	06/09/23 22:07

Client Sample ID: MAWG-3C3

Date Collected: 03/21/23 09:11

Date Received: 05/02/23 09:40

Lab Sample ID: 580-126682-61

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428210	AJD	EET SEA	06/08/23 17:31

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-3C3

Lab Sample ID: 580-126682-61

Date Collected: 03/21/23 09:11

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 51.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428190	AJD	EET SEA	06/08/23 17:23
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 15:00

Client Sample ID: MAWG-3D1

Lab Sample ID: 580-126682-62

Date Collected: 03/21/23 11:02

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428210	AJD	EET SEA	06/08/23 17:31

Client Sample ID: MAWG-3D1

Lab Sample ID: 580-126682-62

Date Collected: 03/21/23 11:02

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 47.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428190	AJD	EET SEA	06/08/23 17:23
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 15:04

Client Sample ID: MAWG-3D2

Lab Sample ID: 580-126682-63

Date Collected: 03/21/23 11:26

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428210	AJD	EET SEA	06/08/23 17:31

Client Sample ID: MAWG-3D2

Lab Sample ID: 580-126682-63

Date Collected: 03/21/23 11:26

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 48.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428190	AJD	EET SEA	06/08/23 17:23
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 18:58

Client Sample ID: MAWG-3D3

Lab Sample ID: 580-126682-64

Date Collected: 03/21/23 11:48

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428210	AJD	EET SEA	06/08/23 17:31

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Client Sample ID: MAWG-3D3

Lab Sample ID: 580-126682-64

Date Collected: 03/21/23 11:48

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 46.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428190	AJD	EET SEA	06/08/23 17:23
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 19:02

Client Sample ID: MAWG-4B2X

Lab Sample ID: 580-126682-65

Date Collected: 03/21/23 12:46

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428210	AJD	EET SEA	06/08/23 17:31

Client Sample ID: MAWG-4B2X

Lab Sample ID: 580-126682-65

Date Collected: 03/21/23 12:46

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 49.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428190	AJD	EET SEA	06/08/23 17:23
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 19:06

Client Sample ID: MAWG-4C2

Lab Sample ID: 580-126682-66

Date Collected: 03/21/23 12:28

Matrix: Solid

Date Received: 05/02/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture - 2540		1	428210	AJD	EET SEA	06/08/23 17:31

Client Sample ID: MAWG-4C2

Lab Sample ID: 580-126682-66

Date Collected: 03/21/23 12:28

Matrix: Solid

Date Received: 05/02/23 09:40

Percent Solids: 45.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631B CAR Prep			428190	AJD	EET SEA	06/08/23 17:23
Total/NA	Analysis	1631B		20	428772	COW	EET SEA	06/12/23 19:10

Laboratory References:

EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Laboratory: Eurofins Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
ANAB	Dept. of Defense ELAP	L2236	01-19-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
ANAB	Dept. of Energy	L2236	01-19-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
ANAB	ISO/IEC 17025	L2236	01-19-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
California	State	2954	07-07-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	1631B CAR Prep	Solid	Mercury
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
Florida	NELAP	E87575	06-30-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
Louisiana (All)	NELAP	03073	06-30-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
Maine	State	WA01273	05-02-24

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Laboratory: Eurofins Seattle (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	1631B CAR Prep	Solid	Mercury
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
Montana (UST)	State	NA	04-14-27
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	1631B CAR Prep	Solid	Mercury
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
New Jersey	NELAP	WA014	06-30-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	1631B CAR Prep	Solid	Mercury
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
New York	NELAP	11662	03-31-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	1631B CAR Prep	Solid	Mercury
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
Oregon	NELAP	4167	07-07-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
Moisture - 2540		Solid	Percent Solids
US Fish & Wildlife	US Federal Programs	A20571	06-30-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	1631B CAR Prep	Solid	Mercury
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
USDA	US Federal Programs	525-23-4-22573	01-04-26
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	1631B CAR Prep	Solid	Mercury
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126682-8

Laboratory: Eurofins Seattle (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	1631B CAR Prep	Solid	Mercury
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
Wisconsin	State	399133460	08-31-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

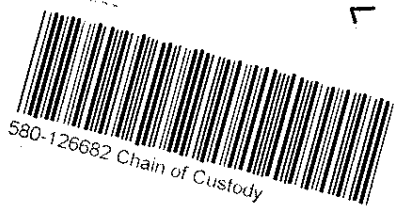
Job ID: 580-126682-8

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-126682-40	Control-3-A	Solid	03/23/23 11:59	05/02/23 09:40
580-126682-41	Control-3-B	Solid	03/23/23 11:59	05/02/23 09:40
580-126682-42	Control-3-C	Solid	03/23/23 11:59	05/02/23 09:40
580-126682-43	MAWG-1B1X	Solid	03/21/23 18:15	05/02/23 09:40
580-126682-44	MAWG-1B2X	Solid	03/21/23 17:14	05/02/23 09:40
580-126682-45	MAWG-1B3X	Solid	03/21/23 19:04	05/02/23 09:40
580-126682-46	MAWG-1C1	Solid	03/21/23 19:44	05/02/23 09:40
580-126682-47	MAWG-1C2	Solid	03/21/23 19:09	05/02/23 09:40
580-126682-48	MAWG-1C3	Solid	03/21/23 19:15	05/02/23 09:40
580-126682-49	MAWG-1D1	Solid	03/21/23 20:12	05/02/23 09:40
580-126682-50	MAWG-1D2	Solid	03/21/23 20:32	05/02/23 09:40
580-126682-51	MAWG-1D3	Solid	03/21/23 20:50	05/02/23 09:40
580-126682-52	MAWG-2B2X	Solid	03/21/23 13:25	05/02/23 09:40
580-126682-53	MAWG-2B2X-FD	Solid	03/21/23 13:35	05/02/23 09:40
580-126682-54	MAWG-2C2	Solid	03/21/23 13:08	05/02/23 09:40
580-126682-55	MAWG-3B1X	Solid	03/21/23 08:02	05/02/23 09:40
580-126682-56	MAWG-3B2X	Solid	03/21/23 08:08	05/02/23 09:40
580-126682-57	MAWG-3B3X	Solid	03/21/23 08:52	05/02/23 09:40
580-126682-58	MAWG-3C1	Solid	03/21/23 10:28	05/02/23 09:40
580-126682-59	MAWG-3C2	Solid	03/21/23 09:00	05/02/23 09:40
580-126682-60	MAWG-3C2-FD	Solid	03/21/23 09:45	05/02/23 09:40
580-126682-61	MAWG-3C3	Solid	03/21/23 09:11	05/02/23 09:40
580-126682-62	MAWG-3D1	Solid	03/21/23 11:02	05/02/23 09:40
580-126682-63	MAWG-3D2	Solid	03/21/23 11:26	05/02/23 09:40
580-126682-64	MAWG-3D3	Solid	03/21/23 11:48	05/02/23 09:40
580-126682-65	MAWG-4B2X	Solid	03/21/23 12:46	05/02/23 09:40
580-126682-66	MAWG-4C2	Solid	03/21/23 12:28	05/02/23 09:40

CHAIN OF CUSTODY

Ship To:
Patrick Garcia-Strickland
Eurofins Specialty Metals Testing
5755 8th St. E
Fife, WA 98424
USA

Dr. Ted Donn
Tetra Tech Inc.
3697 Mt. Diablo Blvd., Suite 150
Lafayette, CA
ted.donn@tetratech.com



General Notes:

Program: Gulf of Thailand (2020-2023)
Please report all results to the MDL, J-flag results between MDL and
Please report results and invoice separately for each Project ID
Please report results in pdf format with Excel EDD deliverable
Please report results on a dry weight basis.

1720 0847 3120

Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.20	LAWA-1C1	SED	FREEZE	19-Mar-23	4:40	1	1	1		
T423.20	LAWA-1C2	SED	FREEZE	19-Mar-23	5:44	1	1	1		
T423.20	LAWA-1C2-FD	SED	FREEZE	19-Mar-23	5:55	1	1	1		
T423.20	LAWA-1C3X	SED	FREEZE	19-Mar-23	7:33	1	1	1		
T423.20	LAWA-1D1	SED	FREEZE	18-Mar-23	11:03	1	1	1		
T423.20	LAWA-1D2	SED	FREEZE	18-Mar-23	22:49	1	1	1		
T423.20	LAWA-1D3X	SED	FREEZE	18-Mar-23	22:13	1	1	1		
T423.20	LAWA-3C1	SED	FREEZE	17-Mar-23	19:07	1	1	1		
T423.20	LAWA-3C2	SED	FREEZE	17-Mar-23	19:55	1	1	1		
T423.20	LAWA-3C3	SED	FREEZE	17-Mar-23	20:23	1	1	1		
T423.20	LAWA-3D1X	SED	FREEZE	17-Mar-23	22:15	1	1	1		
T423.20	LAWA-3D2	SED	FREEZE	17-Mar-23	23:06	1	1	1		
T423.20	LAWA-3D3	SED	FREEZE	18-Mar-23	1:00	1	1	1		

T423.20	G4/43REF-SW-1	SW	FREEZE	23-Mar-23	10:11				1	1
T423.20	G4/43REF-SW-20	SW	FREEZE	23-Mar-23	10:17				1	1
T423.20	G4/43REF-SW-40	SW	FREEZE	23-Mar-23	10:25				1	1
T423.20	G4/43REF-SW-B	SW	FREEZE	23-Mar-23	10:37				1	1
T423.20	LAWA-1C1-SW-1	SW	FREEZE	18-Mar-23	4:36				1	
T423.20	LAWA-1C1-SW-20	SW	FREEZE	18-Mar-23	4:44				1	1
T423.20	LAWA-1C1-SW-40	SW	FREEZE	18-Mar-23	4:56				1	1
T423.20	LAWA-1C1-SW-B	SW	FREEZE	18-Mar-23	5:08				1	1
T423.20	LAWA-1C1-SW-B-FD	SW	FREEZE	18-Mar-23	5:20				1	1
T423.20	LAWA-1C2-SW-1	SW	FREEZE	18-Mar-23	7:08				1	1
T423.20	LAWA-1C2-SW-20	SW	FREEZE	18-Mar-23	7:45				1	1

Relinquished by:

2522 5/5/23

Recieved by:

Relinquished by:

Recieved by:

CHAIN OF CUSTODY

Ship To:
Patrick Garcia-Strickland
Eurofins Specialty Metals Testing
5755 8th St. E
Fife, WA 98424
USA

Dr. Ted Donn
Tetra Tech Inc.
3697 Mt. Diablo Blvd., Suite 150
Lafayette, CA
ted.donn@tetratech.com

General Notes:
Program: Gulf of Thailand (2020-2023)
Please report all results to the MDL, J-flag results between MDL and RL
Please report results and invoice separately for each Project ID
Please report results in pdf format with Excel EDD deliverable
Please report results on a dry weight basis.

Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.20	LAWA-1C2-SW-40	SW	FREEZE	18-Mar-23	7:55				1	1
T423.20	LAWA-1C2-SW-B	SW	FREEZE	18-Mar-23	8:07				1	1
T423.20	LAWA-1C3X-SW-1	SW	FREEZE	18-Mar-23	19:21				1	1
T423.20	LAWA-1C3X-SW-20	SW	FREEZE	18-Mar-23	19:29				1	1
T423.20	LAWA-1C3X-SW-40	SW	FREEZE	18-Mar-23	19:40				1	1
T423.20	LAWA-1C3X-SW-B	SW	FREEZE	18-Mar-23	19:52				1	1
T423.20	LAWA-1D1-SW-1	SW	FREEZE	19-Mar-23	2:31				1	1
T423.20	LAWA-1D1-SW-20	SW	FREEZE	19-Mar-23	2:37				1	1
T423.20	LAWA-1D1-SW-40	SW	FREEZE	19-Mar-23	2:46				1	1
T423.20	LAWA-1D1-SW-B	SW	FREEZE	19-Mar-23	2:59				1	1
T423.20	LAWA-1D2-SW-1	SW	FREEZE	19-Mar-23	0:28				1	1
T423.20	LAWA-1D2-SW-1-FD	SW	FREEZE	19-Mar-23	0:36				1	1
T423.20	LAWA-1D2-SW-20	SW	FREEZE	19-Mar-23	0:43				1	1
T423.20	LAWA-1D2-SW-40	SW	FREEZE	19-Mar-23	0:52				1	1
T423.20	LAWA-1D2-SW-B	SW	FREEZE	19-Mar-23	1:05				1	1
T423.20	LAWA-1D3X-SW-1	SW	FREEZE	18-Mar-23	20:43				1	1
T423.20	LAWA-1D3X-SW-20	SW	FREEZE	18-Mar-23	20:51				1	1
T423.20	LAWA-1D3X-SW-40	SW	FREEZE	18-Mar-23	21:01				1	1
T423.20	LAWA-1D3X-SW-B	SW	FREEZE	18-Mar-23	21:14				1	1
T423.20	LAWA-3C1-SW-1	SW	FREEZE	17-Mar-23	16:43				1	1
T423.20	LAWA-3C1-SW-20	SW	FREEZE	17-Mar-23	16:50				1	1
T423.20	LAWA-3C1-SW-40	SW	FREEZE	17-Mar-23	17:00				1	1
T423.20	LAWA-3C1-SW-B	SW	FREEZE	17-Mar-23	17:13				1	1
T423.20	LAWA-3C2-SW-1	SW	FREEZE	18-Mar-23	3:47				1	1
T423.20	LAWA-3C2-SW-20	SW	FREEZE	18-Mar-23	3:04				1	1

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CHAIN OF CUSTODY

Ship To:

Patrick Garcia-Strickland

Eurofins Specialty Metals Testing

5755 8th St. E

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.20	LAWA-3C2-SW-40	SW	FREEZE	18-Mar-23	4:03				1	1
T423.20	LAWA-3C2-SW-B	SW	FREEZE	18-Mar-23	4:15				1	1
T423.20	LAWA-3C3-SW-1	SW	FREEZE	18-Mar-23	2:01				1	1
T423.20	LAWA-3C3-SW-20	SW	FREEZE	18-Mar-23	2:08				1	1
T423.20	LAWA-3C3-SW-40	SW	FREEZE	18-Mar-23	2:07				1	1
T423.20	LAWA-3C3-SW-B	SW	FREEZE	18-Mar-23	2:33				1	1
T423.20	LAWA-3D1X-SW-1	SW	FREEZE	17-Mar-23	12:21				1	1
T423.20	LAWA-3D1X-SW-20	SW	FREEZE	17-Mar-23	12:29				1	1
T423.20	LAWA-3D1X-SW-40	SW	FREEZE	17-Mar-23	12:39				1	1
T423.20	LAWA-3D1X-SW-B	SW	FREEZE	17-Mar-23	12:51				1	1
T423.20	LAWA-3D2-SW-1	SW	FREEZE	17-Mar-23	4:33				1	1
T423.20	LAWA-3D2-SW-1-FD	SW	FREEZE	17-Mar-23	4:41				1	1
T423.20	LAWA-3D2-SW-20	SW	FREEZE	17-Mar-23	4:48				1	1
T423.20	LAWA-3D2-SW-40	SW	FREEZE	17-Mar-23	4:58				1	1
T423.20	LAWA-3D2-SW-B	SW	FREEZE	17-Mar-23	5:10				1	1
T423.20	LAWA-3D3-SW-1	SW	FREEZE	17-Mar-23	3:38				1	1
T423.20	LAWA-3D3-SW-20	SW	FREEZE	17-Mar-23	3:49				1	1
T423.20	LAWA-3D3-SW-40	SW	FREEZE	17-Mar-23	3:59				1	1
T423.20	LAWA-3D3-SW-B	SW	FREEZE	17-Mar-23	4:14				1	1
T423.20	LAWA-EQ	SW	FREEZE	17-Mar-23	3:25				1	1
T423.20	LAWA-WB	SW	FREEZE	17-Mar-23	3:30				1	1

T423.18	MAWA-1C2	SED	FREEZE	22-Mar-23	7:27	1	1	1		
T423.18	MAWA-1CP2	SED	FREEZE	22-Mar-23	13:29	1	1	1		
T423.18	MAWA-2B2X	SED	FREEZE	22-Mar-23	4:35	1	1	1		

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.18	MAWA-3B2	SED	FREEZE	21-Mar-23	23:28	1	1	1	1	
T423.18	MAWA-3C2	SED	FREEZE	21-Mar-23	23:07	1	1	1	1	
T423.18	MAWA-4B2X	SED	FREEZE	21-Mar-23	22:45	1	1	1	1	
T423.18	MAWB-1B2X	SED	FREEZE	21-Mar-23	3:53	1	1	1	1	
T423.18	MAWB-1C2X	SED	FREEZE	21-Mar-23	4:06	1	1	1	1	
T423.18	MAWB-2B2X	SED	FREEZE	21-Mar-23	1:50	1	1	1	1	
T423.18	MAWB-3B2X	SED	FREEZE	20-Mar-23	23:15	1	1	1	1	
T423.18	MAWB-3C2	SED	FREEZE	20-Mar-23	22:52	1	1	1	1	
T423.18	MAWB-4B2X	SED	FREEZE	20-Mar-23	21:37	1	1	1	1	
T423.18	MAWC-1B2X	SED	FREEZE	20-Mar-23	3:53	1	1	1	1	
T423.18	MAWC-1C2	SED	FREEZE	20-Mar-23	5:16	1	1	1	1	
T423.18	MAWC-1C2-FD	SED	FREEZE	20-Mar-23	5:27	1	1	1	1	
T423.18	MAWC-2B2X	SED	FREEZE	20-Mar-23	1:41	1	1	1	1	
T423.18	MAWC-3B2X	SED	FREEZE	19-Mar-23	23:32	1	1	1	1	
T423.18	MAWC-3C2	SED	FREEZE	19-Mar-23	23:18	1	1	1	1	
T423.18	MAWC-4B2X	SED	FREEZE	19-Mar-23	23:01	1	1	1	1	
T423.18	MAWD-1B2X	SED	FREEZE	23-Mar-23	1:09	1	1	1	1	
T423.18	MAWD-1C2	SED	FREEZE	23-Mar-23	3:36	1	1	1	1	
T423.18	MAWD-2C2X	SED	FREEZE	23-Mar-23	5:07	1	1	1	1	
T423.18	MAWD-3B2	SED	FREEZE	22-Mar-23	23:16	1	1	1	1	
T423.18	MAWD-3C2X	SED	FREEZE	22-Mar-23	23:29	1	1	1	1	
T423.18	MAWD-3C2X-FD	SED	FREEZE	22-Mar-23	23:38	1	1	1	1	
T423.18	MAWD-4B2X	SED	FREEZE	22-Mar-23	22:57	1	1	1	1	

T423.18	MAWA-1C2-SW-1	SW	COLD	22-Mar-23	5:30				1	1
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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.18	MAWA-1C2-SW-20	SW	COLD	22-Mar-23	5:36				1	1
T423.18	MAWA-1C2-SW-40	SW	COLD	22-Mar-23	5:46				1	1
T423.18	MAWA-1C2-SW-B	SW	COLD	22-Mar-23	5:57				1	1
T423.18	MAWA-1CP2-SW-1	SW	COLD	22-Mar-23	12:26				1	1
T423.18	MAWA-1CP2-SW-20	SW	COLD	22-Mar-23	12:32				1	1
T423.18	MAWA-1CP2-SW-40	SW	COLD	22-Mar-23	12:41				1	1
T423.18	MAWA-1CP2-SW-B	SW	COLD	22-Mar-23	12:52				1	1
T423.18	MAWA-2B2X-SW-1	SW	COLD	22-Mar-23	3:52				1	1
T423.18	MAWA-2B2X-SW-20	SW	COLD	22-Mar-23	3:58				1	1
T423.18	MAWA-2B2X-SW-40	SW	COLD	22-Mar-23	4:07				1	1
T423.18	MAWA-2B2X-SW-B	SW	COLD	22-Mar-23	4:19				1	1
T423.18	MAWA-3B2-SW-1	SW	COLD	22-Mar-23	2:12				1	1
T423.18	MAWA-3B2-SW-20	SW	COLD	22-Mar-23	2:19				1	1
T423.18	MAWA-3B2-SW-20-FD	SW	COLD	22-Mar-23	2:26				1	1
T423.18	MAWA-3B2-SW-40	SW	COLD	22-Mar-23	2:35				1	1
T423.18	MAWA-3B2-SW-B	SW	COLD	22-Mar-23	2:48				1	1
T423.18	MAWA-3C2-SW-1	SW	COLD	22-Mar-23	0:21				1	1
T423.18	MAWA-3C2-SW-20	SW	COLD	22-Mar-23	0:27				1	1
T423.18	MAWA-3C2-SW-40	SW	COLD	22-Mar-23	0:36				1	1
T423.18	MAWA-3C2-SW-B	SW	COLD	22-Mar-23	0:47				1	1
T423.18	MAWA-4B2X-SW-1	SW	COLD	21-Mar-23	21:43				1	1
T423.18	MAWA-4B2X-SW-20	SW	COLD	21-Mar-23	21:49				1	1
T423.18	MAWA-4B2X-SW-40	SW	COLD	21-Mar-23	21:57				1	1
T423.18	MAWA-4B2X-SW-B	SW	COLD	21-Mar-23	22:09				1	1
T423.18	MAWA-EQ	SW	COLD	21-Mar-23	21:33				1	1

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.18	MAWB-WB	SW	COLD	21-Mar-23	21:28				1	1
T423.18	MAWB-1B2X-SW-1	SW	FREEZE	21-Mar-23	3:08				1	1
T423.18	MAWB-1B2X-SW-1-FD	SW	FREEZE	21-Mar-23	3:13				1	1
T423.18	MAWB-1B2X-SW-20	SW	FREEZE	21-Mar-23	3:19				1	1
T423.18	MAWB-1B2X-SW-40	SW	FREEZE	21-Mar-23	3:27				1	1
T423.18	MAWB-1B2X-SW-B	SW	FREEZE	21-Mar-23	3:38				1	1
T423.18	MAWB-1C2X-SW-1	SW	FREEZE	20-Mar-23	16:42				1	1
T423.18	MAWB-1C2X-SW-20	SW	FREEZE	20-Mar-23	16:48				1	1
T423.18	MAWB-1C2X-SW-40	SW	FREEZE	20-Mar-23	16:59				1	1
T423.18	MAWB-1C2X-SW-B	SW	FREEZE	20-Mar-23	17:11				1	1
T423.18	MAWB-2B2X-SW-1	SW	FREEZE	21-Mar-23	1:06				1	1
T423.18	MAWB-2B2X-SW-20	SW	FREEZE	21-Mar-23	1:11				1	1
T423.18	MAWB-2B2X-SW-20-FD	SW	FREEZE	21-Mar-23	1:18				1	1
T423.18	MAWB-2B2X-SW-40	SW	FREEZE	21-Mar-23	1:26				1	1
T423.18	MAWB-2B2X-SW-B	SW	FREEZE	21-Mar-23	1:37				1	1
T423.18	MAWB-3B2X-SW-1	SW	FREEZE	20-Mar-23	19:17				1	1
T423.18	MAWB-3B2X-SW-20	SW	FREEZE	20-Mar-23	19:23				1	1
T423.18	MAWB-3B2X-SW-40	SW	FREEZE	20-Mar-23	19:31				1	1
T423.18	MAWB-3B2X-SW-B	SW	FREEZE	20-Mar-23	19:43				1	1
T423.18	MAWB-3C2-SW-1	SW	FREEZE	20-Mar-23	10:55				1	1
T423.18	MAWB-3C2-SW-20	SW	FREEZE	20-Mar-23	11:00				1	1
T423.18	MAWB-3C2-SW-40	SW	FREEZE	20-Mar-23	11:13				1	1
T423.18	MAWB-3C2-SW-B	SW	FREEZE	20-Mar-23	11:24				1	1
T423.18	MAWB-4B2X-SW-1	SW	FREEZE	20-Mar-23	20:25				1	1
T423.18	MAWB-4B2X-SW-20	SW	FREEZE	20-Mar-23	20:30				1	1

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T423.18	MAWB-4B2X-SW-40	SW	FREEZE	20-Mar-23	20:39				1	1
T423.18	MAWB-4B2X-SW-B	SW	FREEZE	20-Mar-23	20:50				1	1
T423.18	MAWB-4B2X-SW-B-FD	SW	FREEZE	20-Mar-23	21:03				1	1
T423.18	MAWC-1B2X-SW-1	SW	FREEZE	20-Mar-23	2:37				1	1
T423.18	MAWC-1B2X-SW-20	SW	FREEZE	20-Mar-23	2:43				1	1
T423.18	MAWC-1B2X-SW-40	SW	FREEZE	20-Mar-23	2:52				1	1
T423.18	MAWC-1B2X-SW-B	SW	FREEZE	20-Mar-23	3:04				1	1
T423.18	MAWC-1C2-SW-1	SW	FREEZE	20-Mar-23	4:37				1	1
T423.18	MAWC-1C2-SW-20	SW	FREEZE	20-Mar-23	4:43				1	1
T423.18	MAWC-1C2-SW-40	SW	FREEZE	20-Mar-23	4:52				1	1
T423.18	MAWC-1C2-SW-B	SW	FREEZE	20-Mar-23	5:04				1	1
T423.18	MAWC-2B2X-SW-1	SW	FREEZE	20-Mar-23	1:02				1	1
T423.18	MAWC-2B2X-SW-20	SW	FREEZE	20-Mar-23	1:08				1	1
T423.18	MAWC-2B2X-SW-40	SW	FREEZE	20-Mar-23	1:17				1	1
T423.18	MAWC-2B2X-SW-B	SW	FREEZE	20-Mar-23	1:28				1	1
T423.18	MAWC-3B2X-SW-1	SW	FREEZE	19-Mar-23	20:13				1	1
T423.18	MAWC-3B2X-SW-20	SW	FREEZE	19-Mar-23	20:23				1	1
T423.18	MAWC-3B2X-SW-40	SW	FREEZE	19-Mar-23	20:32				1	1
T423.18	MAWC-3B2X-SW-B	SW	FREEZE	19-Mar-23	20:43				1	1
T423.18	MAWC-3C2-SW-1	SW	FREEZE	19-Mar-23	19:09				1	1
T423.18	MAWC-3C2-SW-20	SW	FREEZE	19-Mar-23	19:26				1	1
T423.18	MAWC-3C2-SW-40	SW	FREEZE	19-Mar-23	19:04				1	1
T423.18	MAWC-3C2-SW-B	SW	FREEZE	19-Mar-23	19:46				1	1
T423.18	MAWC-4B2X-SW-1	SW	FREEZE	19-Mar-23	21:02				1	1
T423.18	MAWC-4B2X-SW-20	SW	FREEZE	19-Mar-23	21:52				1	1

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T423.18	MAWC-4B2X-SW-40	SW	FREEZE	19-Mar-23	22:01				1	1
T423.18	MAWC-4B2X-SW-B	SW	FREEZE	19-Mar-23	22:12				1	1
T423.18	MAWC-4B2X-SW-B-FD	SW	FREEZE	19-Mar-23	22:25				1	1
T423.18	MAWC-EQ	SW	FREEZE	19-Mar-23	9:07				1	1
T423.18	MAWC-WB	SW	FREEZE	19-Mar-23	19:00				1	1
T423.18	MAWD-1B2X-SW-1	SW	COLD	23-Mar-23	0:50				1	1
T423.18	MAWD-1B2X-SW-20	SW	COLD	23-Mar-23	0:56				1	1
T423.18	MAWD-1B2X-SW-40	SW	COLD	23-Mar-23	1:05				1	1
T423.18	MAWD-1B2X-SW-B	SW	COLD	23-Mar-23	1:17				1	1
T423.18	MAWD-1C2-SW-1	SW	COLD	23-Mar-23	2:22				1	1
T423.18	MAWD-1C2-SW-20	SW	COLD	23-Mar-23	2:28				1	1
T423.18	MAWD-1C2-SW-40	SW	COLD	23-Mar-23	2:37				1	1
T423.18	MAWD-1C2-SW-B	SW	COLD	23-Mar-23	2:48				1	1
T423.18	MAWD-2C2X-SW-1	SW	COLD	23-Mar-23	4:27				1	1
T423.18	MAWD-2C2X-SW-20	SW	COLD	23-Mar-23	4:34				1	1
T423.18	MAWD-2C2X-SW-40	SW	COLD	23-Mar-23	4:43				1	1
T423.18	MAWD-2C2X-SW-B	SW	COLD	23-Mar-23	4:55				1	1
T423.18	MAWD-3B2-SW-1	SW	COLD	22-Mar-23	20:25				1	1
T423.18	MAWD-3B2-SW-20	SW	COLD	22-Mar-23	20:31				1	1
T423.18	MAWD-3B2-SW-40	SW	COLD	22-Mar-23	20:42				1	1
T423.18	MAWD-3B2-SW-B	SW	COLD	22-Mar-23	20:54				1	1
T423.18	MAWD-3C2X-SW-1	SW	COLD	22-Mar-23	19:15				1	1
T423.18	MAWD-3C2X-SW-20	SW	COLD	22-Mar-23	19:24				1	1
T423.18	MAWD-3C2X-SW-40	SW	COLD	22-Mar-23	19:33				1	1
T423.18	MAWD-3C2X-SW-B	SW	COLD	22-Mar-23	19:44				1	1

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CHAIN OF CUSTODY

Patrick Garcia-Strickland
Eurofins Specialty Metals Testing
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Fife, WA 98424
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General Notes:
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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.18	MAWD-4B2X-SW-1	SW	COLD	22-Mar-23	22:18				1	1
T423.18	MAWD-4B2X-SW-20	SW	COLD	22-Mar-23	22:24				1	1
T423.18	MAWD-4B2X-SW-40	SW	COLD	22-Mar-23	22:33				1	1
T423.18	MAWD-4B2X-SW-B	SW	COLD	22-Mar-23	22:44				1	1
T423.19	Control-3-A	SED	FREEZE	23-Mar-23		1	1	1		
T423.19	Control-3-B	SED	FREEZE	23-Mar-23		1	1	1		
T423.19	Control-3-C	SED	FREEZE	23-Mar-23		1	1	1		
T423.19	MAWG-1B1X	SED	FREEZE	21-Mar-23	18:15	1	1	1		
T423.19	MAWG-1B2X	SED	FREEZE	21-Mar-23	17:14	1	1	1		
T423.19	MAWG-1B3X	SED	FREEZE	21-Mar-23	19:04	1	1	1		
T423.19	MAWG-1C1	SED	FREEZE	21-Mar-23	19:44	1	1	1		
T423.19	MAWG-1C2	SED	FREEZE	21-Mar-23	19:09	1	1	1		
T423.19	MAWG-1C3	SED	FREEZE	21-Mar-23	19:15	1	1	1		
T423.19	MAWG-1D1	SED	FREEZE	21-Mar-23	20:12	1	1	1		
T423.19	MAWG-1D2	SED	FREEZE	21-Mar-23	20:32	1	1	1		
T423.19	MAWG-1D3	SED	FREEZE	21-Mar-23	20:50	1	1	1		
T423.19	MAWG-2B2X	SED	FREEZE	21-Mar-23	13:25	1	1	1		
T423.19	MAWG-2B2X-FD	SED	FREEZE	21-Mar-23	13:35	1	1	1		
T423.19	MAWG-2C2	SED	FREEZE	21-Mar-23	13:08	1	1	1		
T423.19	MAWG-3B1X	SED	FREEZE	21-Mar-23	8:02	1	1	1		
T423.19	MAWG-3B2X	SED	FREEZE	21-Mar-23	8:08	1	1	1		
T423.19	MAWG-3B3X	SED	FREEZE	21-Mar-23	8:52	1	1	1		
T423.19	MAWG-3C1	SED	FREEZE	21-Mar-23	10:28	1	1	1		
T423.19	MAWG-3C2	SED	FREEZE	21-Mar-23	9:00	1	1	1		
T423.19	MAWG-3C2-FD	SED	FREEZE	21-Mar-23	9:45	1	1	1		

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.19	MAWG-3C3	SED	FREEZE	21-Mar-23	9:11	1	1	1		
T423.19	MAWG-3D1	SED	FREEZE	21-Mar-23	11:02	1	1	1		
T423.19	MAWG-3D2	SED	FREEZE	21-Mar-23	11:26	1	1	1		
T423.19	MAWG-3D3	SED	FREEZE	21-Mar-23	11:48	1	1	1		
T423.19	MAWG-4B2X	SED	FREEZE	21-Mar-23	12:46	1	1	1		
T423.19	MAWG-4C2	SED	FREEZE	21-Mar-23	12:28	1	1	1		
T423.19	Control-3-SW-1	SW	COLD	23-Mar-23	19:18				1	1
T423.19	Control-3-SW-20	SW	COLD	23-Mar-23	19:27				1	1
T423.19	Control-3-SW-40	SW	COLD	23-Mar-23	19:39				1	1
T423.19	Control-3-SW-B	SW	COLD	23-Mar-23	19:50				1	1
T423.19	MAWG-1B2X-SW-1	SW	COLD	21-Mar-23	15:44				1	1
T423.19	MAWG-1B2X-SW-20	SW	COLD	21-Mar-23	15:50				1	1
T423.19	MAWG-1B2X-SW-40	SW	COLD	21-Mar-23	16:01				1	1
T423.19	MAWG-1B2X-SW-B	SW	COLD	21-Mar-23	16:16				1	1
T423.19	MAWG-3B2X-SW-1	SW	COLD	21-Mar-23	5:13				1	1
T423.19	MAWG-3B2X-SW-1-FD	SW	COLD	21-Mar-23	5:18				1	1
T423.19	MAWG-3B2X-SW-20	SW	COLD	21-Mar-23	5:24				1	1
T423.19	MAWG-3B2X-SW-40	SW	COLD	21-Mar-23	5:39				1	1
T423.19	MAWG-3B2X-SW-B	SW	COLD	21-Mar-23	5:50				1	1
T423.19	MAWG-EQ	SW	COLD	21-Mar-23	4:05				1	1
T423.19	MAWG-WB	SW	COLD	21-Mar-23	5:00				1	1
T423.21	TFPSO-1B2	SED	FREEZE	25-Mar-23	4:33	1	1	1		
T423.21	TFPSO-1C2	SED	FREEZE	25-Mar-23	2:39	1	1	1		

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.21	TFPSO-1CP2	SED	FREEZE	25-Mar-23	2:19	1	1	1		
T423.21	TFPSO-1D2	SED	FREEZE	25-Mar-23	1:48	1	1	1		
T423.21	TFPSO-1D2-FD	SED	FREEZE	25-Mar-23	2:00	1	1	1		
T423.21	TFPSO-2B2	SED	FREEZE	25-Mar-23	7:42	1	1	1		
T423.21	TFPSO-2CP2	SED	FREEZE	25-Mar-23	7:19	1	1	1		
T423.21	TFPSO-3B2	SED	FREEZE	25-Mar-23	8:01	1	1	1		
T423.21	TFPSO-3CP2	SED	FREEZE	25-Mar-23	8:47	1	1	1		
T423.21	TFPSO-4B2	SED	FREEZE	25-Mar-23	8:20	1	1	1		
T423.21	TFPSO-4CP2	SED	FREEZE	25-Mar-23	9:10	1	1	1		
T423.21	YAREF-A2	SED	FREEZE	25-Mar-23	12:54	1	1	1		
T423.21	YAREF-B2	SED	FREEZE	25-Mar-23	13:04	1	1	1		
T423.21	YAREF-C2	SED	FREEZE	25-Mar-23	13:14	1	1	1		
T423.21	TFPSO-1B2-SW-1	SW	COLD	25-Mar-23	2:57				1	1
T423.21	TFPSO-1B2-SW-20	SW	COLD	25-Mar-23	3:04				1	1
T423.21	TFPSO-1B2-SW-20-FD	SW	COLD	25-Mar-23	3:10				1	1
T423.21	TFPSO-1B2-SW-40	SW	COLD	25-Mar-23	3:17				1	1
T423.21	TFPSO-1B2-SW-B	SW	COLD	25-Mar-23	3:28				1	1
T423.21	TFPSO-3B2-SW-1	SW	COLD	25-Mar-23	4:51				1	1
T423.21	TFPSO-3B2-SW-20	SW	COLD	25-Mar-23	4:57				1	1
T423.21	TFPSO-3B2-SW-40	SW	COLD	25-Mar-23	5:05				1	1
T423.21	TFPSO-3B2-SW-B	SW	COLD	25-Mar-23	5:21				1	1
T423.21	TFPSO-EQ	SW	COLD	25-Mar-23	1:00				1	1
T423.21	TFPSO-WB	SW	COLD	25-Mar-23	1:05				1	1
T423.21	YAREF-SW-1	SW	COLD	25-Mar-23	12:16				1	1

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T423.21	YAREF-SW-20	SW	COLD	25-Mar-23	12:23				1	1
T423.21	YAREF-SW-40	SW	COLD	25-Mar-23	12:31				1	1
T423.21	YAREF-SW-B	SW	COLD	25-Mar-23	12:42				1	1
T423.17	CBREF-A	SED	FREEZE	25-Mar-23	19:20	1	1	1		
T423.17	CBREF-B	SED	FREEZE	25-Mar-23	19:30	1	1	1		
T423.17	CBREF-C	SED	FREEZE	25-Mar-23	19:39	1	1	1		
T423.17	YUWA-1B1X	SED	FREEZE	16-Mar-23	17:20	1	1	1		
T423.17	YUWA-1B2X	SED	FREEZE	16-Mar-23	16:50	1	1	1		
T423.17	YUWA-1B3X	SED	FREEZE	16-Mar-23	17:03	1	1	1		
T423.17	YUWA-1C1	SED	FREEZE	16-Mar-23	19:30	1	1	1		
T423.17	YUWA-1C2	SED	FREEZE	16-Mar-23	19:43	1	1	1		
T423.17	YUWA-1C3	SED	FREEZE	16-Mar-23	19:55	1	1	1		
T423.17	YUWA-1D1	SED	FREEZE	16-Mar-23	20:13	1	1	1		
T423.17	YUWA-1D2	SED	FREEZE	16-Mar-23	20:19	1	1	1		
T423.17	YUWA-1D3	SED	FREEZE	16-Mar-23	20:44	1	1	1		
T423.17	YUWA-2B2X	SED	FREEZE	16-Mar-23	18:57	1	1	1		
T423.17	YUWA-2C2	SED	FREEZE	16-Mar-23	19:13	1	1	1		
T423.17	YUWA-3B1X	SED	FREEZE	16-Mar-23	10:09	1	1	1		
T423.17	YUWA-3B1X-FD	SED	FREEZE	16-Mar-23	10:19	1	1	1		
T423.17	YUWA-3B2X	SED	FREEZE	16-Mar-23	9:07	1	1	1		
T423.17	YUWA-3B3X	SED	FREEZE	16-Mar-23	10:49	1	1	1		
T423.17	YUWA-3C1	SED	FREEZE	16-Mar-23	13:00	1	1	1		
T423.17	YUWA-3C1-FD	SED	FREEZE	16-Mar-23	13:09	1	1	1		
T423.17	YUWA-3C2	SED	FREEZE	16-Mar-23	12:03	1	1	1		

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T423.17	YUWA-3C3	SED	FREEZE	16-Mar-23	11:19	1	1	1		
T423.17	YUWA-3D1	SED	FREEZE	16-Mar-23	13:34	1	1	1		
T423.17	YUWA-3D2	SED	FREEZE	16-Mar-23	13:04	1	1	1		
T423.17	YUWA-3D3	SED	FREEZE	16-Mar-23	14:17	1	1	1		
T423.17	YUWA-4B2X	SED	FREEZE	16-Mar-23	6:03	1	1	1		
T423.17	YUWA-4C2	SED	FREEZE	16-Mar-23	6:24	1	1	1		
T423.17	CBREF-SW-1	SW	FREEZE	25-Mar-23	17:03				1	1
T423.17	CBREF-SW-20	SW	FREEZE	25-Mar-23	17:10				1	1
T423.17	CBREF-SW-40	SW	FREEZE	25-Mar-23	17:18				1	1
T423.17	CBREF-SW-B	SW	FREEZE	25-Mar-23	17:30				1	1
T423.17	YUWA-1B2X-SW-1	SW	FREEZE	16-Mar-23	15:09				1	1
T423.17	YUWA-1B2X-SW-20	SW	FREEZE	16-Mar-23	15:16				1	1
T423.17	YUWA-1B2X-SW-40	SW	FREEZE	16-Mar-23	15:04				1	1
T423.17	YUWA-1B2X-SW-40-FD	SW	FREEZE	16-Mar-23	15:34				1	1
T423.17	YUWA-1B2X-SW-B	SW	FREEZE	16-Mar-23	15:45				1	1
T423.17	YUWA-3B2X-SW-1	SW	FREEZE	16-Mar-23	7:04				1	1
T423.17	YUWA-3B2X-SW-20	SW	FREEZE	16-Mar-23	7:58				1	1
T423.17	YUWA-3B2X-SW-40	SW	FREEZE	16-Mar-23	8:19				1	1
T423.17	YUWA-3B2X-SW-B	SW	FREEZE	16-Mar-23	8:33				1	1
T423.17	YUWA-EQ	SW	FREEZE	16-Mar-23	5:55				1	1
T423.17	YUWA-WB	SW	FREEZE	16-Mar-23	6:00				1	1

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T423.21	YAREF-SW-20	SW	COLD	25-Mar-23	12:23				1	1
T423.21	YAREF-SW-40	SW	COLD	25-Mar-23	12:31				1	1
T423.21	YAREF-SW-B	SW	COLD	25-Mar-23	12:42				1	1

Page 90 of 91

T423.17	CBREF-A	SED	FREEZE	25-Mar-23	19:20	1	1	1		
T423.17	CBREF-B	SED	FREEZE	25-Mar-23	19:30	1	1	1		
T423.17	CBREF-C	SED	FREEZE	25-Mar-23	19:39	1	1	1		
T423.17	YUWA-1B1X	SED	FREEZE	16-Mar-23	17:20	1	1	1		
T423.17	YUWA-1B2X	SED	FREEZE	16-Mar-23	16:50	1	1	1		
T423.17	YUWA-1B3X	SED	FREEZE	16-Mar-23	17:03	1	1	1		
T423.17	YUWA-1C1	SED	FREEZE	16-Mar-23	19:30	1	1	1		
T423.17	YUWA-1C2	SED	FREEZE	16-Mar-23	19:43	1	1	1		
T423.17	YUWA-1C3	SED	FREEZE	16-Mar-23	19:55	1	1	1		
T423.17	YUWA-1D1	SED	FREEZE	16-Mar-23	20:13	1	1	1		
T423.17	YUWA-1D2	SED	FREEZE	16-Mar-23	20:19	1	1	1		
T423.17	YUWA-1D3	SED	FREEZE	16-Mar-23	20:44	1	1	1		
T423.17	YUWA-2B2X	SED	FREEZE	16-Mar-23	18:57	1	1	1		
T423.17	YUWA-2C2	SED	FREEZE	16-Mar-23	19:13	1	1	1		
T423.17	YUWA-3B1X	SED	FREEZE	16-Mar-23	10:09	1	1	1		
T423.17	YUWA-3B1X-FD	SED	FREEZE	16-Mar-23	10:19	1	1	1		
T423.17	YUWA-3B2X	SED	FREEZE	16-Mar-23	9:07	1	1	1		
T423.17	YUWA-3B3X	SED	FREEZE	16-Mar-23	10:49	1	1	1		
T423.17	YUWA-3C1	SED	FREEZE	16-Mar-23	13:00	1	1	1		
T423.17	YUWA-3C1-FD	SED	FREEZE	16-Mar-23	13:09	1	1	1		
T423.17	YUWA-3C2	SED	FREEZE	16-Mar-23	12:03	1	1	1		

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 5/15/23

6/15/2023

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 580-126682-8

Login Number: 126682

List Number: 1

Creator: Groden, Kyle J

List Source: Eurofins Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number: 483905
Report Level: II
Report Date: 06/13/2023

Analytical Report *prepared for:*

Ted Donn
Tetra Tech, Inc.
3697 Mt. Diablo Blvd.
Suite 150
Lafayette, CA 94549

Project: COTL - T423.18 - Gulf of Thailand

Authorized for release by:

Miguel Gamboa, Project Coordinator
miguel.gamboa@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105

Sample Summary

Ted Donn
 Tetra Tech, Inc.
 3697 Mt. Diablo Blvd.
 Suite 150
 Lafayette, CA 94549

Lab Job #: 483905
 Project No: COTL
 Location: T423.18 - Gulf of Thailand
 Date Received: 05/05/23

Sample ID	Lab ID	Collected	Matrix
MAWA-1C2	483905-001	03/22/23 07:27	Soil
MAWA-1CP2	483905-002	03/22/23 13:29	Soil
MAWA-2B2X	483905-003	03/22/23 04:35	Soil
MAWA-3B2	483905-004	03/21/23 23:28	Soil
MAWA-3C2	483905-005	03/21/23 23:07	Soil
MAWA-4B2X	483905-006	03/21/23 22:45	Soil
MAWB-1B2X	483905-007	03/21/23 03:53	Soil
MAWB-1C2X	483905-008	03/21/23 04:06	Soil
MAWB-2B2X	483905-009	03/21/23 01:50	Soil
MAWB-3B2X	483905-010	03/20/23 23:15	Soil
MAWB-3C2	483905-011	03/20/23 22:52	Soil
MAWB-4B2X	483905-012	03/20/23 21:37	Soil
MAWC-1B2X	483905-013	03/20/23 03:53	Soil
MAWC-1C2	483905-014	03/20/23 05:16	Soil
MAWC-1C2-FD	483905-015	03/20/23 05:27	Soil
MAWC-2B2X	483905-016	03/20/23 01:41	Soil
MAWC-3B2X	483905-017	03/19/23 23:32	Soil
MAWC-3C2	483905-018	03/19/23 23:18	Soil
MAWC-4B2X	483905-019	03/19/23 23:01	Soil
MAWD-1B2X	483905-020	03/23/23 01:09	Soil
MAWD-1C2	483905-021	03/23/23 03:36	Soil
MAWD-2C2X	483905-022	03/23/23 05:07	Soil
MAWD-3B2	483905-023	03/22/23 23:16	Soil
MAWD-3C2X	483905-024	03/22/23 23:29	Soil
MAWD-3C2X-FD	483905-025	03/22/23 23:38	Soil
MAWD-4B2X	483905-026	03/22/23 22:57	Soil

Case Narrative

Tetra Tech, Inc.
3697 Mt. Diablo Blvd.
Suite 150
Lafayette, CA 94549
Ted Donn

Lab Job Number: 483905
Project No: COTL
Location: T423.18 - Gulf of Thailand
Date Received: 05/05/23

This data package contains sample and QC results for twenty six soil samples, requested for the above referenced project on 05/05/23. The samples were received cold and intact.

TPH-Extractables by GC (EPA 8015M):

- High responses were observed for TPH (C10-C14), TPH (C14-C24), and ORO C28-C44 in the CCV analyzed 05/16/23 05:21; these analytes were not detected at or above the RL in the associated samples, and affected data was qualified with "b".
- No other analytical problems were encountered.

Moisture (ASTM D2216):

No analytical problems were encountered.

Please report all results to the MDL, J-flag results between MDL and RL	
Please report results and invoice separately for each Project ID	
Please report results in pdf format with Excel EDD deliverable	
Please report results on a dry weight basis.	

Project	SampleID	Medium	Preservation	Date	TPH Temp A015	C10 (M)	C14, C15 (S)
T423.20	G4/43REF-A	SED	FREEZE	23-Mar-23	12:46	1	1
T423.20	G4/43REF-B	SED	FREEZE	23-Mar-23	13:06	1	1
T423.20	G4/43REF-C	SED	FREEZE	23-Mar-23	13:16	1	1
T423.20	LAWA-1C1	SED	FREEZE	19-Mar-23	4:40	1	1
T423.20	LAWA-1C2	SED	FREEZE	19-Mar-23	5:44	1	1
T423.20	LAWA-1C2-FD	SED	FREEZE	19-Mar-23	5:55	1	1
T423.20	LAWA-1C3X	SED	FREEZE	19-Mar-23	7:33	1	1
T423.20	LAWA-1D1	SED	FREEZE	18-Mar-23	11:03	1	1
T423.20	LAWA-1D2	SED	FREEZE	18-Mar-23	22:49	1	1
T423.20	LAWA-1D3X	SED	FREEZE	18-Mar-23	22:13	1	1
T423.20	LAWA-3C1	SED	FREEZE	17-Mar-23	19:07	1	1
T423.20	LAWA-3C2	SED	FREEZE	17-Mar-23	19:55	1	1
T423.20	LAWA-3C3	SED	FREEZE	17-Mar-23	20:23	1	1
T423.20	LAWA-3D1X	SED	FREEZE	17-Mar-23	22:15	1	1
T423.20	LAWA-3D2	SED	FREEZE	17-Mar-23	23:06	1	1
T423.20	LAWA-3D3	SED	FREEZE	18-Mar-23	1:00	1	1

T423.18	MAWA-1C2	SED	FREEZE	22-Mar-23	7:27	1	1
T423.18	MAWA-1CP2	SED	FREEZE	22-Mar-23	13:29	1	1
T423.18	MAWA-2B2X	SED	FREEZE	22-Mar-23	4:35	1	1
T423.18	MAWA-3B2	SED	FREEZE	21-Mar-23	23:28	1	1
T423.18	MAWA-3C2	SED	FREEZE	21-Mar-23	23:07	1	1
T423.18	MAWA-4B2X	SED	FREEZE	21-Mar-23	22:45	1	1
T423.18	MAWB-1B2X	SED	FREEZE	21-Mar-23	3:53	1	1
T423.18	MAWB-1C2X	SED	FREEZE	21-Mar-23	4:06	1	1
T423.18	MAWB-2B2X	SED	FREEZE	21-Mar-23	1:50	1	1
T423.18	MAWB-3B2X	SED	FREEZE	20-Mar-23	23:15	1	1
T423.18	MAWB-3C2	SED	FREEZE	20-Mar-23	22:52	1	1
T423.18	MAWB-4B2X	SED	FREEZE	20-Mar-23	21:37	1	1
T423.18	MAWC-1B2X	SED	FREEZE	20-Mar-23	3:53	1	1
T423.18	MAWC-1C2	SED	FREEZE	20-Mar-23	5:16	1	1
T423.18	MAWC-1C2-FD	SED	FREEZE	20-Mar-23	5:27	1	1
T423.18	MAWC-2B2X	SED	FREEZE	20-Mar-23	1:41	1	1
T423.18	MAWC-3B2X	SED	FREEZE	19-Mar-23	23:32	1	1
T423.18	MAWC-3C2	SED	FREEZE	19-Mar-23	23:18	1	1
T423.18	MAWC-4B2X	SED	FREEZE	19-Mar-23	23:01	1	1
T423.18	MAWD-1B2X	SED	FREEZE	23-Mar-23	1:09	1	1
T423.18	MAWD-1C2	SED	FREEZE	23-Mar-23	3:36	1	1
T423.18	MAWD-2C2X	SED	FREEZE	23-Mar-23	5:07	1	1
T423.18	MAWD-3B2	SED	FREEZE	22-Mar-23	23:16	1	1
T423.18	MAWD-3C2X	SED	FREEZE	22-Mar-23	23:29	1	1
T423.18	MAWD-3C2X-FD	SED	FREEZE	22-Mar-23	23:38	1	1
T423.18	MAWD-4B2X	SED	FREEZE	22-Mar-23	22:57	1	1

T423.19	Control-3-A	SED	FREEZE	23-Mar-23	20:24	1	1
T423.19	Control-3-B	SED	FREEZE	23-Mar-23	20:37	1	1
T423.19	Control-3-C	SED	FREEZE	23-Mar-23	20:54	1	1
T423.19	MAWG-1B1X	SED	FREEZE	21-Mar-23	18:15	1	1
T423.19	MAWG-1B2X	SED	FREEZE	21-Mar-23	17:14	1	1
T423.19	MAWG-1B3X	SED	FREEZE	21-Mar-23	19:04	1	1

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483901

T423.19	MAWG-1C1	SED	FREEZE	21-Mar-23	19:44	1	1
T423.19	MAWG-1C2	SED	FREEZE	21-Mar-23	19:09	1	1
T423.19	MAWG-1C3	SED	FREEZE	21-Mar-23	19:15	1	1
T423.19	MAWG-1D1	SED	FREEZE	21-Mar-23	20:12	1	1
T423.19	MAWG-1D2	SED	FREEZE	21-Mar-23	20:32	1	1
T423.19	MAWG-1D3	SED	FREEZE	21-Mar-23	20:50	1	1
T423.19	MAWG-2B2X	SED	FREEZE	21-Mar-23	13:25	1	1
T423.19	MAWG-2B2X-FD	SED	FREEZE	21-Mar-23	13:35	1	1
T423.19	MAWG-2C2	SED	FREEZE	21-Mar-23	13:08	1	1
T423.19	MAWG-3B1X	SED	FREEZE	21-Mar-23	8:02	1	1
T423.19	MAWG-3B2X	SED	FREEZE	21-Mar-23	8:08	1	1
T423.19	MAWG-3B3X	SED	FREEZE	21-Mar-23	8:52	1	1
T423.19	MAWG-3C1	SED	FREEZE	21-Mar-23	10:28	1	1
T423.19	MAWG-3C2	SED	FREEZE	21-Mar-23	9:00	1	1
T423.19	MAWG-3C2-FD	SED	FREEZE	21-Mar-23	9:45	1	1
T423.19	MAWG-3C3	SED	FREEZE	21-Mar-23	9:11	1	1
T423.19	MAWG-3D1	SED	FREEZE	21-Mar-23	11:02	1	1
T423.19	MAWG-3D2	SED	FREEZE	21-Mar-23	11:26	1	1
T423.19	MAWG-3D3	SED	FREEZE	21-Mar-23	11:48	1	1
T423.19	MAWG-4B2X	SED	FREEZE	21-Mar-23	12:46	1	1
T423.19	MAWG-4C2	SED	FREEZE	21-Mar-23	12:28	1	1

483907

T423.21	TFPSO-1B2	SED	FREEZE	25-Mar-23	4:33	1	1
T423.21	TFPSO-1C2	SED	FREEZE	25-Mar-23	2:39	1	1
T423.21	TFPSO-1CP2	SED	FREEZE	25-Mar-23	2:19	1	1
T423.21	TFPSO-1D2	SED	FREEZE	25-Mar-23	1:48	1	1
T423.21	TFPSO-1D2-FD	SED	FREEZE	25-Mar-23	2:00	1	1
T423.21	TFPSO-2B2	SED	FREEZE	25-Mar-23	7:42	1	1
T423.21	TFPSO-2CP2	SED	FREEZE	25-Mar-23	7:19	1	1
T423.21	TFPSO-3B2	SED	FREEZE	25-Mar-23	8:01	1	1
T423.21	TFPSO-3CP2	SED	FREEZE	25-Mar-23	8:47	1	1
T423.21	TFPSO-4B2	SED	FREEZE	25-Mar-23	8:20	1	1
T423.21	TFPSO-4CP2	SED	FREEZE	25-Mar-23	9:10	1	1
T423.21	YAREF-A2	SED	FREEZE	25-Mar-23	12:54	1	1
T423.21	YAREF-B2	SED	FREEZE	25-Mar-23	13:04	1	1
T423.21	YAREF-C2	SED	FREEZE	25-Mar-23	13:14	1	1


483904

T423.17	CBREF-A	SED	FREEZE	25-Mar-23	19:20	1	1
T423.17	CBREF-B	SED	FREEZE	25-Mar-23	19:30	1	1
T423.17	CBREF-C	SED	FREEZE	25-Mar-23	19:39	1	1
T423.17	YUWA-1B1X	SED	FREEZE	16-Mar-23	17:20	1	1
T423.17	YUWA-1B2X	SED	FREEZE	16-Mar-23	16:50	1	1
T423.17	YUWA-1B3X	SED	FREEZE	16-Mar-23	17:03	1	1
T423.17	YUWA-1C1	SED	FREEZE	16-Mar-23	19:30	1	1
T423.17	YUWA-1C2	SED	FREEZE	16-Mar-23	19:43	1	1
T423.17	YUWA-1C3	SED	FREEZE	16-Mar-23	19:55	1	1
T423.17	YUWA-1D1	SED	FREEZE	16-Mar-23	20:13	1	1
T423.17	YUWA-1D2	SED	FREEZE	16-Mar-23	20:19	1	1
T423.17	YUWA-1D3	SED	FREEZE	16-Mar-23	20:44	1	1
T423.17	YUWA-2B2X	SED	FREEZE	16-Mar-23	18:57	1	1
T423.17	YUWA-2C2	SED	FREEZE	16-Mar-23	19:13	1	1
T423.17	YUWA-3B1X	SED	FREEZE	16-Mar-23	10:09	1	1
T423.17	YUWA-3B1X-FD	SED	FREEZE	16-Mar-23	10:19	1	1
T423.17	YUWA-3B2X	SED	FREEZE	16-Mar-23	9:07	1	1
T423.17	YUWA-3B3X	SED	FREEZE	16-Mar-23	10:49	1	1
T423.17	YUWA-3C1	SED	FREEZE	16-Mar-23	13:00	1	1
T423.17	YUWA-3C1-FD	SED	FREEZE	16-Mar-23	13:09	1	1

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483504

T423.17	YUWA-3C2	SED	FREEZE	16-Mar-23	12:03	1	1
T423.17	YUWA-3C3	SED	FREEZE	16-Mar-23	11:19	1	1
T423.17	YUWA-3D1	SED	FREEZE	16-Mar-23	13:34	1	1
T423.17	YUWA-3D2	SED	FREEZE	16-Mar-23	13:04	1	1
T423.17	YUWA-3D3	SED	FREEZE	16-Mar-23	14:17	1	1
T423.17	YUWA-4B2X	SED	FREEZE	16-Mar-23	6:03	1	1
T423.17	YUWA-4C2	SED	FREEZE	16-Mar-23	6:24	1	1

Received:  5/5/23 1009



ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1	
Client: Tetra Tech, Inc.	Project: T423.21 - Gulf of Thailand
Date Received: 05/05/23	Sampler's Name Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Section 2	
Sample(s) received in a cooler? <input checked="" type="checkbox"/> Yes, How many? <u>2</u> <input type="checkbox"/> No (skip section 2)	Sample Temp (°C) (No Cooler): _____
Sample Temp (°C), One from each cooler: #1: <u>-14.1</u> #2: <u>-8.3</u> #3: _____ #4: _____	
<i>(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)</i>	
Shipping Information: _____	

Section 3	
Was the cooler packed with: <input type="checkbox"/> Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Bubble Wrap <input type="checkbox"/> Styrofoam	
<input type="checkbox"/> Paper <input type="checkbox"/> None <input checked="" type="checkbox"/> Other <u>Dry Ice</u>	
Cooler Temp (°C): #1: <u>-21.1</u> #2: <u>-14.4</u> #3: _____ #4: _____	

Section 4	YES	NO	N/A
Was a COC received?		<input checked="" type="checkbox"/>	
Are sample IDs present?			
Are sampling dates & times present?			
Is a relinquished signature present?			
Are the tests required clearly indicated on the COC?			
Are custody seals present?		<input checked="" type="checkbox"/>	
If custody seals are present, were they intact?			<input checked="" type="checkbox"/>
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			<input checked="" type="checkbox"/>
Did all samples arrive intact? If no, indicate in Section 4 below.	<input checked="" type="checkbox"/>		
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>		
Were the samples collected in the correct containers for the required tests?	<input checked="" type="checkbox"/>		
Are the containers labeled with the correct preservatives?			<input checked="" type="checkbox"/>
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			<input checked="" type="checkbox"/>
Was a sufficient amount of sample submitted for the requested tests?	<input checked="" type="checkbox"/>		

Section 5 Explanations/Comments
COCs not received.

Section 6	
For discrepancies, how was the Project Manager notified? <input type="checkbox"/> Verbal <input type="checkbox"/> Email	PM Initials: _____ Date/Time: _____ (email sent to/on): _____ / _____
Project Manager's response:	

Completed By: [Signature] Date: 5/5/23

ORIGIN ID:CCRA (925) 283-3771
BARBARA MAGOON
TETRA TECH, INC
3897 MT. DIABLO BLVD #150

LAFAYETTE, CA 94549
UNITED STATES US

SHIP DATE: 04MAY23
ACTWGT: 35.00 LB
CAD: 250818822/INET4610
DIMS: 23x12x13 IN
DRY ICE: 0.91 KG
BILL SENDER

TO ENTHALPY
ENTHALPY
931 W. BARKLEY AVE.

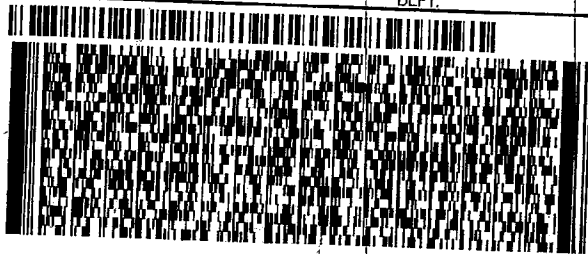
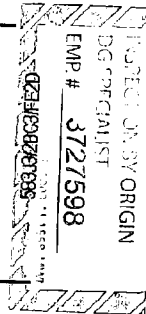
ORANGE CA 92868

(714) 771-8900

REF: TED - T41423

INV:
PO:

DEPT:



FedEx
Express



2 of 3

MPS# 7720 0864 6718

Mstr# 7720 0864 7688

0201

92 APVA

FRI - 05 MAY 10:30A
PRIORITY OVERNIGHT

ICE

92868

CA-US SNA



-21.1/-14.1

ORIGIN ID: CCRA (925) 283-3771
BARBARA MAGOON
TETRA TECH, INC
3697 MT. DIABLO BLVD #150

LAFAYETTE, CA 94548
UNITED STATES US

SHIP DATE: 04MAY23
ACTWGT: 35.00 LB
CAD: 250616822/NET4810
DIMS: 23x12x13 IN
DRY ICE: 0.91 KG
BILL SENDER

RT **229** 1 10:30 D
FZ 7688 05.05

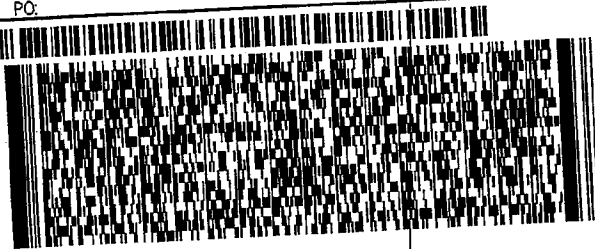
TO **ENTHALPY**
ENTHALPY
931 W. BARKLEY AVE.

ORANGE CA 92868

(714) 771-8900
INV:
PO:

REF: TED - T41423

DEPT:

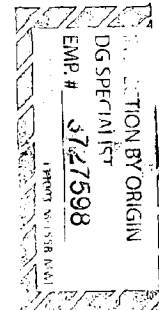


FRI - 05 MAY 10:30A
PRIORITY OVERNIGHT

1 of 3
TRK# **7720 0864 7688**
0201
MASTER

ICE
92868
CA-US **SNA**

92 APVA



-14.4 / -8.3

Extractable Carbon Chain

Lab #: 483905

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.18 - Gulf of Thailand

Field ID: MAWA-1C2

Moisture: 64%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/15/23

Lab ID: 483905-001

Batch#: 313935

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/22/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: SME

483905-001 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	28	3.3	mg/Kg
TPH (C14-C24)	ND	28	3.3	mg/Kg
ORO C28-C44	5.3 J	55	3.3	mg/Kg
483905-001 Surrogate	%REC			Limits
n-Triacontane	89			70-130

Field ID: MAWA-1CP2

Moisture: 52%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/15/23

Lab ID: 483905-002

Batch#: 313935

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/22/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: SME

483905-002 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	21	2.4	mg/Kg
TPH (C14-C24)	ND	21	2.4	mg/Kg
ORO C28-C44	3.1 J	41	2.4	mg/Kg
483905-002 Surrogate	%REC			Limits
n-Triacontane	97			70-130

Field ID: MAWA-2B2X

Moisture: 57%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/15/23

Lab ID: 483905-003

Batch#: 313935

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/22/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: SME

483905-003 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	23	2.7	mg/Kg
TPH (C14-C24)	ND	23	2.7	mg/Kg
ORO C28-C44	4.3 J	46	2.7	mg/Kg
483905-003 Surrogate	%REC			Limits
n-Triacontane	99			70-130

Extractable Carbon Chain

Lab #: 483905

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.18 - Gulf of Thailand

Field ID: MAWA-3B2

Moisture: 58%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/15/23

Lab ID: 483905-004

Batch#: 313935

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/21/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: SME

483905-004 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	24	2.8	mg/Kg
TPH (C14-C24)	ND	24	2.8	mg/Kg
ORO C28-C44	3.4 J	47	2.8	mg/Kg
483905-004 Surrogate	%REC		Limits	
n-Triacontane	95		70-130	

Field ID: MAWA-3C2

Moisture: 57%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/15/23

Lab ID: 483905-005

Batch#: 313935

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/21/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: SME

483905-005 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	23	2.7	mg/Kg
TPH (C14-C24)	ND	23	2.7	mg/Kg
ORO C28-C44	4.7 J	46	2.7	mg/Kg
483905-005 Surrogate	%REC		Limits	
n-Triacontane	96		70-130	

Field ID: MAWA-4B2X

Moisture: 54%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/16/23

Lab ID: 483905-006

Batch#: 313935

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/21/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: SME

483905-006 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	22	2.6	mg/Kg
TPH (C14-C24)	ND	22	2.6	mg/Kg
ORO C28-C44	3.2 J	43	2.6	mg/Kg
483905-006 Surrogate	%REC		Limits	
n-Triacontane	96		70-130	

Extractable Carbon Chain

Lab #: 483905

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.18 - Gulf of Thailand

Field ID: MAWB-1B2X

Moisture: 55%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/16/23

Lab ID: 483905-007

Batch#: 313935

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/21/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: SME

483905-007 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	200	22	2.6	mg/Kg
TPH (C14-C24)	400	22	2.6	mg/Kg
ORO C28-C44	4.9 J	44	2.6	mg/Kg
483905-007 Surrogate	%REC		Limits	
n-Triacontane	95		70-130	

Field ID: MAWB-1C2X

Moisture: 59%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/16/23

Lab ID: 483905-008

Batch#: 313935

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/21/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: SME

483905-008 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	30	24	2.9	mg/Kg
TPH (C14-C24)	66	24	2.9	mg/Kg
ORO C28-C44	4.2 J	48	2.9	mg/Kg
483905-008 Surrogate	%REC		Limits	
n-Triacontane	97		70-130	

Field ID: MAWB-2B2X

Moisture: 52%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/17/23

Lab ID: 483905-009

Batch#: 313936

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/21/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: BJB

483905-009 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	17 J	21	2.2	mg/Kg
TPH (C14-C24)	37	21	2.2	mg/Kg
ORO C28-C44	ND	42	2.2	mg/Kg
483905-009 Surrogate	%REC		Limits	
n-Triacontane	98		70-130	

Extractable Carbon Chain

Lab #: 483905		Project#: COTL				
Client: Tetra Tech, Inc.		Location: T423.18 - Gulf of Thailand				
Field ID: MAWB-3B2X		Moisture: 44%		Prepared: 05/14/23		
Type: SAMPLE		Diln Fac: 100.0		Analyzed: 05/17/23		
Lab ID: 483905-010		Batch#: 313936		Prep: EPA 3580M		
Matrix: Soil		Sampled: 03/20/23		Analysis: EPA 8015M		
Basis: dry		Received: 05/05/23		Analyst: BJJ		
483905-010 Analyte		Result	RL	MDL	Units	
TPH (C10-C14)		43,000	1,800	190	mg/Kg	
TPH (C14-C24)		60,000	1,800	190	mg/Kg	
ORO C28-C44		ND	3,500	190	mg/Kg	
483905-010 Surrogate			%REC	Limits		
n-Triacontane			DO	70-130		
Field ID: MAWB-3C2		Moisture: 62%		Prepared: 05/14/23		
Type: SAMPLE		Diln Fac: 1.000		Analyzed: 05/17/23		
Lab ID: 483905-011		Batch#: 313936		Prep: EPA 3580M		
Matrix: Soil		Sampled: 03/20/23		Analysis: EPA 8015M		
Basis: dry		Received: 05/05/23		Analyst: BJJ		
483905-011 Analyte		Result	RL	MDL	Units	
TPH (C10-C14)		24 J	26	2.8	mg/Kg	
TPH (C14-C24)		46	26	2.8	mg/Kg	
ORO C28-C44		ND	52	2.8	mg/Kg	
483905-011 Surrogate			%REC	Limits		
n-Triacontane			94	70-130		
Field ID: MAWB-4B2X		Moisture: 56%		Prepared: 05/14/23		
Type: SAMPLE		Diln Fac: 1.000		Analyzed: 05/16/23		
Lab ID: 483905-012		Batch#: 313936		Prep: EPA 3580M		
Matrix: Soil		Sampled: 03/20/23		Analysis: EPA 8015M		
Basis: dry		Received: 05/05/23		Analyst: SME		
483905-012 Analyte		Result	RL	MDL	Units	Qual
TPH (C10-C14)		11 J	23	5.5	mg/Kg	B b
TPH (C14-C24)		22 J	23	5.5	mg/Kg	B b
ORO C28-C44		15 J	45	5.5	mg/Kg	B b
483905-012 Surrogate			%REC	Limits		
n-Triacontane			123	70-130		

Extractable Carbon Chain

Lab #: 483905

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.18 - Gulf of Thailand

Field ID: MAWC-1B2X

Moisture: 53%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/16/23

Lab ID: 483905-013

Batch#: 313936

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/20/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: SME

483905-013 Analyte	Result	RL	MDL	Units	Qual
TPH (C10-C14)	8.8 J	21	5.1	mg/Kg	B b
TPH (C14-C24)	18 J	21	5.1	mg/Kg	B b
ORO C28-C44	14 J	42	5.1	mg/Kg	B b

483905-013 Surrogate	%REC	Limits
n-Triacontane	122	70-130

Field ID: MAWC-1C2

Moisture: 57%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/16/23

Lab ID: 483905-014

Batch#: 313936

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/20/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: SME

483905-014 Analyte	Result	RL	MDL	Units	Qual
TPH (C10-C14)	9.9 J	23	5.6	mg/Kg	B b
TPH (C14-C24)	20 J	23	5.6	mg/Kg	B b
ORO C28-C44	17 J	46	5.6	mg/Kg	B b

483905-014 Surrogate	%REC	Limits
n-Triacontane	123	70-130

Field ID: MAWC-1C2-FD

Moisture: 53%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/16/23

Lab ID: 483905-015

Batch#: 313936

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/20/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: SME

483905-015 Analyte	Result	RL	MDL	Units	Qual
TPH (C10-C14)	8.8 J	21	5.1	mg/Kg	B b
TPH (C14-C24)	19 J	21	5.1	mg/Kg	B b
ORO C28-C44	14 J	42	5.1	mg/Kg	B b

483905-015 Surrogate	%REC	Limits
n-Triacontane	115	70-130

Extractable Carbon Chain

Lab #: 483905

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.18 - Gulf of Thailand

Field ID: MAWC-2B2X

Moisture: 60%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/17/23

Lab ID: 483905-016

Batch#: 313936

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/20/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: BJB

483905-016 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	25	2.7	mg/Kg
TPH (C14-C24)	2.9 J	25	2.7	mg/Kg
ORO C28-C44	ND	50	2.7	mg/Kg
483905-016 Surrogate	%REC			Limits
n-Triacontane	93			70-130

Field ID: MAWC-3B2X

Moisture: 52%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/17/23

Lab ID: 483905-017

Batch#: 313936

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/19/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: BJB

483905-017 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	21	2.2	mg/Kg
TPH (C14-C24)	11 J	21	2.2	mg/Kg
ORO C28-C44	2.6 J	42	2.2	mg/Kg
483905-017 Surrogate	%REC			Limits
n-Triacontane	94			70-130

Field ID: MAWC-3C2

Moisture: 59%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/16/23

Lab ID: 483905-018

Batch#: 313936

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/19/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: SME

483905-018 Analyte	Result	RL	MDL	Units	Qual
TPH (C10-C14)	11 J	24	5.8	mg/Kg	B b
TPH (C14-C24)	23 J	24	5.8	mg/Kg	B b
ORO C28-C44	16 J	48	5.8	mg/Kg	B b
483905-018 Surrogate	%REC			Limits	
n-Triacontane	129			70-130	

Extractable Carbon Chain

Lab #: 483905

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.18 - Gulf of Thailand

Field ID: MAWC-4B2X

Moisture: 47%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/16/23

Lab ID: 483905-019

Batch#: 313936

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/19/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: SME

483905-019 Analyte	Result	RL	MDL	Units	Qual
TPH (C10-C14)	8.5 J	19	4.5	mg/Kg	B b
TPH (C14-C24)	17 J	19	4.5	mg/Kg	B b
ORO C28-C44	11 J	37	4.5	mg/Kg	B b

483905-019 Surrogate	%REC	Limits
n-Triacontane	126	70-130

Field ID: MAWD-1B2X

Moisture: 55%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/15/23

Lab ID: 483905-020

Batch#: 313938

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/23/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: BJJ

483905-020 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	22	5.3	mg/Kg
TPH (C14-C24)	ND	22	5.3	mg/Kg
ORO C28-C44	ND	44	5.3	mg/Kg

483905-020 Surrogate	%REC	Limits
n-Triacontane	83	70-130

Field ID: MAWD-1C2

Moisture: 57%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/15/23

Lab ID: 483905-021

Batch#: 313938

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/23/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: BJJ

483905-021 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	23	5.6	mg/Kg
TPH (C14-C24)	ND	23	5.6	mg/Kg
ORO C28-C44	ND	46	5.6	mg/Kg

483905-021 Surrogate	%REC	Limits
n-Triacontane	84	70-130

Extractable Carbon Chain

Lab #: 483905

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.18 - Gulf of Thailand

Field ID: MAWD-2C2X

Moisture: 58%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/15/23

Lab ID: 483905-022

Batch#: 313938

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/23/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: BJJ

483905-022 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	24	5.7	mg/Kg
TPH (C14-C24)	ND	24	5.7	mg/Kg
ORO C28-C44	ND	47	5.7	mg/Kg
483905-022 Surrogate	%REC		Limits	
n-Triacontane	72		70-130	

Field ID: MAWD-3B2

Moisture: 55%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/17/23

Lab ID: 483905-023

Batch#: 313938

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/22/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: BJJ

483905-023 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	22	2.4	mg/Kg
TPH (C14-C24)	17 J	22	2.4	mg/Kg
ORO C28-C44	2.7 J	44	2.4	mg/Kg
483905-023 Surrogate	%REC		Limits	
n-Triacontane	97		70-130	

Field ID: MAWD-3C2X

Moisture: 63%

Prepared: 05/18/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/19/23

Lab ID: 483905-024

Batch#: 314228

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/22/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: BJJ

483905-024 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	27	6.5	mg/Kg
TPH (C14-C24)	ND	27	6.5	mg/Kg
ORO C28-C44	ND	54	6.5	mg/Kg
483905-024 Surrogate	%REC		Limits	
n-Triacontane	104		70-130	

Extractable Carbon Chain

Lab #: 483905	Project#: COTL	
Client: Tetra Tech, Inc.	Location: T423.18 - Gulf of Thailand	
Field ID: MAWD-3C2X-FD	Moisture: 56%	Prepared: 05/14/23
Type: SAMPLE	Diln Fac: 1.000	Analyzed: 05/15/23
Lab ID: 483905-025	Batch#: 313938	Prep: EPA 3580M
Matrix: Soil	Sampled: 03/22/23	Analysis: EPA 8015M
Basis: dry	Received: 05/05/23	Analyst: BJG

483905-025 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	23	5.4	mg/Kg
TPH (C14-C24)	ND	23	5.4	mg/Kg
ORO C28-C44	ND	45	5.4	mg/Kg
483905-025 Surrogate	%REC		Limits	
n-Triacontane	71		70-130	

Field ID: MAWD-4B2X	Moisture: 60%	Prepared: 05/14/23
Type: SAMPLE	Diln Fac: 1.000	Analyzed: 05/15/23
Lab ID: 483905-026	Batch#: 313938	Prep: EPA 3580M
Matrix: Soil	Sampled: 03/22/23	Analysis: EPA 8015M
Basis: dry	Received: 05/05/23	Analyst: BJJ

483905-026 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	25	6.0	mg/Kg
TPH (C14-C24)	ND	25	6.0	mg/Kg
ORO C28-C44	ND	50	6.0	mg/Kg
483905-026 Surrogate	%REC		Limits	
n-Triacontane	77		70-130	

Type: BLANK	Batch#: 313935	Analysis: EPA 8015M
Lab ID: QC1065761	Prepared: 05/14/23	Analyst: SME
Matrix: Soil	Analyzed: 05/15/23	
Diln Fac: 1.000	Prep: EPA 3580M	

QC1065761 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	10	1.1	mg/Kg
TPH (C14-C24)	ND	10	1.1	mg/Kg
ORO C28-C44	ND	20	1.1	mg/Kg
QC1065761 Surrogate	%REC		Limits	
n-Triacontane	84		70-130	

Extractable Carbon Chain

Lab #: 483905

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.18 - Gulf of Thailand

Type: BLANK

Batch#: 313936

Analysis: EPA 8015M

Lab ID: QC1065765

Prepared: 05/14/23

Analyst: SME

Matrix: Soil

Analyzed: 05/17/23

DiIn Fac: 1.000

Prep: EPA 3580M

QC1065765 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	10	1.1	mg/Kg
TPH (C14-C24)	ND	10	1.1	mg/Kg
ORO C28-C44	ND	20	1.1	mg/Kg
QC1065765 Surrogate	%REC		Limits	
n-Triacontane	98		70-130	

Type: BLANK

Batch#: 313938

Analysis: EPA 8015M

Lab ID: QC1065773

Prepared: 05/14/23

Analyst: SME

Matrix: Soil

Analyzed: 05/15/23

DiIn Fac: 1.000

Prep: EPA 3580M

QC1065773 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	10	2.4	mg/Kg
TPH (C14-C24)	ND	10	2.4	mg/Kg
ORO C28-C44	ND	20	2.4	mg/Kg
QC1065773 Surrogate	%REC		Limits	
n-Triacontane	91		70-130	

Type: BLANK

Batch#: 314228

Analysis: EPA 8015M

Lab ID: QC1066792

Prepared: 05/18/23

Analyst: BJG

Matrix: Soil

Analyzed: 05/18/23

DiIn Fac: 1.000

Prep: EPA 3580M

QC1066792 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	10	1.1	mg/Kg
TPH (C14-C24)	ND	10	1.1	mg/Kg
ORO C28-C44	ND	20	1.1	mg/Kg
QC1066792 Surrogate	%REC		Limits	
n-Triacontane	97		70-130	

Legend

B: Contamination found in associated Method Blank

DO: Diluted Out

J: Estimated value

MDL: Method Detection Limit

ND: Not Detected at or above MDL

RL: Reporting Limit

b: See narrative

Extractable Carbon Chain: Batch QC

Lab #: 483905

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.18 - Gulf of Thailand

Type: LCS

Batch#: 313935

Analysis: EPA 8015M

Lab ID: QC1065762

Prepared: 05/14/23

Analyst: SME

Matrix: Soil

Analyzed: 05/15/23

Diln Fac: 1.000

Prep: EPA 3580M

QC1065762 Analyte	Spiked	Result	%REC	Limits	Units
Diesel C10-C28	249.3	230.7	93	76-122	mg/Kg
QC1065762 Surrogate			%REC	Limits	
n-Triacontane			87	70-130	

Extractable Carbon Chain: Batch QC

Lab #: 483905

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.18 - Gulf of Thailand

Field ID: ZZZZZZZZZZ

Matrix: Soil

Batch#: 313935

Analyzed: 05/15/23

Type: MS

Basis: dry

Sampled: 05/12/23

Prep: EPA 3580M

MSS Lab ID: 485119-001

Moisture: 13%

Received: 05/12/23

Analysis: EPA 8015M

Lab ID: QC1065763

Diln Fac: 1.000

Prepared: 05/14/23

Analyst: SME

QC1065763 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Diesel C10-C28	3.932	286.5	250.8	86	62-126	mg/Kg

QC1065763 Surrogate	%REC	Limits
n-Triacontane	74	70-130

Field ID: ZZZZZZZZZZ

Matrix: Soil

Batch#: 313935

Analyzed: 05/15/23

Type: MSD

Basis: dry

Sampled: 05/12/23

Prep: EPA 3580M

MSS Lab ID: 485119-001

Moisture: 13%

Received: 05/12/23

Analysis: EPA 8015M

Lab ID: QC1065764

Diln Fac: 1.000

Prepared: 05/14/23

Analyst: SME

QC1065764 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
Diesel C10-C28	284.8	251.1	87	62-126	mg/Kg	1	35

QC1065764 Surrogate	%REC	Limits
n-Triacontane	73	70-130

Legend

RPD: Relative Percent Difference

Extractable Carbon Chain: Batch QC

Lab #: 483905

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.18 - Gulf of Thailand

Type: LCS

Batch#: 313936

Analysis: EPA 8015M

Lab ID: QC1065766

Prepared: 05/14/23

Analyst: SME

Matrix: Soil

Analyzed: 05/15/23

Diln Fac: 1.000

Prep: EPA 3580M

QC1065766 Analyte	Spiked	Result	%REC	Limits	Units
Diesel C10-C28	249.5	236.7	95	76-122	mg/Kg
QC1065766 Surrogate			%REC	Limits	
n-Triacontane			111	70-130	

Extractable Carbon Chain: Batch QC

Lab #: 483905

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.18 - Gulf of Thailand

Field ID: ZZZZZZZZZZ

Basis: as received

Prepared: 05/14/23

Type: MS

Diln Fac: 1.000

Analyzed: 05/15/23

MSS Lab ID: 484923-037

Batch#: 313936

Prep: EPA 3580M

Lab ID: QC1065767

Sampled: 05/10/23

Analysis: EPA 8015M

Matrix: Soil

Received: 05/10/23

Analyst: SME

QC1065767 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Diesel C10-C28	24.04	249.0	265.8	97	62-126	mg/Kg
QC1065767 Surrogate				%REC	Limits	
n-Triacontane				117	70-130	

Field ID: ZZZZZZZZZZ

Basis: as received

Prepared: 05/14/23

Type: MSD

Diln Fac: 1.000

Analyzed: 05/15/23

MSS Lab ID: 484923-037

Batch#: 313936

Prep: EPA 3580M

Lab ID: QC1065768

Sampled: 05/10/23

Analysis: EPA 8015M

Matrix: Soil

Received: 05/10/23

Analyst: SME

QC1065768 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
Diesel C10-C28	248.5	254.9	93	62-126	mg/Kg	4	35
QC1065768 Surrogate				%REC	Limits		
n-Triacontane				112	70-130		

Legend

RPD: Relative Percent Difference

Extractable Carbon Chain: Batch QC

Lab #: 483905		Project#: COTL			
Client: Tetra Tech, Inc.		Location: T423.18 - Gulf of Thailand			
Type: LCS		Batch#: 313938		Analysis: EPA 8015M	
Lab ID: QC1065774		Prepared: 05/14/23		Analyst: SME	
Matrix: Soil		Analyzed: 05/15/23			
Diln Fac: 1.000		Prep: EPA 3580M			
QC1065774 Analyte		Spiked	Result	%REC	Limits
Diesel C10-C28		249.5	263.8	106	76-122
QC1065774 Surrogate				%REC	Limits
n-Triacontane				89	70-130

Extractable Carbon Chain: Batch QC

Lab #: 483905

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.18 - Gulf of Thailand

Field ID: ZZZZZZZZZZ

Basis: as received

Prepared: 05/14/23

Type: MS

Diln Fac: 1.000

Analyzed: 05/15/23

MSS Lab ID: 484566-001

Batch#: 313938

Prep: EPA 3580M

Lab ID: QC1065775

Sampled: 05/03/23

Analysis: EPA 8015M

Matrix: Soil

Received: 05/04/23

Analyst: SME

QC1065775 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Diesel C10-C28	2.425	247.8	278.1	111	62-126	mg/Kg
QC1065775 Surrogate				%REC	Limits	
n-Triacontane				77	70-130	

Field ID: ZZZZZZZZZZ

Basis: as received

Prepared: 05/14/23

Type: MSD

Diln Fac: 1.000

Analyzed: 05/15/23

MSS Lab ID: 484566-001

Batch#: 313938

Prep: EPA 3580M

Lab ID: QC1065776

Sampled: 05/03/23

Analysis: EPA 8015M

Matrix: Soil

Received: 05/04/23

Analyst: SME

QC1065776 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
Diesel C10-C28	249.0	247.4	98	62-126	mg/Kg	12	35
QC1065776 Surrogate				%REC	Limits		
n-Triacontane				73	70-130		

Legend

RPD: Relative Percent Difference

Extractable Carbon Chain: Batch QC

Lab #: 483905

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.18 - Gulf of Thailand

Type: LCS

Batch#: 314228

Analysis: EPA 8015M

Lab ID: QC1066793

Prepared: 05/18/23

Analyst: BJB

Matrix: Soil

Analyzed: 05/18/23

Diln Fac: 1.000

Prep: EPA 3580M

QC1066793 Analyte	Spiked	Result	%REC	Limits	Units
Diesel C10-C28	248.8	250.0	101	76-122	mg/Kg
QC1066793 Surrogate			%REC	Limits	
n-Triacontane			97	70-130	

Extractable Carbon Chain: Batch QC

Lab #: 483905

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.18 - Gulf of Thailand

Field ID: ZZZZZZZZZZ

Basis: as received

Prepared: 05/18/23

Type: MS

Diln Fac: 1.000

Analyzed: 05/18/23

MSS Lab ID: 485278-007

Batch#: 314228

Prep: EPA 3580M

Lab ID: QC1066794

Sampled: 05/16/23

Analysis: EPA 8015M

Matrix: Soil

Received: 05/16/23

Analyst: BJG

QC1066794 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Diesel C10-C28	26.36	248.8	245.5	88	62-126	mg/Kg
QC1066794 Surrogate				%REC	Limits	
n-Triacontane				90	70-130	

Field ID: ZZZZZZZZZZ

Basis: as received

Prepared: 05/18/23

Type: MSD

Diln Fac: 1.000

Analyzed: 05/18/23

MSS Lab ID: 485278-007

Batch#: 314228

Prep: EPA 3580M

Lab ID: QC1066795

Sampled: 05/16/23

Analysis: EPA 8015M

Matrix: Soil

Received: 05/16/23

Analyst: BJG

QC1066795 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
Diesel C10-C28	247.8	247.6	89	62-126	mg/Kg	1	35
QC1066795 Surrogate				%REC	Limits		
n-Triacontane				85	70-130		

Legend

RPD: Relative Percent Difference

Moisture

Lab #: 483905

Client: Tetra Tech, Inc.

Project#: COTL

Location: T423.18 - Gulf of Thailand

Field ID: MAWA-1C2

Lab ID: 483905-001

Matrix: Soil

Diln Fac: 1.000

Batch#: 314682

Sampled: 03/22/23

Received: 05/05/23

Prepared: 05/24/23

Analyzed: 05/25/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483905-001 Analyte

Moisture, Percent

Result RL Units

64 1 %

Field ID: MAWA-1CP2

Lab ID: 483905-002

Matrix: Soil

Diln Fac: 1.000

Batch#: 314682

Sampled: 03/22/23

Received: 05/05/23

Prepared: 05/24/23

Analyzed: 05/25/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483905-002 Analyte

Moisture, Percent

Result RL Units

52 1 %

Field ID: MAWA-2B2X

Lab ID: 483905-003

Matrix: Soil

Diln Fac: 1.000

Batch#: 314682

Sampled: 03/22/23

Received: 05/05/23

Prepared: 05/24/23

Analyzed: 05/25/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483905-003 Analyte

Moisture, Percent

Result RL Units

57 1 %

Field ID: MAWA-3B2

Lab ID: 483905-004

Matrix: Soil

Diln Fac: 1.000

Batch#: 314682

Sampled: 03/21/23

Received: 05/05/23

Prepared: 05/24/23

Analyzed: 05/25/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483905-004 Analyte

Moisture, Percent

Result RL Units

58 1 %

Field ID: MAWA-3C2

Lab ID: 483905-005

Matrix: Soil

Diln Fac: 1.000

Batch#: 314682

Sampled: 03/21/23

Received: 05/05/23

Prepared: 05/24/23

Analyzed: 05/25/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483905-005 Analyte

Moisture, Percent

Result RL Units

57 1 %

Field ID: MAWA-4B2X

Lab ID: 483905-006

Matrix: Soil

Diln Fac: 1.000

Batch#: 314682

Sampled: 03/21/23

Received: 05/05/23

Prepared: 05/24/23

Analyzed: 05/25/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483905-006 Analyte

Moisture, Percent

Result RL Units

54 1 %

Moisture

Lab #: 483905

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.18 - Gulf of Thailand

Field ID: MAWB-1B2X

Batch#: 314682

Analyzed: 05/25/23

Lab ID: 483905-007

Sampled: 03/21/23

Prep: METHOD

Matrix: Soil

Received: 05/05/23

Analysis: ASTM D2216

Diln Fac: 1.000

Prepared: 05/24/23

Analyst: JAK

483905-007 Analyte

Moisture, Percent

Result **RL** **Units**

55 1 %

Field ID: MAWB-1C2X

Batch#: 314682

Analyzed: 05/25/23

Lab ID: 483905-008

Sampled: 03/21/23

Prep: METHOD

Matrix: Soil

Received: 05/05/23

Analysis: ASTM D2216

Diln Fac: 1.000

Prepared: 05/24/23

Analyst: JAK

483905-008 Analyte

Moisture, Percent

Result **RL** **Units**

59 1 %

Field ID: MAWB-2B2X

Batch#: 314682

Analyzed: 05/25/23

Lab ID: 483905-009

Sampled: 03/21/23

Prep: METHOD

Matrix: Soil

Received: 05/05/23

Analysis: ASTM D2216

Diln Fac: 1.000

Prepared: 05/24/23

Analyst: JAK

483905-009 Analyte

Moisture, Percent

Result **RL** **Units**

52 1 %

Field ID: MAWB-3B2X

Batch#: 314682

Analyzed: 05/25/23

Lab ID: 483905-010

Sampled: 03/20/23

Prep: METHOD

Matrix: Soil

Received: 05/05/23

Analysis: ASTM D2216

Diln Fac: 1.000

Prepared: 05/24/23

Analyst: JAK

483905-010 Analyte

Moisture, Percent

Result **RL** **Units**

44 1 %

Field ID: MAWB-3C2

Batch#: 314682

Analyzed: 05/25/23

Lab ID: 483905-011

Sampled: 03/20/23

Prep: METHOD

Matrix: Soil

Received: 05/05/23

Analysis: ASTM D2216

Diln Fac: 1.000

Prepared: 05/24/23

Analyst: JAK

483905-011 Analyte

Moisture, Percent

Result **RL** **Units**

62 1 %

Field ID: MAWB-4B2X

Batch#: 314682

Analyzed: 05/25/23

Lab ID: 483905-012

Sampled: 03/20/23

Prep: METHOD

Matrix: Soil

Received: 05/05/23

Analysis: ASTM D2216

Diln Fac: 1.000

Prepared: 05/24/23

Analyst: JAK

483905-012 Analyte

Moisture, Percent

Result **RL** **Units**

56 1 %

Moisture

Lab #: 483905			Project#: COTL		
Client: Tetra Tech, Inc.			Location: T423.18 - Gulf of Thailand		
Field ID: MAWC-1B2X	Batch#: 314682	Analyzed: 05/25/23			
Lab ID: 483905-013	Sampled: 03/20/23	Prep: METHOD			
Matrix: Soil	Received: 05/05/23	Analysis: ASTM D2216			
Diln Fac: 1.000	Prepared: 05/24/23	Analyst: JAK			
483905-013 Analyte			Result	RL	Units
Moisture, Percent			53	1	%
Field ID: MAWC-1C2	Batch#: 314731	Analyzed: 05/24/23			
Lab ID: 483905-014	Sampled: 03/20/23	Prep: METHOD			
Matrix: Soil	Received: 05/05/23	Analysis: ASTM D2216			
Diln Fac: 1.000	Prepared: 05/24/23	Analyst: JAK			
483905-014 Analyte			Result	RL	Units
Moisture, Percent			57	1	%
Field ID: MAWC-1C2-FD	Batch#: 314731	Analyzed: 05/24/23			
Lab ID: 483905-015	Sampled: 03/20/23	Prep: METHOD			
Matrix: Soil	Received: 05/05/23	Analysis: ASTM D2216			
Diln Fac: 1.000	Prepared: 05/24/23	Analyst: JAK			
483905-015 Analyte			Result	RL	Units
Moisture, Percent			53	1	%
Field ID: MAWC-2B2X	Batch#: 314731	Analyzed: 05/24/23			
Lab ID: 483905-016	Sampled: 03/20/23	Prep: METHOD			
Matrix: Soil	Received: 05/05/23	Analysis: ASTM D2216			
Diln Fac: 1.000	Prepared: 05/24/23	Analyst: JAK			
483905-016 Analyte			Result	RL	Units
Moisture, Percent			60	1	%
Field ID: MAWC-3B2X	Batch#: 314731	Analyzed: 05/24/23			
Lab ID: 483905-017	Sampled: 03/19/23	Prep: METHOD			
Matrix: Soil	Received: 05/05/23	Analysis: ASTM D2216			
Diln Fac: 1.000	Prepared: 05/24/23	Analyst: JAK			
483905-017 Analyte			Result	RL	Units
Moisture, Percent			52	1	%
Field ID: MAWC-3C2	Batch#: 314731	Analyzed: 05/24/23			
Lab ID: 483905-018	Sampled: 03/19/23	Prep: METHOD			
Matrix: Soil	Received: 05/05/23	Analysis: ASTM D2216			
Diln Fac: 1.000	Prepared: 05/24/23	Analyst: JAK			
483905-018 Analyte			Result	RL	Units
Moisture, Percent			59	1	%

Moisture

Lab #: 483905

Client: Tetra Tech, Inc.

Project#: COTL

Location: T423.18 - Gulf of Thailand

Field ID: MAWC-4B2X

Lab ID: 483905-019

Matrix: Soil

Diln Fac: 1.000

Batch#: 314731

Sampled: 03/19/23

Received: 05/05/23

Prepared: 05/24/23

Analyzed: 05/24/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483905-019 Analyte

Moisture, Percent

Result **RL** **Units**

47 **1** **%**

Field ID: MAWD-1B2X

Lab ID: 483905-020

Matrix: Soil

Diln Fac: 1.000

Batch#: 314731

Sampled: 03/23/23

Received: 05/05/23

Prepared: 05/24/23

Analyzed: 05/24/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483905-020 Analyte

Moisture, Percent

Result **RL** **Units**

55 **1** **%**

Field ID: MAWD-1C2

Lab ID: 483905-021

Matrix: Soil

Diln Fac: 1.000

Batch#: 314731

Sampled: 03/23/23

Received: 05/05/23

Prepared: 05/24/23

Analyzed: 05/24/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483905-021 Analyte

Moisture, Percent

Result **RL** **Units**

57 **1** **%**

Field ID: MAWD-2C2X

Lab ID: 483905-022

Matrix: Soil

Diln Fac: 1.000

Batch#: 314731

Sampled: 03/23/23

Received: 05/05/23

Prepared: 05/24/23

Analyzed: 05/24/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483905-022 Analyte

Moisture, Percent

Result **RL** **Units**

58 **1** **%**

Field ID: MAWD-3B2

Lab ID: 483905-023

Matrix: Soil

Diln Fac: 1.000

Batch#: 314731

Sampled: 03/22/23

Received: 05/05/23

Prepared: 05/24/23

Analyzed: 05/24/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483905-023 Analyte

Moisture, Percent

Result **RL** **Units**

55 **1** **%**

Field ID: MAWD-3C2X

Lab ID: 483905-024

Matrix: Soil

Diln Fac: 1.000

Batch#: 314731

Sampled: 03/22/23

Received: 05/05/23

Prepared: 05/24/23

Analyzed: 05/24/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483905-024 Analyte

Moisture, Percent

Result **RL** **Units**

63 **1** **%**

Moisture

Lab #: 483905		Project#: COTL	
Client: Tetra Tech, Inc.		Location: T423.18 - Gulf of Thailand	
Field ID: MAWD-3C2X-FD	Batch#: 314731	Analyzed: 05/24/23	
Lab ID: 483905-025	Sampled: 03/22/23	Prep: METHOD	
Matrix: Soil	Received: 05/05/23	Analysis: ASTM D2216	
Diln Fac: 1.000	Prepared: 05/24/23	Analyst: JAK	
483905-025 Analyte		Result	RL Units
Moisture, Percent		56	1 %
Field ID: MAWD-4B2X		Analyzed: 05/24/23	
Lab ID: 483905-026		Prep: METHOD	
Matrix: Soil		Analysis: ASTM D2216	
Diln Fac: 1.000		Analyst: JAK	
483905-026 Analyte		Result	RL Units
Moisture, Percent		60	1 %

Legend
 RL: Reporting Limit

Moisture: Batch QC

Lab #: 483905

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.18 - Gulf of Thailand

Field ID: LAWA-3D3

Diln Fac: 1.000

Analyzed: 05/25/23

Type: SDUP

Batch#: 314682

Prep: METHOD

MSS Lab ID: 483906-016

Sampled: 03/18/23

Analysis: ASTM D2216

Lab ID: QC1068232

Received: 05/05/23

Analyst: JAK

Matrix: Soil

Prepared: 05/24/23

QC1068232 Analyte	MSS Result	Result	RL	Units	RPD	Lim
Moisture, Percent	57.45	57.02	1.000	%	1	20

Field ID: MAWD-4B2X

Diln Fac: 1.000

Analyzed: 05/24/23

Type: SDUP

Batch#: 314731

Prep: METHOD

MSS Lab ID: 483905-026

Sampled: 03/22/23

Analysis: ASTM D2216

Lab ID: QC1068370

Received: 05/05/23

Analyst: JAK

Matrix: Soil

Prepared: 05/24/23

QC1068370 Analyte	MSS Result	Result	RL	Units	RPD	Lim
Moisture, Percent	59.66	58.36	1.000	%	2	20

Legend

RL: Reporting Limit

RPD: Relative Percent Difference



Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number: 483901
Report Level: II
Report Date: 05/26/2023

Analytical Report *prepared for:*

Ted Donn
Tetra Tech, Inc.
3697 Mt. Diablo Blvd.
Suite 150
Lafayette, CA 94549

Project: COTL - T423.19 - Gulf of Thailand

Authorized for release by:

Miguel Gamboa, Project Coordinator
miguel.gamboa@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105

Sample Summary

Ted Donn
 Tetra Tech, Inc.
 3697 Mt. Diablo Blvd.
 Suite 150
 Lafayette, CA 94549

Lab Job #: 483901
 Project No: COTL
 Location: T423.19 - Gulf of Thailand
 Date Received: 05/05/23

Sample ID	Lab ID	Collected	Matrix
CONTROL-3-A	483901-001	03/23/23 20:24	Soil
CONTROL-3-B	483901-002	03/23/23 20:37	Soil
CONTROL-3-C	483901-003	03/23/23 20:54	Soil
MAWG-1B1X	483901-004	03/21/23 18:15	Soil
MAWG-1B2X	483901-005	03/21/23 17:14	Soil
MAWG-1B3X	483901-006	03/21/23 19:04	Soil
MAWG-1C1	483901-007	03/21/23 19:44	Soil
MAWG-1C2	483901-008	03/21/23 19:09	Soil
MAWG-1C3	483901-009	03/21/23 19:15	Soil
MAWG-1D1	483901-010	03/21/23 20:12	Soil
MAWG-1D2	483901-011	03/21/23 20:32	Soil
MAWG-1D3	483901-012	03/21/23 20:50	Soil
MAWG-2B2X	483901-013	03/21/23 13:25	Soil
MAWG-2B2X-FD	483901-014	03/21/23 13:35	Soil
MAWG-2C2	483901-015	03/21/23 13:08	Soil
MAWG-3B1X	483901-016	03/21/23 08:02	Soil
MAWG-3B2X	483901-017	03/21/23 08:08	Soil
MAWG-3B3X	483901-018	03/21/23 08:52	Soil
MAWG-3C1	483901-019	03/21/23 10:28	Soil
MAWG-3C2	483901-020	03/21/23 09:00	Soil
MAWG-3C2-FD	483901-021	03/21/23 09:45	Soil
MAWG-3C3	483901-022	03/21/23 09:11	Soil
MAWG-3D1	483901-023	03/21/23 11:02	Soil
MAWG-3D2	483901-024	03/21/23 11:26	Soil
MAWG-3D3	483901-025	03/21/23 11:48	Soil
MAWG-4B2X	483901-026	03/21/23 12:46	Soil



Sample Summary

Ted Donn	Lab Job #:	483901
Tetra Tech, Inc.	Project No:	COTL
3697 Mt. Diablo Blvd.	Location:	T423.19 - Gulf of Thailand
Suite 150	Date Received:	05/05/23
Lafayette, CA 94549		

Sample ID	Lab ID	Collected	Matrix
MAWG-4C2	483901-027	03/21/23 12:28	Soil

Case Narrative

Tetra Tech, Inc.
3697 Mt. Diablo Blvd.
Suite 150
Lafayette, CA 94549
Ted Donn

Lab Job Number: 483901
Project No: COTL
Location: T423.19 - Gulf of Thailand
Date Received: 05/05/23

This data package contains sample and QC results for twenty seven soil samples, requested for the above referenced project on 05/05/23. The samples were received cold and intact.

TPH-Extractables by GC (EPA 8015M):

No analytical problems were encountered.

Moisture (ASTM D2216):

No analytical problems were encountered.

General Notes:

Please report all results to the MDL, J-flag results between MDL and RL
 Please report results and invoice separately for each Project ID
 Please report results in pdf format with Excel EDD deliverable
 Please report results on a dry weight basis.

483906

Project	SampleID	Medium	Preservation	Date	PH Temp Time	C10 M	C14 M	C14- C10 Ratio
T423.20	G4/43REF-A	SED	FREEZE	23-Mar-23	12:46	1	1	1
T423.20	G4/43REF-B	SED	FREEZE	23-Mar-23	13:06	1	1	1
T423.20	G4/43REF-C	SED	FREEZE	23-Mar-23	13:16	1	1	1
T423.20	LAWA-1C1	SED	FREEZE	19-Mar-23	4:40	1	1	1
T423.20	LAWA-1C2	SED	FREEZE	19-Mar-23	5:44	1	1	1
T423.20	LAWA-1C2-FD	SED	FREEZE	19-Mar-23	5:55	1	1	1
T423.20	LAWA-1C3X	SED	FREEZE	19-Mar-23	7:33	1	1	1
T423.20	LAWA-1D1	SED	FREEZE	18-Mar-23	11:03	1	1	1
T423.20	LAWA-1D2	SED	FREEZE	18-Mar-23	22:49	1	1	1
T423.20	LAWA-1D3X	SED	FREEZE	18-Mar-23	22:13	1	1	1
T423.20	LAWA-3C1	SED	FREEZE	17-Mar-23	19:07	1	1	1
T423.20	LAWA-3C2	SED	FREEZE	17-Mar-23	19:55	1	1	1
T423.20	LAWA-3C3	SED	FREEZE	17-Mar-23	20:23	1	1	1
T423.20	LAWA-3D1X	SED	FREEZE	17-Mar-23	22:15	1	1	1
T423.20	LAWA-3D2	SED	FREEZE	17-Mar-23	23:06	1	1	1
T423.20	LAWA-3D3	SED	FREEZE	18-Mar-23	1:00	1	1	1

483905

T423.18	MAWA-1C2	SED	FREEZE	22-Mar-23	7:27	1	1	1
T423.18	MAWA-1CP2	SED	FREEZE	22-Mar-23	13:29	1	1	1
T423.18	MAWA-2B2X	SED	FREEZE	22-Mar-23	4:35	1	1	1
T423.18	MAWA-3B2	SED	FREEZE	21-Mar-23	23:28	1	1	1
T423.18	MAWA-3C2	SED	FREEZE	21-Mar-23	23:07	1	1	1
T423.18	MAWA-4B2X	SED	FREEZE	21-Mar-23	22:45	1	1	1
T423.18	MAWB-1B2X	SED	FREEZE	21-Mar-23	3:53	1	1	1
T423.18	MAWB-1C2X	SED	FREEZE	21-Mar-23	4:06	1	1	1
T423.18	MAWB-2B2X	SED	FREEZE	21-Mar-23	1:50	1	1	1
T423.18	MAWB-3B2X	SED	FREEZE	20-Mar-23	23:15	1	1	1
T423.18	MAWB-3C2	SED	FREEZE	20-Mar-23	22:52	1	1	1
T423.18	MAWB-4B2X	SED	FREEZE	20-Mar-23	21:37	1	1	1
T423.18	MAWC-1B2X	SED	FREEZE	20-Mar-23	3:53	1	1	1
T423.18	MAWC-1C2	SED	FREEZE	20-Mar-23	5:16	1	1	1
T423.18	MAWC-1C2-FD	SED	FREEZE	20-Mar-23	5:27	1	1	1
T423.18	MAWC-2B2X	SED	FREEZE	20-Mar-23	1:41	1	1	1
T423.18	MAWC-3B2X	SED	FREEZE	19-Mar-23	23:32	1	1	1
T423.18	MAWC-3C2	SED	FREEZE	19-Mar-23	23:18	1	1	1
T423.18	MAWC-4B2X	SED	FREEZE	19-Mar-23	23:01	1	1	1
T423.18	MAWD-1B2X	SED	FREEZE	23-Mar-23	1:09	1	1	1
T423.18	MAWD-1C2	SED	FREEZE	23-Mar-23	3:36	1	1	1
T423.18	MAWD-2C2X	SED	FREEZE	23-Mar-23	5:07	1	1	1
T423.18	MAWD-3B2	SED	FREEZE	22-Mar-23	23:16	1	1	1
T423.18	MAWD-3C2X	SED	FREEZE	22-Mar-23	23:29	1	1	1
T423.18	MAWD-3C2X-FD	SED	FREEZE	22-Mar-23	23:38	1	1	1
T423.18	MAWD-4B2X	SED	FREEZE	22-Mar-23	22:57	1	1	1

483901

T423.19	Control-3-A	SED	FREEZE	23-Mar-23	20:24	1	1	1
T423.19	Control-3-B	SED	FREEZE	23-Mar-23	20:37	1	1	1
T423.19	Control-3-C	SED	FREEZE	23-Mar-23	20:54	1	1	1
T423.19	MAWG-1B1X	SED	FREEZE	21-Mar-23	18:15	1	1	1
T423.19	MAWG-1B2X	SED	FREEZE	21-Mar-23	17:14	1	1	1
T423.19	MAWG-1B3X	SED	FREEZE	21-Mar-23	19:04	1	1	1

RECEIVED: 5/5/23 1009

483901

T423.19	MAWG-1C1	SED	FREEZE	21-Mar-23	19:44	1	1
T423.19	MAWG-1C2	SED	FREEZE	21-Mar-23	19:09	1	1
T423.19	MAWG-1C3	SED	FREEZE	21-Mar-23	19:15	1	1
T423.19	MAWG-1D1	SED	FREEZE	21-Mar-23	20:12	1	1
T423.19	MAWG-1D2	SED	FREEZE	21-Mar-23	20:32	1	1
T423.19	MAWG-1D3	SED	FREEZE	21-Mar-23	20:50	1	1
T423.19	MAWG-2B2X	SED	FREEZE	21-Mar-23	13:25	1	1
T423.19	MAWG-2B2X-FD	SED	FREEZE	21-Mar-23	13:35	1	1
T423.19	MAWG-2C2	SED	FREEZE	21-Mar-23	13:08	1	1
T423.19	MAWG-3B1X	SED	FREEZE	21-Mar-23	8:02	1	1
T423.19	MAWG-3B2X	SED	FREEZE	21-Mar-23	8:08	1	1
T423.19	MAWG-3B3X	SED	FREEZE	21-Mar-23	8:52	1	1
T423.19	MAWG-3C1	SED	FREEZE	21-Mar-23	10:28	1	1
T423.19	MAWG-3C2	SED	FREEZE	21-Mar-23	9:00	1	1
T423.19	MAWG-3C2-FD	SED	FREEZE	21-Mar-23	9:45	1	1
T423.19	MAWG-3C3	SED	FREEZE	21-Mar-23	9:11	1	1
T423.19	MAWG-3D1	SED	FREEZE	21-Mar-23	11:02	1	1
T423.19	MAWG-3D2	SED	FREEZE	21-Mar-23	11:26	1	1
T423.19	MAWG-3D3	SED	FREEZE	21-Mar-23	11:48	1	1
T423.19	MAWG-4B2X	SED	FREEZE	21-Mar-23	12:46	1	1
T423.19	MAWG-4C2	SED	FREEZE	21-Mar-23	12:28	1	1

483907

T423.21	TFPSO-1B2	SED	FREEZE	25-Mar-23	4:33	1	1
T423.21	TFPSO-1C2	SED	FREEZE	25-Mar-23	2:39	1	1
T423.21	TFPSO-1CP2	SED	FREEZE	25-Mar-23	2:19	1	1
T423.21	TFPSO-1D2	SED	FREEZE	25-Mar-23	1:48	1	1
T423.21	TFPSO-1D2-FD	SED	FREEZE	25-Mar-23	2:00	1	1
T423.21	TFPSO-2B2	SED	FREEZE	25-Mar-23	7:42	1	1
T423.21	TFPSO-2CP2	SED	FREEZE	25-Mar-23	7:19	1	1
T423.21	TFPSO-3B2	SED	FREEZE	25-Mar-23	8:01	1	1
T423.21	TFPSO-3CP2	SED	FREEZE	25-Mar-23	8:47	1	1
T423.21	TFPSO-4B2	SED	FREEZE	25-Mar-23	8:20	1	1
T423.21	TFPSO-4CP2	SED	FREEZE	25-Mar-23	9:10	1	1
T423.21	YAREF-A2	SED	FREEZE	25-Mar-23	12:54	1	1
T423.21	YAREF-B2	SED	FREEZE	25-Mar-23	13:04	1	1
T423.21	YAREF-C2	SED	FREEZE	25-Mar-23	13:14	1	1


483904

T423.17	CBREF-A	SED	FREEZE	25-Mar-23	19:20	1	1
T423.17	CBREF-B	SED	FREEZE	25-Mar-23	19:30	1	1
T423.17	CBREF-C	SED	FREEZE	25-Mar-23	19:39	1	1
T423.17	YUWA-1B1X	SED	FREEZE	16-Mar-23	17:20	1	1
T423.17	YUWA-1B2X	SED	FREEZE	16-Mar-23	16:50	1	1
T423.17	YUWA-1B3X	SED	FREEZE	16-Mar-23	17:03	1	1
T423.17	YUWA-1C1	SED	FREEZE	16-Mar-23	19:30	1	1
T423.17	YUWA-1C2	SED	FREEZE	16-Mar-23	19:43	1	1
T423.17	YUWA-1C3	SED	FREEZE	16-Mar-23	19:55	1	1
T423.17	YUWA-1D1	SED	FREEZE	16-Mar-23	20:13	1	1
T423.17	YUWA-1D2	SED	FREEZE	16-Mar-23	20:19	1	1
T423.17	YUWA-1D3	SED	FREEZE	16-Mar-23	20:44	1	1
T423.17	YUWA-2B2X	SED	FREEZE	16-Mar-23	18:57	1	1
T423.17	YUWA-2C2	SED	FREEZE	16-Mar-23	19:13	1	1
T423.17	YUWA-3B1X	SED	FREEZE	16-Mar-23	10:09	1	1
T423.17	YUWA-3B1X-FD	SED	FREEZE	16-Mar-23	10:19	1	1
T423.17	YUWA-3B2X	SED	FREEZE	16-Mar-23	9:07	1	1
T423.17	YUWA-3B3X	SED	FREEZE	16-Mar-23	10:49	1	1
T423.17	YUWA-3C1	SED	FREEZE	16-Mar-23	13:00	1	1
T423.17	YUWA-3C1-FD	SED	FREEZE	16-Mar-23	13:09	1	1

RECEIVED: 5/5/23 1009

48304

T423.17	YUWA-3C2	SED	FREEZE	16-Mar-23	12:03	1	1
T423.17	YUWA-3C3	SED	FREEZE	16-Mar-23	11:19	1	1
T423.17	YUWA-3D1	SED	FREEZE	16-Mar-23	13:34	1	1
T423.17	YUWA-3D2	SED	FREEZE	16-Mar-23	13:04	1	1
T423.17	YUWA-3D3	SED	FREEZE	16-Mar-23	14:17	1	1
T423.17	YUWA-4B2X	SED	FREEZE	16-Mar-23	6:03	1	1
T423.17	YUWA-4C2	SED	FREEZE	16-Mar-23	6:24	1	1

RECEIVED:  5/5/23 1009



ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1			
Client: Tetra Tech, Inc.	Project: T423.21 - Gulf of Thailand		
Date Received: 05/05/23	Sampler's Name Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Section 2			
Sample(s) received in a cooler? <input checked="" type="checkbox"/> Yes, How many? <u>2</u> <input type="checkbox"/> No (skip section 2)	Sample Temp (°C) (No Cooler): _____		
Sample Temp (°C), One from each cooler: #1: <u>-14.1</u> #2: <u>-8.3</u> #3: _____ #4: _____			
(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)			
Shipping Information: _____			
Section 3			
Was the cooler packed with: <input type="checkbox"/> Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Bubble Wrap <input type="checkbox"/> Styrofoam <input type="checkbox"/> Paper <input type="checkbox"/> None <input checked="" type="checkbox"/> Other <u>Dry Ice</u>			
Cooler Temp (°C): #1: <u>-21.1</u> #2: <u>-14.4</u> #3: _____ #4: _____			
Section 4			
	YES	NO	N/A
Was a COC received?		<input checked="" type="checkbox"/>	
Are sample IDs present?			
Are sampling dates & times present?			
Is a relinquished signature present?			
Are the tests required clearly indicated on the COC?			
Are custody seals present?		<input checked="" type="checkbox"/>	
If custody seals are present, were they intact?			<input checked="" type="checkbox"/>
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			<input checked="" type="checkbox"/>
Did all samples arrive intact? If no, indicate in Section 4 below.	<input checked="" type="checkbox"/>		
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>		
Were the samples collected in the correct containers for the required tests?	<input checked="" type="checkbox"/>		
Are the containers labeled with the correct preservatives?			<input checked="" type="checkbox"/>
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			<input checked="" type="checkbox"/>
Was a sufficient amount of sample submitted for the requested tests?	<input checked="" type="checkbox"/>		
Section 5 Explanations/Comments			
COCs not received.			
Section 6			
For discrepancies, how was the Project Manager notified? <input type="checkbox"/> Verbal <input type="checkbox"/> Email	PM Initials: _____ Date/Time: _____		
	(email sent to/on): _____ / _____		
Project Manager's response: _____			

Completed By: [Signature] Date: 5/5/23

ORIGIN ID: CCRA (925) 283-3771
BARBARA MAGOON
TETRA TECH, INC
3697 MT. DIABLO BLVD #150

LAFAYETTE, CA 94549
UNITED STATES US

SHIP DATE: 04MAY23
ACTWGT: 35.00 LB
CAD: 250818822/NET4810
DIMS: 23x12x13 IN
DRY ICE: 0.91 KG
BILL SENDER

TO ENTHALPY
ENTHALPY
931 W. BARKLEY AVE.

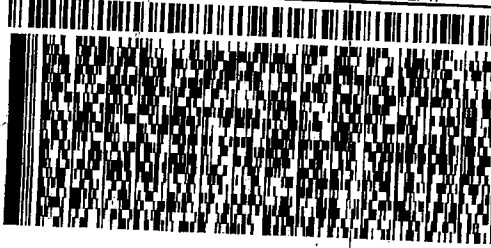
ORANGE CA 92868

(714) 771-8900

REF: TED - T41423

INV:
PO:

DEPT:



FedEx
Express



INSPECT ON BY ORIGIN
DG CATALOGIST
EMP. # 3727598

2 of 3

MPS# 7720 0864 6718
0263
Mstr# 7720 0864 7688

92 APVA

FRI - 05 MAY 10:30A
PRIORITY OVERNIGHT

0201

ICE
92868
CA-US SNA



-21.1/-14.1

LAFAYETTE, CA 94549
UNITED STATES US

SHIP DATE: 04MAY23
ACTWGT: 35.00 LB
CAD: 250616822/NET4610
DIMS: 23x12x13 IN
DRY ICE: 0.91 KG
BILL SENDER

TO ENTHALPY
ENTHALPY
931 W. BARKLEY AVE.

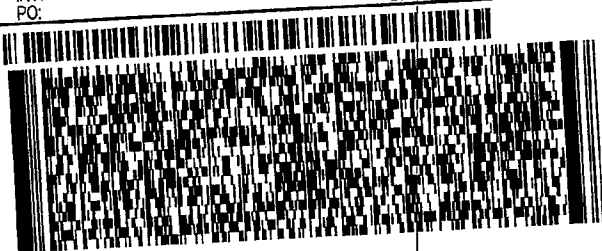
ORANGE CA 92868

(714) 771-6900

REF: TED - T41423

INV:
PO:

DEPT:



92 APVA

FRI - 05 MAY 10:30A
PRIORITY OVERNIGHT

ICE
92868
SNA
CA-US



SECTION BY ORIGIN
DG SPECIALIST
EMP. # 3727598
(1907) NO. 1578 N.W.

-14.4 / -8.3

Extractable Carbon Chain

Lab #: 483901

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.19 - Gulf of Thailand

Field ID: CONTROL-3-A

Moisture: 49%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/15/23

Lab ID: 483901-001

Batch#: 313934

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/23/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: BJG

483901-001 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	20	2.6	mg/Kg
TPH (C14-C24)	ND	20	2.6	mg/Kg
ORO C28-C44	ND	39	2.6	mg/Kg
483901-001 Surrogate	%REC		Limits	
n-Triacontane	75		70-130	

Field ID: CONTROL-3-B

Moisture: 45%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/15/23

Lab ID: 483901-002

Batch#: 313934

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/23/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: BJG

483901-002 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	18	2.4	mg/Kg
TPH (C14-C24)	ND	18	2.4	mg/Kg
ORO C28-C44	ND	36	2.4	mg/Kg
483901-002 Surrogate	%REC		Limits	
n-Triacontane	77		70-130	

Field ID: CONTROL-3-C

Moisture: 48%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/15/23

Lab ID: 483901-003

Batch#: 313934

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/23/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: BJG

483901-003 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	19	2.5	mg/Kg
TPH (C14-C24)	ND	19	2.5	mg/Kg
ORO C28-C44	ND	38	2.5	mg/Kg
483901-003 Surrogate	%REC		Limits	
n-Triacontane	78		70-130	

Extractable Carbon Chain

Lab #: 483901		Project#: COTL		
Client: Tetra Tech, Inc.		Location: T423.19 - Gulf of Thailand		
Field ID: MAWG-1B1X	Moisture: 46%	Prepared: 05/14/23		
Type: SAMPLE	Diln Fac: 1.000	Analyzed: 05/15/23		
Lab ID: 483901-004	Batch#: 313934	Prep: EPA 3580M		
Matrix: Soil	Sampled: 03/21/23	Analysis: EPA 8015M		
Basis: dry	Received: 05/05/23	Analyst: BJB		
483901-004 Analyte		Result	RL	MDL Units
TPH (C10-C14)		ND	19	2.4 mg/Kg
TPH (C14-C24)		ND	19	2.4 mg/Kg
ORO C28-C44		ND	37	2.4 mg/Kg
483901-004 Surrogate		%REC		Limits
n-Triacontane		75		70-130
Field ID: MAWG-1B2X		Moisture: 44%	Prepared: 05/14/23	
Type: SAMPLE		Diln Fac: 1.000	Analyzed: 05/15/23	
Lab ID: 483901-005		Batch#: 313934	Prep: EPA 3580M	
Matrix: Soil		Sampled: 03/21/23	Analysis: EPA 8015M	
Basis: dry		Received: 05/05/23	Analyst: BJB	
483901-005 Analyte		Result	RL	MDL Units
TPH (C10-C14)		110	18	2.6 mg/Kg
TPH (C14-C24)		320	18	2.6 mg/Kg
ORO C28-C44		19 J	36	2.6 mg/Kg
483901-005 Surrogate		%REC		Limits
n-Triacontane		85		70-130
Field ID: MAWG-1B3X		Moisture: 42%	Prepared: 05/14/23	
Type: SAMPLE		Diln Fac: 1.000	Analyzed: 05/15/23	
Lab ID: 483901-006		Batch#: 313934	Prep: EPA 3580M	
Matrix: Soil		Sampled: 03/21/23	Analysis: EPA 8015M	
Basis: dry		Received: 05/05/23	Analyst: BJB	
483901-006 Analyte		Result	RL	MDL Units
TPH (C10-C14)		27	17	2.5 mg/Kg
TPH (C14-C24)		45	17	2.5 mg/Kg
ORO C28-C44		ND	34	2.5 mg/Kg
483901-006 Surrogate		%REC		Limits
n-Triacontane		86		70-130

Extractable Carbon Chain

Lab #: 483901		Project#: COTL		
Client: Tetra Tech, Inc.		Location: T423.19 - Gulf of Thailand		
Field ID: MAWG-1C1	Moisture: 50%	Prepared: 05/14/23		
Type: SAMPLE	Diln Fac: 1.000	Analyzed: 05/15/23		
Lab ID: 483901-007	Batch#: 313934	Prep: EPA 3580M		
Matrix: Soil	Sampled: 03/21/23	Analysis: EPA 8015M		
Basis: dry	Received: 05/05/23	Analyst: BJG		
483901-007 Analyte		Result	RL	MDL Units
TPH (C10-C14)		16 J	20	2.9 mg/Kg
TPH (C14-C24)		84	20	2.9 mg/Kg
ORO C28-C44		18 J	40	2.9 mg/Kg
483901-007 Surrogate		%REC		Limits
n-Triacontane		89		70-130
Field ID: MAWG-1C2		Moisture: 46%	Prepared: 05/14/23	
Type: SAMPLE		Diln Fac: 1.000	Analyzed: 05/15/23	
Lab ID: 483901-008		Batch#: 313934	Prep: EPA 3580M	
Matrix: Soil		Sampled: 03/21/23	Analysis: EPA 8015M	
Basis: dry		Received: 05/05/23	Analyst: BJG	
483901-008 Analyte		Result	RL	MDL Units
TPH (C10-C14)		ND	19	2.7 mg/Kg
TPH (C14-C24)		4.3 J	19	2.7 mg/Kg
ORO C28-C44		ND	37	2.7 mg/Kg
483901-008 Surrogate		%REC		Limits
n-Triacontane		93		70-130
Field ID: MAWG-1C3		Moisture: 42%	Prepared: 05/14/23	
Type: SAMPLE		Diln Fac: 1.000	Analyzed: 05/15/23	
Lab ID: 483901-009		Batch#: 313934	Prep: EPA 3580M	
Matrix: Soil		Sampled: 03/21/23	Analysis: EPA 8015M	
Basis: dry		Received: 05/05/23	Analyst: BJG	
483901-009 Analyte		Result	RL	MDL Units
TPH (C10-C14)		ND	17	2.5 mg/Kg
TPH (C14-C24)		ND	17	2.5 mg/Kg
ORO C28-C44		ND	34	2.5 mg/Kg
483901-009 Surrogate		%REC		Limits
n-Triacontane		88		70-130

Extractable Carbon Chain

Lab #: 483901

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.19 - Gulf of Thailand

Field ID: MAWG-1D1

Moisture: 45%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/15/23

Lab ID: 483901-010

Batch#: 313934

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/21/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: BJG

483901-010 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	18	2.6	mg/Kg
TPH (C14-C24)	ND	18	2.6	mg/Kg
ORO C28-C44	ND	36	2.6	mg/Kg
483901-010 Surrogate	%REC		Limits	
n-Triacontane	92		70-130	

Field ID: MAWG-1D2

Moisture: 45%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/15/23

Lab ID: 483901-011

Batch#: 313934

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/21/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: BJG

483901-011 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	18	2.7	mg/Kg
TPH (C14-C24)	ND	18	2.7	mg/Kg
ORO C28-C44	ND	36	2.7	mg/Kg
483901-011 Surrogate	%REC		Limits	
n-Triacontane	88		70-130	

Field ID: MAWG-1D3

Moisture: 45%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/15/23

Lab ID: 483901-012

Batch#: 313934

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/21/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: BJG

483901-012 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	18	2.7	mg/Kg
TPH (C14-C24)	ND	18	2.7	mg/Kg
ORO C28-C44	ND	36	2.7	mg/Kg
483901-012 Surrogate	%REC		Limits	
n-Triacontane	85		70-130	

Extractable Carbon Chain

Lab #: 483901

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.19 - Gulf of Thailand

Field ID: MAWG-2B2X

Moisture: 46%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/15/23

Lab ID: 483901-013

Batch#: 313934

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/21/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: BJG

483901-013 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	18	2.7	mg/Kg
TPH (C14-C24)	ND	18	2.7	mg/Kg
ORO C28-C44	ND	37	2.7	mg/Kg
483901-013 Surrogate	%REC		Limits	
n-Triacontane	92		70-130	

Field ID: MAWG-2B2X-FD

Moisture: 45%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/15/23

Lab ID: 483901-014

Batch#: 313934

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/21/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: BJG

483901-014 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	18	2.7	mg/Kg
TPH (C14-C24)	ND	18	2.7	mg/Kg
ORO C28-C44	ND	36	2.7	mg/Kg
483901-014 Surrogate	%REC		Limits	
n-Triacontane	90		70-130	

Field ID: MAWG-2C2

Moisture: 45%

Prepared: 05/14/23

Type: SAMPLE

Diln Fac: 1.000

Analyzed: 05/15/23

Lab ID: 483901-015

Batch#: 313934

Prep: EPA 3580M

Matrix: Soil

Sampled: 03/21/23

Analysis: EPA 8015M

Basis: dry

Received: 05/05/23

Analyst: BJG

483901-015 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	18	2.7	mg/Kg
TPH (C14-C24)	ND	18	2.7	mg/Kg
ORO C28-C44	ND	36	2.7	mg/Kg
483901-015 Surrogate	%REC		Limits	
n-Triacontane	96		70-130	

Extractable Carbon Chain

Lab #: 483901		Project#: COTL		
Client: Tetra Tech, Inc.		Location: T423.19 - Gulf of Thailand		
Field ID: MAWG-3B1X	Moisture: 44%	Prepared: 05/14/23		
Type: SAMPLE	Diln Fac: 1.000	Analyzed: 05/15/23		
Lab ID: 483901-016	Batch#: 313934	Prep: EPA 3580M		
Matrix: Soil	Sampled: 03/21/23	Analysis: EPA 8015M		
Basis: dry	Received: 05/05/23	Analyst: BJB		
483901-016 Analyte		Result	RL	MDL
TPH (C10-C14)		ND	18	2.6
TPH (C14-C24)		15 J	18	2.6
ORO C28-C44		ND	36	2.6
483901-016 Surrogate		%REC		Limits
n-Triacontane		95		70-130
Field ID: MAWG-3B2X		Moisture: 41%	Prepared: 05/14/23	
Type: SAMPLE		Diln Fac: 1.000	Analyzed: 05/15/23	
Lab ID: 483901-017		Batch#: 313935	Prep: EPA 3580M	
Matrix: Soil		Sampled: 03/21/23	Analysis: EPA 8015M	
Basis: dry		Received: 05/05/23	Analyst: SME	
483901-017 Analyte		Result	RL	MDL
TPH (C10-C14)		14 J	17	1.8
TPH (C14-C24)		65	17	1.8
ORO C28-C44		18 J	34	1.8
483901-017 Surrogate		%REC		Limits
n-Triacontane		85		70-130
Field ID: MAWG-3B3X		Moisture: 39%	Prepared: 05/14/23	
Type: SAMPLE		Diln Fac: 1.000	Analyzed: 05/15/23	
Lab ID: 483901-018		Batch#: 313935	Prep: EPA 3580M	
Matrix: Soil		Sampled: 03/21/23	Analysis: EPA 8015M	
Basis: dry		Received: 05/05/23	Analyst: SME	
483901-018 Analyte		Result	RL	MDL
TPH (C10-C14)		8.1 J	16	1.7
TPH (C14-C24)		34	16	1.7
ORO C28-C44		17 J	32	1.7
483901-018 Surrogate		%REC		Limits
n-Triacontane		79		70-130

Extractable Carbon Chain

Lab #: 483901		Project#: COTL			
Client: Tetra Tech, Inc.		Location: T423.19 - Gulf of Thailand			
Field ID: MAWG-3C1		Moisture: 43%		Prepared: 05/14/23	
Type: SAMPLE		Diln Fac: 1.000		Analyzed: 05/15/23	
Lab ID: 483901-019		Batch#: 313935		Prep: EPA 3580M	
Matrix: Soil		Sampled: 03/21/23		Analysis: EPA 8015M	
Basis: dry		Received: 05/05/23		Analyst: SME	
483901-019 Analyte		Result	RL	MDL	Units
TPH (C10-C14)		ND	18	1.9	mg/Kg
TPH (C14-C24)		ND	18	1.9	mg/Kg
ORO C28-C44		17 J	35	1.9	mg/Kg
483901-019 Surrogate			%REC	Limits	
n-Triacontane			86	70-130	
Field ID: MAWG-3C2		Moisture: 46%		Prepared: 05/14/23	
Type: SAMPLE		Diln Fac: 1.000		Analyzed: 05/15/23	
Lab ID: 483901-020		Batch#: 313935		Prep: EPA 3580M	
Matrix: Soil		Sampled: 03/21/23		Analysis: EPA 8015M	
Basis: dry		Received: 05/05/23		Analyst: SME	
483901-020 Analyte		Result	RL	MDL	Units
TPH (C10-C14)		ND	18	2.0	mg/Kg
TPH (C14-C24)		ND	18	2.0	mg/Kg
ORO C28-C44		17 J	37	2.0	mg/Kg
483901-020 Surrogate			%REC	Limits	
n-Triacontane			80	70-130	
Field ID: MAWG-3C2-FD		Moisture: 45%		Prepared: 05/14/23	
Type: SAMPLE		Diln Fac: 1.000		Analyzed: 05/16/23	
Lab ID: 483901-021		Batch#: 313935		Prep: EPA 3580M	
Matrix: Soil		Sampled: 03/21/23		Analysis: EPA 8015M	
Basis: dry		Received: 05/05/23		Analyst: SME	
483901-021 Analyte		Result	RL	MDL	Units
TPH (C10-C14)		ND	18	1.9	mg/Kg
TPH (C14-C24)		ND	18	1.9	mg/Kg
ORO C28-C44		16 J	36	1.9	mg/Kg
483901-021 Surrogate			%REC	Limits	
n-Triacontane			87	70-130	

Extractable Carbon Chain

Lab #: 483901		Project#: COTL			
Client: Tetra Tech, Inc.		Location: T423.19 - Gulf of Thailand			
Field ID: MAWG-3C3		Moisture: 69%		Prepared: 05/14/23	
Type: SAMPLE		Diln Fac: 1.000		Analyzed: 05/16/23	
Lab ID: 483901-022		Batch#: 313935		Prep: EPA 3580M	
Matrix: Soil		Sampled: 03/21/23		Analysis: EPA 8015M	
Basis: dry		Received: 05/05/23		Analyst: SME	
483901-022 Analyte		Result	RL	MDL	Units
TPH (C10-C14)		ND	32	3.4	mg/Kg
TPH (C14-C24)		ND	32	3.4	mg/Kg
ORO C28-C44		27 J	64	3.4	mg/Kg
483901-022 Surrogate			%REC	Limits	
n-Triacontane			81	70-130	
Field ID: MAWG-3D1		Moisture: 65%		Prepared: 05/14/23	
Type: SAMPLE		Diln Fac: 1.000		Analyzed: 05/16/23	
Lab ID: 483901-023		Batch#: 313935		Prep: EPA 3580M	
Matrix: Soil		Sampled: 03/21/23		Analysis: EPA 8015M	
Basis: dry		Received: 05/05/23		Analyst: SME	
483901-023 Analyte		Result	RL	MDL	Units
TPH (C10-C14)		ND	28	3.1	mg/Kg
TPH (C14-C24)		ND	28	3.1	mg/Kg
ORO C28-C44		24 J	57	3.1	mg/Kg
483901-023 Surrogate			%REC	Limits	
n-Triacontane			79	70-130	
Field ID: MAWG-3D2		Moisture: 70%		Prepared: 05/14/23	
Type: SAMPLE		Diln Fac: 1.000		Analyzed: 05/15/23	
Lab ID: 483901-024		Batch#: 313935		Prep: EPA 3580M	
Matrix: Soil		Sampled: 03/21/23		Analysis: EPA 8015M	
Basis: dry		Received: 05/05/23		Analyst: SME	
483901-024 Analyte		Result	RL	MDL	Units
TPH (C10-C14)		ND	33	3.9	mg/Kg
TPH (C14-C24)		ND	33	3.9	mg/Kg
ORO C28-C44		36 J	66	3.9	mg/Kg
483901-024 Surrogate			%REC	Limits	
n-Triacontane			96	70-130	

Extractable Carbon Chain

Lab #: 483901		Project#: COTL			
Client: Tetra Tech, Inc.		Location: T423.19 - Gulf of Thailand			
Field ID: MAWG-3D3		Moisture: 61%		Prepared: 05/14/23	
Type: SAMPLE		Diln Fac: 1.000		Analyzed: 05/15/23	
Lab ID: 483901-025		Batch#: 313935		Prep: EPA 3580M	
Matrix: Soil		Sampled: 03/21/23		Analysis: EPA 8015M	
Basis: dry		Received: 05/05/23		Analyst: SME	
483901-025 Analyte		Result	RL	MDL	Units
TPH (C10-C14)		ND	26	3.0	mg/Kg
TPH (C14-C24)		ND	26	3.0	mg/Kg
ORO C28-C44		27 J	51	3.0	mg/Kg
483901-025 Surrogate			%REC	Limits	
n-Triacontane			100	70-130	
Field ID: MAWG-4B2X		Moisture: 53%		Prepared: 05/14/23	
Type: SAMPLE		Diln Fac: 1.000		Analyzed: 05/15/23	
Lab ID: 483901-026		Batch#: 313935		Prep: EPA 3580M	
Matrix: Soil		Sampled: 03/21/23		Analysis: EPA 8015M	
Basis: dry		Received: 05/05/23		Analyst: SME	
483901-026 Analyte		Result	RL	MDL	Units
TPH (C10-C14)		ND	21	2.5	mg/Kg
TPH (C14-C24)		ND	21	2.5	mg/Kg
ORO C28-C44		22 J	43	2.5	mg/Kg
483901-026 Surrogate			%REC	Limits	
n-Triacontane			97	70-130	
Field ID: MAWG-4C2		Moisture: 61%		Prepared: 05/14/23	
Type: SAMPLE		Diln Fac: 1.000		Analyzed: 05/15/23	
Lab ID: 483901-027		Batch#: 313935		Prep: EPA 3580M	
Matrix: Soil		Sampled: 03/21/23		Analysis: EPA 8015M	
Basis: dry		Received: 05/05/23		Analyst: SME	
483901-027 Analyte		Result	RL	MDL	Units
TPH (C10-C14)		ND	26	3.0	mg/Kg
TPH (C14-C24)		ND	26	3.0	mg/Kg
ORO C28-C44		27 J	51	3.0	mg/Kg
483901-027 Surrogate			%REC	Limits	
n-Triacontane			99	70-130	

Extractable Carbon Chain

Lab #: 483901

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.19 - Gulf of Thailand

Type: BLANK

Batch#: 313934

Analysis: EPA 8015M

Lab ID: QC1065757

Prepared: 05/14/23

Analyst: BJG

Matrix: Soil

Analyzed: 05/15/23

Diln Fac: 1.000

Prep: EPA 3580M

QC1065757 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	10	1.3	mg/Kg
TPH (C14-C24)	ND	10	1.3	mg/Kg
ORO C28-C44	ND	20	1.3	mg/Kg
QC1065757 Surrogate	%REC		Limits	
n-Triacontane	82		70-130	

Type: BLANK

Batch#: 313935

Analysis: EPA 8015M

Lab ID: QC1065761

Prepared: 05/14/23

Analyst: SME

Matrix: Soil

Analyzed: 05/15/23

Diln Fac: 1.000

Prep: EPA 3580M

QC1065761 Analyte	Result	RL	MDL	Units
TPH (C10-C14)	ND	10	1.1	mg/Kg
TPH (C14-C24)	ND	10	1.1	mg/Kg
ORO C28-C44	ND	20	1.1	mg/Kg
QC1065761 Surrogate	%REC		Limits	
n-Triacontane	84		70-130	

Legend

J: Estimated value

MDL: Method Detection Limit

ND: Not Detected at or above MDL

RL: Reporting Limit

Extractable Carbon Chain: Batch QC

Lab #: 483901

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.19 - Gulf of Thailand

Type: LCS

Batch#: 313934

Analysis: EPA 8015M

Lab ID: QC1065758

Prepared: 05/14/23

Analyst: BJG

Matrix: Soil

Analyzed: 05/15/23

Diln Fac: 1.000

Prep: EPA 3580M

QC1065758 Analyte	Spiked	Result	%REC	Limits	Units
Diesel C10-C28	249.0	248.4	100	76-122	mg/Kg
QC1065758 Surrogate			%REC	Limits	
n-Triacontane			89	70-130	

Extractable Carbon Chain: Batch QC

Lab #: 483901

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.19 - Gulf of Thailand

Field ID: ZZZZZZZZZZ

Basis: as received

Prepared: 05/14/23

Type: MS

DiIn Fac: 1.000

Analyzed: 05/15/23

MSS Lab ID: 484918-006

Batch#: 313934

Prep: EPA 3580M

Lab ID: QC1065759

Sampled: 05/09/23

Analysis: EPA 8015M

Matrix: Soil

Received: 05/10/23

Analyst: BJJ

QC1065759 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Diesel C10-C28	3.743	248.3	232.2	92	62-126	mg/Kg
QC1065759 Surrogate				%REC	Limits	
n-Triacontane				81	70-130	

Field ID: ZZZZZZZZZZ

Basis: as received

Prepared: 05/14/23

Type: MSD

DiIn Fac: 1.000

Analyzed: 05/15/23

MSS Lab ID: 484918-006

Batch#: 313934

Prep: EPA 3580M

Lab ID: QC1065760

Sampled: 05/09/23

Analysis: EPA 8015M

Matrix: Soil

Received: 05/10/23

Analyst: BJJ

QC1065760 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
Diesel C10-C28	248.9	219.0	86	62-126	mg/Kg	6	35
QC1065760 Surrogate				%REC	Limits		
n-Triacontane				78	70-130		

Legend

RPD: Relative Percent Difference

Extractable Carbon Chain: Batch QC

Lab #: 483901

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.19 - Gulf of Thailand

Type: LCS

Batch#: 313935

Analysis: EPA 8015M

Lab ID: QC1065762

Prepared: 05/14/23

Analyst: SME

Matrix: Soil

Analyzed: 05/15/23

Diln Fac: 1.000

Prep: EPA 3580M

QC1065762 Analyte	Spiked	Result	%REC	Limits	Units
Diesel C10-C28	249.3	230.7	93	76-122	mg/Kg
QC1065762 Surrogate			%REC	Limits	
n-Triacontane			87	70-130	

Extractable Carbon Chain: Batch QC

Lab #: 483901

Project#: COTL

Client: Tetra Tech, Inc.

Location: T423.19 - Gulf of Thailand

Field ID: ZZZZZZZZZZ

Matrix: Soil

Batch#: 313935

Analyzed: 05/15/23

Type: MS

Basis: dry

Sampled: 05/12/23

Prep: EPA 3580M

MSS Lab ID: 485119-001

Moisture: 13%

Received: 05/12/23

Analysis: EPA 8015M

Lab ID: QC1065763

Diln Fac: 1.000

Prepared: 05/14/23

Analyst: SME

QC1065763 Analyte	MSS Result	Spiked	Result	%REC	Limits	Units
Diesel C10-C28	3.932	286.5	250.8	86	62-126	mg/Kg

QC1065763 Surrogate	%REC	Limits
n-Triacontane	74	70-130

Field ID: ZZZZZZZZZZ

Matrix: Soil

Batch#: 313935

Analyzed: 05/15/23

Type: MSD

Basis: dry

Sampled: 05/12/23

Prep: EPA 3580M

MSS Lab ID: 485119-001

Moisture: 13%

Received: 05/12/23

Analysis: EPA 8015M

Lab ID: QC1065764

Diln Fac: 1.000

Prepared: 05/14/23

Analyst: SME

QC1065764 Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
Diesel C10-C28	284.8	251.1	87	62-126	mg/Kg	1	35

QC1065764 Surrogate	%REC	Limits
n-Triacontane	73	70-130

Legend

RPD: Relative Percent Difference

Moisture

Lab #: 483901		Project#: COTL	
Client: Tetra Tech, Inc.		Location: T423.19 - Gulf of Thailand	
Field ID: CONTROL-3-A	Batch#: 314527	Prep: METHOD	
Lab ID: 483901-001	Sampled: 03/23/23	Analysis: ASTM D2216	
Matrix: Soil	Received: 05/05/23	Analyst: KTJ	
Diln Fac: 1.000	Analyzed: 05/22/23		
483901-001 Analyte		Result	RL
Moisture, Percent		49	1
		Units	
		%	
Field ID: CONTROL-3-B		Batch#: 314527	
Lab ID: 483901-002		Sampled: 03/23/23	
Matrix: Soil		Received: 05/05/23	
Diln Fac: 1.000		Analyzed: 05/22/23	
Field ID: CONTROL-3-C		Batch#: 314527	
Lab ID: 483901-003		Sampled: 03/23/23	
Matrix: Soil		Received: 05/05/23	
Diln Fac: 1.000		Analyzed: 05/22/23	
Field ID: MAWG-1B1X		Batch#: 314527	
Lab ID: 483901-004		Sampled: 03/21/23	
Matrix: Soil		Received: 05/05/23	
Diln Fac: 1.000		Analyzed: 05/22/23	
Field ID: MAWG-1B2X		Batch#: 314527	
Lab ID: 483901-005		Sampled: 03/21/23	
Matrix: Soil		Received: 05/05/23	
Diln Fac: 1.000		Analyzed: 05/22/23	
Field ID: MAWG-1B3X		Batch#: 314527	
Lab ID: 483901-006		Sampled: 03/21/23	
Matrix: Soil		Received: 05/05/23	
Diln Fac: 1.000		Analyzed: 05/22/23	
483901-001 Analyte		Result	RL
Moisture, Percent		45	1
		Units	
		%	
483901-002 Analyte		Result	RL
Moisture, Percent		48	1
		Units	
		%	
483901-003 Analyte		Result	RL
Moisture, Percent		46	1
		Units	
		%	
483901-004 Analyte		Result	RL
Moisture, Percent		44	1
		Units	
		%	
483901-005 Analyte		Result	RL
Moisture, Percent		42	1
		Units	
		%	

Moisture

Lab #: 483901

Client: Tetra Tech, Inc.

Project#: COTL

Location: T423.19 - Gulf of Thailand

Field ID: MAWG-1C1

Lab ID: 483901-007

Matrix: Soil

Diln Fac: 1.000

Batch#: 314672

Sampled: 03/21/23

Received: 05/05/23

Analyzed: 05/24/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483901-007 Analyte

Moisture, Percent

Result RL Units

50 1 %

Field ID: MAWG-1C2

Lab ID: 483901-008

Matrix: Soil

Diln Fac: 1.000

Batch#: 314527

Sampled: 03/21/23

Received: 05/05/23

Analyzed: 05/22/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: KTJ

483901-008 Analyte

Moisture, Percent

Result RL Units

46 1 %

Field ID: MAWG-1C3

Lab ID: 483901-009

Matrix: Soil

Diln Fac: 1.000

Batch#: 314527

Sampled: 03/21/23

Received: 05/05/23

Analyzed: 05/22/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: KTJ

483901-009 Analyte

Moisture, Percent

Result RL Units

42 1 %

Field ID: MAWG-1D1

Lab ID: 483901-010

Matrix: Soil

Diln Fac: 1.000

Batch#: 314527

Sampled: 03/21/23

Received: 05/05/23

Analyzed: 05/22/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: KTJ

483901-010 Analyte

Moisture, Percent

Result RL Units

45 1 %

Field ID: MAWG-1D2

Lab ID: 483901-011

Matrix: Soil

Diln Fac: 1.000

Batch#: 314527

Sampled: 03/21/23

Received: 05/05/23

Analyzed: 05/22/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: KTJ

483901-011 Analyte

Moisture, Percent

Result RL Units

45 1 %

Field ID: MAWG-1D3

Lab ID: 483901-012

Matrix: Soil

Diln Fac: 1.000

Batch#: 314527

Sampled: 03/21/23

Received: 05/05/23

Analyzed: 05/22/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: KTJ

483901-012 Analyte

Moisture, Percent

Result RL Units

45 1 %

Moisture

Lab #: 483901

Client: Tetra Tech, Inc.

Project#: COTL

Location: T423.19 - Gulf of Thailand

Field ID: MAWG-2B2X

Lab ID: 483901-013

Matrix: Soil

Diln Fac: 1.000

Batch#: 314527

Sampled: 03/21/23

Received: 05/05/23

Analyzed: 05/22/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: KTJ

483901-013 Analyte

Moisture, Percent

Result **RL** **Units**

46 **1** **%**

Field ID: MAWG-2B2X-FD

Lab ID: 483901-014

Matrix: Soil

Diln Fac: 1.000

Batch#: 314527

Sampled: 03/21/23

Received: 05/05/23

Analyzed: 05/22/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: KTJ

483901-014 Analyte

Moisture, Percent

Result **RL** **Units**

45 **1** **%**

Field ID: MAWG-2C2

Lab ID: 483901-015

Matrix: Soil

Diln Fac: 1.000

Batch#: 314527

Sampled: 03/21/23

Received: 05/05/23

Analyzed: 05/22/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: KTJ

483901-015 Analyte

Moisture, Percent

Result **RL** **Units**

45 **1** **%**

Field ID: MAWG-3B1X

Lab ID: 483901-016

Matrix: Soil

Diln Fac: 1.000

Batch#: 314527

Sampled: 03/21/23

Received: 05/05/23

Analyzed: 05/22/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: KTJ

483901-016 Analyte

Moisture, Percent

Result **RL** **Units**

44 **1** **%**

Field ID: MAWG-3B2X

Lab ID: 483901-017

Matrix: Soil

Diln Fac: 1.000

Batch#: 314527

Sampled: 03/21/23

Received: 05/05/23

Analyzed: 05/22/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: KTJ

483901-017 Analyte

Moisture, Percent

Result **RL** **Units**

41 **1** **%**

Field ID: MAWG-3B3X

Lab ID: 483901-018

Matrix: Soil

Diln Fac: 1.000

Batch#: 314527

Sampled: 03/21/23

Received: 05/05/23

Analyzed: 05/22/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: KTJ

483901-018 Analyte

Moisture, Percent

Result **RL** **Units**

39 **1** **%**

Moisture

Lab #: 483901

Client: Tetra Tech, Inc.

Project#: COTL

Location: T423.19 - Gulf of Thailand

Field ID: MAWG-3C1

Lab ID: 483901-019

Matrix: Soil

Diln Fac: 1.000

Batch#: 314527

Sampled: 03/21/23

Received: 05/05/23

Analyzed: 05/22/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: KTJ

483901-019 Analyte

Moisture, Percent

Result RL Units

43 1 %

Field ID: MAWG-3C2

Lab ID: 483901-020

Matrix: Soil

Diln Fac: 1.000

Batch#: 314527

Sampled: 03/21/23

Received: 05/05/23

Analyzed: 05/22/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: KTJ

483901-020 Analyte

Moisture, Percent

Result RL Units

46 1 %

Field ID: MAWG-3C2-FD

Lab ID: 483901-021

Matrix: Soil

Diln Fac: 1.000

Batch#: 314527

Sampled: 03/21/23

Received: 05/05/23

Analyzed: 05/22/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: KTJ

483901-021 Analyte

Moisture, Percent

Result RL Units

45 1 %

Field ID: MAWG-3C3

Lab ID: 483901-022

Matrix: Soil

Diln Fac: 1.000

Batch#: 314672

Sampled: 03/21/23

Received: 05/05/23

Analyzed: 05/24/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483901-022 Analyte

Moisture, Percent

Result RL Units

69 1 %

Field ID: MAWG-3D1

Lab ID: 483901-023

Matrix: Soil

Diln Fac: 1.000

Batch#: 314672

Sampled: 03/21/23

Received: 05/05/23

Analyzed: 05/24/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483901-023 Analyte

Moisture, Percent

Result RL Units

65 1 %

Field ID: MAWG-3D2

Lab ID: 483901-024

Matrix: Soil

Diln Fac: 1.000

Batch#: 314672

Sampled: 03/21/23

Received: 05/05/23

Analyzed: 05/24/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483901-024 Analyte

Moisture, Percent

Result RL Units

70 1 %

Moisture

Lab #: 483901

Client: Tetra Tech, Inc.

Project#: COTL

Location: T423.19 - Gulf of Thailand

Field ID: MAWG-3D3

Lab ID: 483901-025

Matrix: Soil

Diln Fac: 1.000

Batch#: 313921

Sampled: 03/21/23

Received: 05/05/23

Analyzed: 05/13/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: ATP

483901-025 Analyte

Moisture, Percent

Result	RL	Units
61	1	%

Field ID: MAWG-4B2X

Lab ID: 483901-026

Matrix: Soil

Diln Fac: 1.000

Batch#: 314672

Sampled: 03/21/23

Received: 05/05/23

Analyzed: 05/24/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483901-026 Analyte

Moisture, Percent

Result	RL	Units
53	1	%

Field ID: MAWG-4C2

Lab ID: 483901-027

Matrix: Soil

Diln Fac: 1.000

Batch#: 314672

Sampled: 03/21/23

Received: 05/05/23

Analyzed: 05/24/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

483901-027 Analyte

Moisture, Percent

Result	RL	Units
61	1	%

Legend

RL: Reporting Limit

Moisture: Batch QC

Lab #: 483901

Client: Tetra Tech, Inc.

Project#: COTL

Location: T423.19 - Gulf of Thailand

Field ID: ZZZZZZZZZZ

Type: SDUP

MSS Lab ID: 484766-029

Lab ID: QC1065728

Matrix: Soil

Diln Fac: 1.000

Batch#: 313921

Sampled: 05/08/23

Received: 05/08/23

Analyzed: 05/13/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: ATP

QC1065728 Analyte	MSS Result	Result	RL	Units	RPD	Lim
Moisture, Percent	6.054	6.265	1.000	%	3	20

Field ID: MAWG-3C2-FD

Type: SDUP

MSS Lab ID: 483901-021

Lab ID: QC1067735

Matrix: Soil

Diln Fac: 1.000

Batch#: 314527

Sampled: 03/21/23

Received: 05/05/23

Analyzed: 05/22/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: KTJ

QC1067735 Analyte	MSS Result	Result	RL	Units	RPD	Lim
Moisture, Percent	45.11	46.07	1.000	%	2	20

Field ID: ZZZZZZZZZZ

Type: SDUP

MSS Lab ID: 485586-008

Lab ID: QC1068200

Matrix: Miscell.

Diln Fac: 1.000

Batch#: 314672

Sampled: 05/22/23

Received: 05/22/23

Analyzed: 05/24/23

Prep: METHOD

Analysis: ASTM D2216

Analyst: JAK

QC1068200 Analyte	MSS Result	Result	RL	Units	RPD	Lim
Moisture, Percent	1.675	1.682	1.000	%	0	20

Legend

RL: Reporting Limit

RPD: Relative Percent Difference



Analytical Resources, LLC
Analytical Chemists and Consultants
Tukwila, WA

14 July 2023

Ted Donn
Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette, CA 94549

RE: Gulf of Thailand (T423.18)

Please find enclosed sample receipt documentation and analytical results for samples from the project referenced above.

Sample analyses were performed according to ARI's Quality Assurance Plan and any provided project specific Quality Assurance Plan. Each analytical section of this report has been approved and reviewed by an analytical peer, the appropriate Laboratory Supervisor or qualified substitute, and a technical reviewer.

Should you have any questions or problems, please feel free to contact us at your convenience.

Associated Work Order(s)
23E0177

Associated SDG ID(s)
N/A

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the enclose Narrative. ARI, an accredited laboratory, certifies that the report results for which ARI is accredited meets all the requirements of the accrediting body. A list of certified analyses, accreditations, and expiration dates is included in this report.

Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Analytical Resources, LLC

Susan Dunnihoo, Director, Client Services

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Ship to:
Sue Dunnihoo
Analytical Resources, Inc.
4611 S. 134th Place, Ste. 100
Tukwila, WA 98168
USA

CHAIN OF CUSTODY

E-copy

Dr. Ted Donn
Tetra Tech Inc.
3697 Mt. Diablo Blvd., Suite 150
Lafayette, CA
ted.donn@tetrattech.com

General Notes:

Please report all results to the MDL, J-flag results between MDL and RL
Please report results and invoice separately for each Project ID
Please report results in pdf format with Excel EDD deliverable
Please report results on a dry weight basis.

Project	SampleID	Medium	Preservation	Date	Time	TOC
T423.20	G4/43REF-A	SED	FREEZE	23-Mar-23	12:46	1
T423.20	G4/43REF-B	SED	FREEZE	23-Mar-23	13:06	1
T423.20	G4/43REF-C	SED	FREEZE	23-Mar-23	13:16	1
T423.20	LAWA-1C1	SED	FREEZE	19-Mar-23	4:40	1
T423.20	LAWA-1C2	SED	FREEZE	19-Mar-23	5:44	1
T423.20	LAWA-1C2-FD	SED	FREEZE	19-Mar-23	5:55	1
T423.20	LAWA-1C3X	SED	FREEZE	19-Mar-23	7:33	1
T423.20	LAWA-1D1	SED	FREEZE	18-Mar-23	11:03	1
T423.20	LAWA-1D2	SED	FREEZE	18-Mar-23	22:49	1
T423.20	LAWA-1D3X	SED	FREEZE	18-Mar-23	22:13	1
T423.20	LAWA-3C1	SED	FREEZE	17-Mar-23	19:07	1
T423.20	LAWA-3C2	SED	FREEZE	17-Mar-23	19:55	1
T423.20	LAWA-3C3	SED	FREEZE	17-Mar-23	20:23	1
T423.20	LAWA-3D1X	SED	FREEZE	17-Mar-23	22:15	1
T423.20	LAWA-3D2	SED	FREEZE	17-Mar-23	23:06	1
T423.20	LAWA-3D3	SED	FREEZE	18-Mar-23	1:00	1

T423.18	MAWA-1C2	SED	FREEZE	22-Mar-23	7:27	1
T423.18	MAWA-1CP2	SED	FREEZE	22-Mar-23	13:29	1
T423.18	MAWA-2B2X	SED	FREEZE	22-Mar-23	4:35	1
T423.18	MAWA-3B2	SED	FREEZE	21-Mar-23	23:28	1
T423.18	MAWA-3C2	SED	FREEZE	21-Mar-23	23:07	1
T423.18	MAWA-4B2X	SED	FREEZE	21-Mar-23	22:45	1
T423.18	MAWB-1B2X	SED	FREEZE	21-Mar-23	3:53	1
T423.18	MAWB-1C2X	SED	FREEZE	21-Mar-23	4:06	1
T423.18	MAWB-2B2X	SED	FREEZE	21-Mar-23	1:50	1
T423.18	MAWB-3B2X	SED	FREEZE	20-Mar-23	23:15	1
T423.18	MAWB-3C2	SED	FREEZE	20-Mar-23	22:52	1
T423.18	MAWB-4B2X	SED	FREEZE	20-Mar-23	21:37	1
T423.18	MAWC-1B2X	SED	FREEZE	20-Mar-23	3:53	1
T423.18	MAWC-1C2	SED	FREEZE	20-Mar-23	5:16	1
T423.18	MAWC-1C2-FD	SED	FREEZE	20-Mar-23	5:27	1
T423.18	MAWC-2B2X	SED	FREEZE	20-Mar-23	1:41	1
T423.18	MAWC-3B2X	SED	FREEZE	19-Mar-23	23:32	1
T423.18	MAWC-3C2	SED	FREEZE	19-Mar-23	23:18	1
T423.18	MAWC-4B2X	SED	FREEZE	19-Mar-23	23:01	1
T423.18	MAWD-1B2X	SED	FREEZE	23-Mar-23	1:09	1
T423.18	MAWD-1C2	SED	FREEZE	23-Mar-23	3:36	1
T423.18	MAWD-2C2X	SED	FREEZE	23-Mar-23	5:07	1

Relinquished by:

Relinquished by:

Received by: *Jacob Walter*
5/10/23
1000 - 144

Received by:

Ship to:

Sue Dunnihoo

Analytical Resources, Inc.

4611 S. 134th Place, Ste. 100

Tukwila, WA 98168

USA

CHAIN OF CUSTODY

E - Copy

Dr. Ted Donn

Tetra Tech Inc.

3697 Mt. Diablo Blvd., Suite 150

Lafayette, CA

ted.donn@tetratech.com

General Notes:

Please report all results to the MDL, J-flag results between MDL and RL

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Project	SampleID	Medium	Preservation	Date	Time	TOC
T423.18	MAWD-3B2	SED	FREEZE	22-Mar-23	23:16	1
T423.18	MAWD-3C2X	SED	FREEZE	22-Mar-23	23:29	1
T423.18	MAWD-3C2X-FD	SED	FREEZE	22-Mar-23	23:38	1
T423.18	MAWD-4B2X	SED	FREEZE	22-Mar-23	22:57	1

T423.19	Control-3-A	SED	FREEZE	23-Mar-23	20:24	1
T423.19	Control-3-B	SED	FREEZE	23-Mar-23	20:37	1
T423.19	Control-3-C	SED	FREEZE	23-Mar-23	20:54	1
T423.19	MAWG-1B1X	SED	FREEZE	21-Mar-23	18:15	1
T423.19	MAWG-1B2X	SED	FREEZE	21-Mar-23	17:14	1
T423.19	MAWG-1B3X	SED	FREEZE	21-Mar-23	19:04	1
T423.19	MAWG-1C1	SED	FREEZE	21-Mar-23	19:44	1
T423.19	MAWG-1C2	SED	FREEZE	21-Mar-23	19:09	1
T423.19	MAWG-1C3	SED	FREEZE	21-Mar-23	19:15	1
T423.19	MAWG-1D1	SED	FREEZE	21-Mar-23	20:12	1
T423.19	MAWG-1D2	SED	FREEZE	21-Mar-23	20:32	1
T423.19	MAWG-1D3	SED	FREEZE	21-Mar-23	20:50	1
T423.19	MAWG-2B2X	SED	FREEZE	21-Mar-23	13:25	1
T423.19	MAWG-2B2X-FD	SED	FREEZE	21-Mar-23	13:35	1
T423.19	MAWG-2C2	SED	FREEZE	21-Mar-23	13:08	1
T423.19	MAWG-3B1X	SED	FREEZE	21-Mar-23	8:02	1
T423.19	MAWG-3B2X	SED	FREEZE	21-Mar-23	8:08	1
T423.19	MAWG-3B3X	SED	FREEZE	21-Mar-23	8:52	1
T423.19	MAWG-3C1	SED	FREEZE	21-Mar-23	10:28	1
T423.19	MAWG-3C2	SED	FREEZE	21-Mar-23	9:00	1
T423.19	MAWG-3C2-FD	SED	FREEZE	21-Mar-23	9:45	1
T423.19	MAWG-3C3	SED	FREEZE	21-Mar-23	9:11	1
T423.19	MAWG-3D1	SED	FREEZE	21-Mar-23	11:02	1
T423.19	MAWG-3D2	SED	FREEZE	21-Mar-23	11:26	1
T423.19	MAWG-3D3	SED	FREEZE	21-Mar-23	11:48	1
T423.19	MAWG-4B2X	SED	FREEZE	21-Mar-23	12:46	1
T423.19	MAWG-4C2	SED	FREEZE	21-Mar-23	12:28	1

T423.17	CBREF-A	SED	FREEZE	25-Mar-23	19:20	1
T423.17	CBREF-B	SED	FREEZE	25-Mar-23	19:30	1
T423.17	CBREF-C	SED	FREEZE	25-Mar-23	19:39	1
T423.17	YUWA-1B1X	SED	FREEZE	16-Mar-23	17:20	1
T423.17	YUWA-1B2X	SED	FREEZE	16-Mar-23	16:50	1
T423.17	YUWA-1B3X	SED	FREEZE	16-Mar-23	17:03	1

Relinquished by:

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Received by:

Received by:

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Sue Dunnihoo
Analytical Resources, Inc.
4611 S. 134th Place, Ste. 100
Tukwila, WA 98168
USA

23E0177

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E-copy

Dr. Ted Donn
Tetra Tech Inc.
3697 Mt. Diablo Blvd., Suite 150
Lafayette, CA
ted.donn@tetratech.com

General Notes:

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Please report results on a dry weight basis.

Project	SampleID	Medium	Preservation	Date	Time	TOC
T423.17	YUWA-1C1	SED	FREEZE	16-Mar-23	19:30	1
T423.17	YUWA-1C2	SED	FREEZE	16-Mar-23	19:43	1
T423.17	YUWA-1C3	SED	FREEZE	16-Mar-23	19:55	1
T423.17	YUWA-1D1	SED	FREEZE	16-Mar-23	20:13	1
T423.17	YUWA-1D2	SED	FREEZE	16-Mar-23	20:19	1
T423.17	YUWA-1D3	SED	FREEZE	16-Mar-23	20:44	1
T423.17	YUWA-2B2X	SED	FREEZE	16-Mar-23	18:57	1
T423.17	YUWA-2C2	SED	FREEZE	16-Mar-23	19:13	1
T423.17	YUWA-3B1X	SED	FREEZE	16-Mar-23	10:09	1
T423.17	YUWA-3B1X-FD	SED	FREEZE	16-Mar-23	10:19	1
T423.17	YUWA-3B2X	SED	FREEZE	16-Mar-23	9:07	1
T423.17	YUWA-3B3X	SED	FREEZE	16-Mar-23	10:49	1
T423.17	YUWA-3C1	SED	FREEZE	16-Mar-23	13:00	1
T423.17	YUWA-3C1-FD	SED	FREEZE	16-Mar-23	13:09	1
T423.17	YUWA-3C2	SED	FREEZE	16-Mar-23	12:03	1
T423.17	YUWA-3C3	SED	FREEZE	16-Mar-23	11:19	1
T423.17	YUWA-3D1	SED	FREEZE	16-Mar-23	13:34	1
T423.17	YUWA-3D2	SED	FREEZE	16-Mar-23	13:04	1
T423.17	YUWA-3D3	SED	FREEZE	16-Mar-23	14:17	1
T423.17	YUWA-4B2X	SED	FREEZE	16-Mar-23	6:03	1
T423.17	YUWA-4C2	SED	FREEZE	16-Mar-23	6:24	1

Relinquished by:

Relinquished by:

Received by: Jacob Walter
aslo563
10/10/23 - 5:40

Received by:



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MAWA-1C2	23E0177-01	Solid	22-Mar-2023 07:27	05-May-2023 10:00
MAWA-1CP2	23E0177-02	Solid	22-Mar-2023 13:29	05-May-2023 10:00
MAWA-2B2X	23E0177-03	Solid	22-Mar-2023 04:35	05-May-2023 10:00
MAWA-3B2	23E0177-04	Solid	21-Mar-2023 23:28	05-May-2023 10:00
MAWA-3C2	23E0177-05	Solid	21-Mar-2023 23:07	05-May-2023 10:00
MAWA-4B2X	23E0177-06	Solid	21-Mar-2023 22:45	05-May-2023 10:00
MAWB-1B2X	23E0177-07	Solid	21-Mar-2023 03:53	05-May-2023 10:00
MAWB-1C2X	23E0177-08	Solid	21-Mar-2023 04:06	05-May-2023 10:00
MAWB-2B2X	23E0177-09	Solid	21-Mar-2023 01:50	05-May-2023 10:00
MAWB-3B2X	23E0177-10	Solid	20-Mar-2023 23:15	05-May-2023 10:00
MAWB-3C2	23E0177-11	Solid	20-Mar-2023 22:52	05-May-2023 10:00
MAWB-4B2X	23E0177-12	Solid	20-Mar-2023 21:37	05-May-2023 10:00
MAWC-1B2X	23E0177-13	Solid	20-Mar-2023 03:53	05-May-2023 10:00
MAWC-1C2	23E0177-14	Solid	20-Mar-2023 05:16	05-May-2023 10:00
MAWC-1C2-FD	23E0177-15	Solid	20-Mar-2023 05:27	05-May-2023 10:00
MAWC-2B2X	23E0177-16	Solid	20-Mar-2023 01:41	05-May-2023 10:00
MAWC-3B2X	23E0177-17	Solid	19-Mar-2023 23:32	05-May-2023 10:00
MAWC-3C2	23E0177-18	Solid	19-Mar-2023 23:18	05-May-2023 10:00
MAWC-4B2X	23E0177-19	Solid	19-Mar-2023 23:01	05-May-2023 10:00
MAWD-1B2X	23E0177-20	Solid	23-Mar-2023 01:09	05-May-2023 10:00
MAWD-1C2	23E0177-21	Solid	23-Mar-2023 03:36	05-May-2023 10:00
MAWD-2C2X	23E0177-22	Solid	23-Mar-2023 05:07	05-May-2023 10:00
MAWD-3B2	23E0177-23	Solid	22-Mar-2023 23:16	05-May-2023 10:00
MAWD-3C2X	23E0177-24	Solid	22-Mar-2023 23:29	05-May-2023 10:00
MAWD-3C2X-FD	23E0177-25	Solid	22-Mar-2023 23:38	05-May-2023 10:00
MAWD-4B2X	23E0177-26	Solid	22-Mar-2023 22:57	05-May-2023 10:00



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

Work Order Case Narrative

Client: Tetra Tech, Inc. (Lafayette)

Project: Gulf of Thailand

Work Order: 23E0177

Sample receipt

Samples as listed on the preceding page were received 05-May-2023 10:00 under ARI work order 23E0177. For details regarding sample receipt, please refer to the Cooler Receipt Form. Samples were received frozen and stored frozen until prepared for analysis.

Wet Chemistry (Total Organic Carbon)

The sample(s) were prepared and analyzed within the recommended holding times for samples stored frozen.

Initial and continuing calibrations were within method requirements.

The method blank(s) were clean at the reporting limits.

The blank spike (BS/LCS) percent recoveries were within control limits for all batches.

The matrix spike (MS) percent recoveries and the duplicate (DUP) relative percent difference (RPD) were within advisory control limits for all batches. Matrix QC results for batch BLF0739 are reported under work order 23E0176.



Analytical Resources, LLC
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Tetra Tech

Project Name: T42X.18

COC No(s): _____ (NA)

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: 23E0177

Tracking No: 7724 0885 0186 NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of the cooler? YES (NO)

Were custody papers included with the cooler? YES (NO)

Were custody papers properly filled out (ink, signed, etc.) YES (NO)

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)

Time 1000

-5.4°C

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: SC09708

Cooler Accepted by: JS Date: 05/05/23 Time: 1000

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES (NO)

What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: Dry Ice

Was sufficient ice used (if appropriate)? NA YES NO

How were bottles sealed in plastic bags? Individually Grouped Not

Did all bottles arrive in good condition (unbroken)? YES NO

Were all bottle labels complete and legible? YES NO

Did the number of containers listed on COC match with the number of containers received? YES NO

Did all bottle labels and tags agree with custody papers? YES NO

Were all bottles used correct for the requested analyses? YES NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs) ... NA YES NO

Were all VOC vials free of air bubbles? NA YES NO

Was sufficient amount of sample sent in each bottle? YES NO

Date VOC Trip Blank was made at ARI: NA

Were the sample(s) split by ARI? (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: PIB Date: 5/8/23 Time: 12:26 Labels checked by: PIB

**** Notify Project Manager of discrepancies or concerns ****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:
client provided electronic COC, in case this happened.

By: JS Date: 05/05/23



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWA-1C2
23E0177-01 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/22/2023 07:27
Analyzed: 06/30/2023 01:27

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.6896 g (wet)	Extract ID: 23E0177-01 A
	Preparation Batch: BLF0739	Final Volume: 0.6896 g	Dry Weight: 0.34 g
	Prepared: 06/26/2023		% Solids: 49.36

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.40	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWA-1C2
23E0177-01 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/22/2023 07:27

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 09:39

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0177-01
	Preparation Batch: BLF0759	Final Volume: 5 g	Dry Weight: 2.47 g
	Prepared: 06/27/2023		% Solids: 49.36

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	49.36	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWA-1CP2
23E0177-02 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/22/2023 13:29
Analyzed: 06/30/2023 01:58

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5231 g (wet)	Extract ID: 23E0177-02 A
	Preparation Batch: BLF0739	Final Volume: 0.5231 g	Dry Weight: 0.26 g
	Prepared: 06/26/2023		% Solids: 49.68

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.33	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWA-1CP2
23E0177-02 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/22/2023 13:29

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 09:39

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0177-02
	Preparation Batch: BLF0759	Final Volume: 5 g	Dry Weight: 2.48 g
	Prepared: 06/27/2023		% Solids: 49.68

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	49.68	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWA-2B2X
23E0177-03 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/22/2023 04:35
Analyzed: 06/30/2023 02:28

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5671 g (wet)	Extract ID: 23E0177-03 A
	Preparation Batch: BLF0739	Final Volume: 0.5671 g	Dry Weight: 0.28 g
	Prepared: 06/26/2023		% Solids: 48.97

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.38	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWA-2B2X
23E0177-03 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/22/2023 04:35

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 09:39

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0177-03
	Preparation Batch: BLF0759	Final Volume: 5 g	Dry Weight: 2.45 g
	Prepared: 06/27/2023		% Solids: 48.97

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	48.97	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWA-3B2
23E0177-04 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 23:28
Analyzed: 06/30/2023 02:58

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5607 g (wet)	Extract ID: 23E0177-04 A
	Preparation Batch: BLF0739	Final Volume: 0.5607 g	Dry Weight: 0.27 g
	Prepared: 06/26/2023		% Solids: 48.74

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.41	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWA-3B2
23E0177-04 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 23:28

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 09:39

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0177-04
	Preparation Batch: BLF0759	Final Volume: 5 g	Dry Weight: 2.44 g
	Prepared: 06/27/2023		% Solids: 48.74

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	48.74	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWA-3C2
23E0177-05 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 23:07
Analyzed: 06/30/2023 05:59

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5444 g (wet)	Extract ID: 23E0177-05 A
	Preparation Batch: BLF0739	Final Volume: 0.5444 g	Dry Weight: 0.26 g
	Prepared: 06/26/2023		% Solids: 47.00

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.39	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWA-3C2
23E0177-05 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 23:07

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 09:39

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0177-05
	Preparation Batch: BLF0759	Final Volume: 5 g	Dry Weight: 2.35 g
	Prepared: 06/27/2023		% Solids: 47.00

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	47.00	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWA-4B2X
23E0177-06 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 22:45
Analyzed: 06/30/2023 06:30

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5292 g (wet)	Extract ID: 23E0177-06 A
	Preparation Batch: BLF0739	Final Volume: 0.5292 g	Dry Weight: 0.24 g
	Prepared: 06/26/2023		% Solids: 44.63

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.41	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWA-4B2X
23E0177-06 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 22:45

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 09:39

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0177-06
	Preparation Batch: BLF0759	Final Volume: 5 g	Dry Weight: 2.23 g
	Prepared: 06/27/2023		% Solids: 44.63

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	44.63	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWB-1B2X
23E0177-07 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 03:53
Analyzed: 06/30/2023 07:00

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.6262 g (wet)	Extract ID: 23E0177-07 A
	Preparation Batch: BLF0739	Final Volume: 0.6262 g	Dry Weight: 0.32 g
	Prepared: 06/26/2023		% Solids: 51.21

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.37	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWB-1B2X
23E0177-07 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 03:53

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 09:39

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0177-07
	Preparation Batch: BLF0759	Final Volume: 5 g	Dry Weight: 2.56 g
	Prepared: 06/27/2023		% Solids: 51.21

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	51.21	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWB-1C2X
23E0177-08 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 04:06
Analyzed: 06/30/2023 07:30

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5457 g (wet)	Extract ID: 23E0177-08 A
	Preparation Batch: BLF0739	Final Volume: 0.5457 g	Dry Weight: 0.26 g
	Prepared: 06/26/2023		% Solids: 48.25

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.44	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWB-1C2X
23E0177-08 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 04:06

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 09:39

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0177-08
	Preparation Batch: BLF0759	Final Volume: 5 g	Dry Weight: 2.41 g
	Prepared: 06/27/2023		% Solids: 48.25

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	48.25	%	



Tetra Tech, Inc. (Lafayette)
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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWB-2B2X
23E0177-09 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 01:50
Analyzed: 06/30/2023 08:00

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5233 g (wet)	Extract ID: 23E0177-09 A
	Preparation Batch: BLF0739	Final Volume: 0.5233 g	Dry Weight: 0.26 g
	Prepared: 06/26/2023		% Solids: 49.93

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.55	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWB-2B2X
23E0177-09 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 01:50

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 09:39

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0177-09
	Preparation Batch: BLF0759	Final Volume: 5 g	Dry Weight: 2.50 g
	Prepared: 06/27/2023		% Solids: 49.93

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	49.93	%	



Tetra Tech, Inc. (Lafayette)
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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWB-3B2X
23E0177-10 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/20/2023 23:15

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 09:39

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0177-10
	Preparation Batch: BLF0759	Final Volume: 5 g	Dry Weight: 3.02 g
	Prepared: 06/27/2023		% Solids: 60.33

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	60.33	%	



Tetra Tech, Inc. (Lafayette)
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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWB-3B2X
23E0177-10RE1 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/20/2023 23:15
Analyzed: 07/06/2023 16:43

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.1536 g (wet)	Extract ID: 23E0177-10RE1 A
	Preparation Batch: BLF0739	Final Volume: 0.1536 g	Dry Weight: 0.09 g
	Prepared: 06/26/2023		% Solids: 60.33

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	2.21	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWB-3C2
23E0177-11 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/20/2023 22:52
Analyzed: 06/30/2023 09:00

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5142 g (wet)	Extract ID: 23E0177-11 A
	Preparation Batch: BLF0739	Final Volume: 0.5142 g	Dry Weight: 0.23 g
	Prepared: 06/26/2023		% Solids: 45.47

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.42	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWB-3C2
23E0177-11 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/20/2023 22:52

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 09:39

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0177-11
	Preparation Batch: BLF0759	Final Volume: 5 g	Dry Weight: 2.27 g
	Prepared: 06/27/2023		% Solids: 45.47

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	45.47	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWB-4B2X
23E0177-12 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/20/2023 21:37
Analyzed: 06/30/2023 09:31

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5857 g (wet)	Extract ID: 23E0177-12 A
	Preparation Batch: BLF0739	Final Volume: 0.5857 g	Dry Weight: 0.27 g
	Prepared: 06/26/2023		% Solids: 46.73

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.40	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWB-4B2X
23E0177-12 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/20/2023 21:37

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 09:39

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0177-12
	Preparation Batch: BLF0759	Final Volume: 5 g	Dry Weight: 2.34 g
	Prepared: 06/27/2023		% Solids: 46.73

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	46.73	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWC-1B2X
23E0177-13 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/20/2023 03:53
Analyzed: 06/30/2023 10:01

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5464 g (wet)	Extract ID: 23E0177-13 A
	Preparation Batch: BLF0739	Final Volume: 0.5464 g	Dry Weight: 0.27 g
	Prepared: 06/26/2023		% Solids: 49.82

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.30	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWC-1B2X
23E0177-13 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/20/2023 03:53

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 09:39

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0177-13
	Preparation Batch: BLF0759	Final Volume: 5 g	Dry Weight: 2.49 g
	Prepared: 06/27/2023		% Solids: 49.82

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	49.82	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWC-1C2
23E0177-14 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/20/2023 05:16
Analyzed: 06/30/2023 10:31

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5751 g (wet)	Extract ID: 23E0177-14 A
	Preparation Batch: BLF0739	Final Volume: 0.5751 g	Dry Weight: 0.29 g
	Prepared: 06/26/2023		% Solids: 50.01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.39	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWC-1C2
23E0177-14 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/20/2023 05:16

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 09:39

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0177-14
	Preparation Batch: BLF0759	Final Volume: 5 g	Dry Weight: 2.50 g
	Prepared: 06/27/2023		% Solids: 50.01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	50.01	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWC-1C2-FD
23E0177-15 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/20/2023 05:27
Analyzed: 06/30/2023 12:02

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5204 g (wet)	Extract ID: 23E0177-15 A
	Preparation Batch: BLF0739	Final Volume: 0.5204 g	Dry Weight: 0.26 g
	Prepared: 06/26/2023		% Solids: 49.48

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.41	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWC-1C2-FD
23E0177-15 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/20/2023 05:27

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 09:39

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0177-15
	Preparation Batch: BLF0759	Final Volume: 5 g	Dry Weight: 2.47 g
	Prepared: 06/27/2023		% Solids: 49.48

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	49.48	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWC-2B2X
23E0177-16 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/20/2023 01:41
Analyzed: 06/30/2023 12:32

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5301 g (wet)	Extract ID: 23E0177-16 A
	Preparation Batch: BLF0739	Final Volume: 0.5301 g	Dry Weight: 0.25 g
	Prepared: 06/26/2023		% Solids: 47.15

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.40	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWC-2B2X
23E0177-16 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/20/2023 01:41

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 09:39

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0177-16
	Preparation Batch: BLF0759	Final Volume: 5 g	Dry Weight: 2.36 g
	Prepared: 06/27/2023		% Solids: 47.15

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	47.15	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWC-3B2X
23E0177-17 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/19/2023 23:32
Analyzed: 06/30/2023 13:03

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5502 g (wet)	Extract ID: 23E0177-17 A
	Preparation Batch: BLF0739	Final Volume: 0.5502 g	Dry Weight: 0.25 g
	Prepared: 06/26/2023		% Solids: 45.87

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.53	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWC-3B2X
23E0177-17 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/19/2023 23:32

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 10:01

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0177-17
	Preparation Batch: BLF0762	Final Volume: 5 g	Dry Weight: 2.29 g
	Prepared: 06/27/2023		% Solids: 45.87

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	45.87	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWC-3C2
23E0177-18 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: CDE

Sampled: 03/19/2023 23:18
Analyzed: 06/27/2023 10:22

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5259 g (wet)	Extract ID: 23E0177-18 A
	Preparation Batch: BLF0740	Final Volume: 0.5259 g	Dry Weight: 0.25 g
	Prepared: 06/26/2023		% Solids: 48.37

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.47	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWC-3C2
23E0177-18 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/19/2023 23:18

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 10:01

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0177-18
	Preparation Batch: BLF0762	Final Volume: 5 g	Dry Weight: 2.42 g
	Prepared: 06/27/2023		% Solids: 48.37

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	48.37	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWC-4B2X
23E0177-19 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/19/2023 23:01
Analyzed: 06/30/2023 13:33

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5641 g (wet)	Extract ID: 23E0177-19 A
	Preparation Batch: BLF0740	Final Volume: 0.5641 g	Dry Weight: 0.29 g
	Prepared: 06/26/2023		% Solids: 50.60

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.30	%	



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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWC-4B2X
23E0177-19 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/19/2023 23:01

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 10:01

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0177-19
	Preparation Batch: BLF0762	Final Volume: 5 g	Dry Weight: 2.53 g
	Prepared: 06/27/2023		% Solids: 50.60

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	50.60	%	



Tetra Tech, Inc. (Lafayette)
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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWD-1B2X
23E0177-20 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/23/2023 01:09
Analyzed: 06/30/2023 14:03

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5105 g (wet)	Extract ID: 23E0177-20 A
	Preparation Batch: BLF0740	Final Volume: 0.5105 g	Dry Weight: 0.26 g
	Prepared: 06/26/2023		% Solids: 50.27

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.42	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWD-1B2X
23E0177-20 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/23/2023 01:09

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 10:01

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0177-20
	Preparation Batch: BLF0762	Final Volume: 5 g	Dry Weight: 2.51 g
	Prepared: 06/27/2023		% Solids: 50.27

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	50.27	%	



Tetra Tech, Inc. (Lafayette)
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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWD-1C2
23E0177-21 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/23/2023 03:36
Analyzed: 06/30/2023 14:34

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5162 g (wet)	Extract ID: 23E0177-21 A
	Preparation Batch: BLF0740	Final Volume: 0.5162 g	Dry Weight: 0.25 g
	Prepared: 06/26/2023		% Solids: 48.58

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.38	%	



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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWD-1C2
23E0177-21 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/23/2023 03:36

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 10:01

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0177-21
	Preparation Batch: BLF0762	Final Volume: 5 g	Dry Weight: 2.43 g
	Prepared: 06/27/2023		% Solids: 48.58

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	48.58	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWD-2C2X
23E0177-22 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/23/2023 05:07
Analyzed: 06/30/2023 15:04

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5285 g (wet)	Extract ID: 23E0177-22 A
	Preparation Batch: BLF0740	Final Volume: 0.5285 g	Dry Weight: 0.24 g
	Prepared: 06/26/2023		% Solids: 45.41

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.41	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWD-2C2X
23E0177-22 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/23/2023 05:07

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 10:01

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0177-22
	Preparation Batch: BLF0762	Final Volume: 5 g	Dry Weight: 2.27 g
	Prepared: 06/27/2023		% Solids: 45.41

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	45.41	%	



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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWD-3B2
23E0177-23 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/22/2023 23:16
Analyzed: 06/30/2023 15:34

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5162 g (wet)	Extract ID: 23E0177-23 A
	Preparation Batch: BLF0740	Final Volume: 0.5162 g	Dry Weight: 0.24 g
	Prepared: 06/26/2023		% Solids: 45.86

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.81	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWD-3B2
23E0177-23 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/22/2023 23:16

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 10:01

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0177-23
	Preparation Batch: BLF0762	Final Volume: 5 g	Dry Weight: 2.29 g
	Prepared: 06/27/2023		% Solids: 45.86

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	45.86	%	



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Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWD-3C2X
23E0177-24 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/22/2023 23:29
Analyzed: 06/30/2023 16:05

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5349 g (wet)	Extract ID: 23E0177-24 A
	Preparation Batch: BLF0740	Final Volume: 0.5349 g	Dry Weight: 0.20 g
	Prepared: 06/26/2023		% Solids: 37.66

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.53	%	



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Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWD-3C2X
23E0177-24 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/22/2023 23:29

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 10:01

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0177-24
	Preparation Batch: BLF0762	Final Volume: 5 g	Dry Weight: 1.88 g
	Prepared: 06/27/2023		% Solids: 37.66

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	37.66	%	



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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWD-3C2X-FD
23E0177-25 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/22/2023 23:38
Analyzed: 06/30/2023 16:35

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5757 g (wet)	Extract ID: 23E0177-25 A
	Preparation Batch: BLF0740	Final Volume: 0.5757 g	Dry Weight: 0.27 g
	Prepared: 06/26/2023		% Solids: 47.23

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.44	%	



Tetra Tech, Inc. (Lafayette)
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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWD-3C2X-FD
23E0177-25 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/22/2023 23:38

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 10:01

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0177-25
	Preparation Batch: BLF0762	Final Volume: 5 g	Dry Weight: 2.36 g
	Prepared: 06/27/2023		% Solids: 47.23

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	47.23	%	



Tetra Tech, Inc. (Lafayette)
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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWD-4B2X
23E0177-26 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/22/2023 22:57
Analyzed: 06/30/2023 18:06

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5639 g (wet)	Extract ID: 23E0177-26 A
	Preparation Batch: BLF0740	Final Volume: 0.5639 g	Dry Weight: 0.27 g
	Prepared: 06/26/2023		% Solids: 48.26

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.34	%	



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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

MAWD-4B2X
23E0177-26 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/22/2023 22:57

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 10:01

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0177-26
	Preparation Batch: BLF0762	Final Volume: 5 g	Dry Weight: 2.41 g
	Prepared: 06/27/2023		% Solids: 48.26

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	48.26	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

Analysis by: Analytical Resources, LLC

Wet Chemistry - Quality Control

Batch BLF0739 - Plumb 1981, Combustion IR

Instrument: TOC Cube Analyst: CDE

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Blank (BLF0739-BLK1)					Prepared: 26-Jun-2023 Analyzed: 26-Jun-2023 23:48					
Total Organic Carbon	ND	0.02	0.02	%						U
LCS (BLF0739-BS1)					Prepared: 26-Jun-2023 Analyzed: 27-Jun-2023 03:19					
Total Organic Carbon	43.0	0.02	0.02	%	44.4		96.6 80-120			



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Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

Analysis by: Analytical Resources, LLC

Wet Chemistry - Quality Control

Batch BLF0740 - Plumb 1981, Combustion IR

Instrument: TOC Cube Analyst: CDE

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BLF0740-BLK1)						Prepared: 26-Jun-2023 Analyzed: 27-Jun-2023 00:18					
Total Organic Carbon	ND	0.02	0.02	%							U
LCS (BLF0740-BS1)						Prepared: 26-Jun-2023 Analyzed: 27-Jun-2023 03:49					
Total Organic Carbon	44.4	0.02	0.02	%	44.4		99.9	80-120			
Duplicate (BLF0740-DUP1)						Source: 23E0177-18 Prepared: 26-Jun-2023 Analyzed: 27-Jun-2023 10:52					
Total Carbon	2.25	0.02	0.02	%		2.59			14.10	20	
Total Inorganic Carbon	1.86	0.02	0.02	%		2.11			12.60	20	
Duplicate (BLF0740-DUP2)						Source: 23E0177-18 Prepared: 26-Jun-2023 Analyzed: 06-Jul-2023 17:14					
Total Organic Carbon	0.44	0.02	0.02	%		0.47			7.24	20	
Matrix Spike (BLF0740-MS1)						Source: 23E0177-18 Prepared: 26-Jun-2023 Analyzed: 27-Jun-2023 11:22					
Total Organic Carbon	1.76	0.02	0.02	%	1.34	0.47	95.5	75-125			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.



Tetra Tech, Inc. (Lafayette)
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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

Analysis by: Analytical Resources, LLC

Wet Chemistry - Quality Control

Batch BLF0759 - SM 2540 G-97

Instrument: BAL2 Analyst: UW

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Blank (BLF0759-BLK1)					Prepared: 27-Jun-2023 Analyzed: 27-Jun-2023 09:39					
Total Solids	ND	0.04	0.04	%						U
Duplicate (BLF0759-DUP1)					Source: 23E0177-01 Prepared: 27-Jun-2023 Analyzed: 27-Jun-2023 09:39					
Total Solids	49.07	0.04	0.04	%		49.36		0.58	20	
Duplicate (BLF0759-DUP2)					Source: 23E0177-01 Prepared: 27-Jun-2023 Analyzed: 27-Jun-2023 09:39					
Total Solids	49.40	0.04	0.04	%		49.36		0.08	20	



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3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

Analysis by: Analytical Resources, LLC

Wet Chemistry - Quality Control

Batch BLF0762 - SM 2540 G-97

Instrument: BAL2 Analyst: UW

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD Limit	Notes
Blank (BLF0762-BLK1)					Prepared: 27-Jun-2023 Analyzed: 27-Jun-2023 10:01				
Total Solids	ND	0.04	0.04	%					U



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Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

Certified Analyses included in this Report

Analyte	Certifications		
<i>Plumb 1981, Combustion IR in Solid</i>			
Total Organic Carbon		DoD-ELAP	
Code	Description	Number	Expires
ADEC	Alaska Dept of Environmental Conservation	17-015	03/28/2025
DoD-ELAP	DoD-Environmental Laboratory Accreditation Program, PJLA Testing	66169	02/28/2025
NELAP	ORELAP - Oregon Laboratory Accreditation Program	WA100006-012	05/12/2023
WADOE	WA Dept of Ecology	C558	06/30/2023
WA-DW	Ecology - Drinking Water	C558	06/30/2023



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.18
Project Manager: Ted Donn

Reported:
14-Jul-2023 11:50

Notes and Definitions

U	This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
[2C]	Indicates this result was quantified on the second column on a dual column analysis.



Analytical Resources, LLC
Analytical Chemists and Consultants
Tukwila, WA

11 July 2023

Ted Donn
Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette, CA 94549

RE: Gulf of Thailand (T423.19)

Please find enclosed sample receipt documentation and analytical results for samples from the project referenced above.

Sample analyses were performed according to ARI's Quality Assurance Plan and any provided project specific Quality Assurance Plan. Each analytical section of this report has been approved and reviewed by an analytical peer, the appropriate Laboratory Supervisor or qualified substitute, and a technical reviewer.

Should you have any questions or problems, please feel free to contact us at your convenience.

Associated Work Order(s)
23E0176

Associated SDG ID(s)
N/A

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the enclose Narrative. ARI, an accredited laboratory, certifies that the report results for which ARI is accredited meets all the requirements of the accrediting body. A list of certified analyses, accreditations, and expiration dates is included in this report.

Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Analytical Resources, LLC

Susan Dunnihoo, Director, Client Services

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Ship to:

Sue Dunnihoo

Analytical Resources, Inc.

4611 S. 134th Place, Ste. 100

Tukwila, WA 98168

USA

23E0176

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E-Copy

Dr. Ted Donn

Tetra Tech Inc.

3697 Mt. Diablo Blvd., Suite 150

Lafayette, CA

ted.donn@tetrattech.com

General Notes:

Please report all results to the MDL, J-flag results between MDL and RL

Please report results and invoice separately for each Project ID

Please report results in pdf format with Excel EDD deliverable

Please report results on a dry weight basis.

Project	SampleID	Medium	Preservation	Date	Time	TOC
T423.18	MAWD-3B2	SED	FREEZE	22-Mar-23	23:16	1
T423.18	MAWD-3C2X	SED	FREEZE	22-Mar-23	23:29	1
T423.18	MAWD-3C2X-FD	SED	FREEZE	22-Mar-23	23:38	1
T423.18	MAWD-4B2X	SED	FREEZE	22-Mar-23	22:57	1

T423.19	Control-3-A	SED	FREEZE	23-Mar-23	20:24	1
T423.19	Control-3-B	SED	FREEZE	23-Mar-23	20:37	1
T423.19	Control-3-C	SED	FREEZE	23-Mar-23	20:54	1
T423.19	MAWG-1B1X	SED	FREEZE	21-Mar-23	18:15	1
T423.19	MAWG-1B2X	SED	FREEZE	21-Mar-23	17:14	1
T423.19	MAWG-1B3X	SED	FREEZE	21-Mar-23	19:04	1
T423.19	MAWG-1C1	SED	FREEZE	21-Mar-23	19:44	1
T423.19	MAWG-1C2	SED	FREEZE	21-Mar-23	19:09	1
T423.19	MAWG-1C3	SED	FREEZE	21-Mar-23	19:15	1
T423.19	MAWG-1D1	SED	FREEZE	21-Mar-23	20:12	1
T423.19	MAWG-1D2	SED	FREEZE	21-Mar-23	20:32	1
T423.19	MAWG-1D3	SED	FREEZE	21-Mar-23	20:50	1
T423.19	MAWG-2B2X	SED	FREEZE	21-Mar-23	13:25	1
T423.19	MAWG-2B2X-FD	SED	FREEZE	21-Mar-23	13:35	1
T423.19	MAWG-2C2	SED	FREEZE	21-Mar-23	13:08	1
T423.19	MAWG-3B1X	SED	FREEZE	21-Mar-23	8:02	1
T423.19	MAWG-3B2X	SED	FREEZE	21-Mar-23	8:08	1
T423.19	MAWG-3B3X	SED	FREEZE	21-Mar-23	8:52	1
T423.19	MAWG-3C1	SED	FREEZE	21-Mar-23	10:28	1
T423.19	MAWG-3C2	SED	FREEZE	21-Mar-23	9:00	1
T423.19	MAWG-3C2-FD	SED	FREEZE	21-Mar-23	9:45	1
T423.19	MAWG-3C3	SED	FREEZE	21-Mar-23	9:11	1
T423.19	MAWG-3D1	SED	FREEZE	21-Mar-23	11:02	1
T423.19	MAWG-3D2	SED	FREEZE	21-Mar-23	11:26	1
T423.19	MAWG-3D3	SED	FREEZE	21-Mar-23	11:48	1
T423.19	MAWG-4B2X	SED	FREEZE	21-Mar-23	12:46	1
T423.19	MAWG-4C2	SED	FREEZE	21-Mar-23	12:28	1


T423.17	CBREF-A	SED	FREEZE	25-Mar-23	19:20	1
T423.17	CBREF-B	SED	FREEZE	25-Mar-23	19:30	1
T423.17	CBREF-C	SED	FREEZE	25-Mar-23	19:39	1
T423.17	YUWA-1B1X	SED	FREEZE	16-Mar-23	17:20	1
T423.17	YUWA-1B2X	SED	FREEZE	16-Mar-23	16:50	1
T423.17	YUWA-1B3X	SED	FREEZE	16-Mar-23	17:03	1

Relinquished by:

Relinquished by:

Received by:

Received by:


 05/05/23
 1000 - 541

Ship to:

Sue Dunnihoo

Analytical Resources, Inc.

4611 S. 134th Place, Ste. 100

Tukwila, WA 98168

USA

CHAIN OF CUSTODY

E-copy

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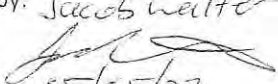
Please report results on a dry weight basis.

Project	SampleID	Medium	Preservation	Date	Time	TOC
T423.17	YUWA-1C1	SED	FREEZE	16-Mar-23	19:30	1
T423.17	YUWA-1C2	SED	FREEZE	16-Mar-23	19:43	1
T423.17	YUWA-1C3	SED	FREEZE	16-Mar-23	19:55	1
T423.17	YUWA-1D1	SED	FREEZE	16-Mar-23	20:13	1
T423.17	YUWA-1D2	SED	FREEZE	16-Mar-23	20:19	1
T423.17	YUWA-1D3	SED	FREEZE	16-Mar-23	20:44	1
T423.17	YUWA-2B2X	SED	FREEZE	16-Mar-23	18:57	1
T423.17	YUWA-2C2	SED	FREEZE	16-Mar-23	19:13	1
T423.17	YUWA-3B1X	SED	FREEZE	16-Mar-23	10:09	1
T423.17	YUWA-3B1X-FD	SED	FREEZE	16-Mar-23	10:19	1
T423.17	YUWA-3B2X	SED	FREEZE	16-Mar-23	9:07	1
T423.17	YUWA-3B3X	SED	FREEZE	16-Mar-23	10:49	1
T423.17	YUWA-3C1	SED	FREEZE	16-Mar-23	13:00	1
T423.17	YUWA-3C1-FD	SED	FREEZE	16-Mar-23	13:09	1
T423.17	YUWA-3C2	SED	FREEZE	16-Mar-23	12:03	1
T423.17	YUWA-3C3	SED	FREEZE	16-Mar-23	11:19	1
T423.17	YUWA-3D1	SED	FREEZE	16-Mar-23	13:34	1
T423.17	YUWA-3D2	SED	FREEZE	16-Mar-23	13:04	1
T423.17	YUWA-3D3	SED	FREEZE	16-Mar-23	14:17	1
T423.17	YUWA-4B2X	SED	FREEZE	16-Mar-23	6:03	1
T423.17	YUWA-4C2	SED	FREEZE	16-Mar-23	6:24	1

Relinquished by:

Relinquished by:

Recieved by:

Jacob Walter

 65105103
 10/10/23 - 5:40

Recieved by:

Ship to:

Sue Dunnihoo

Analytical Resources, Inc.

4611 S. 134th Place, Ste. 100

Tukwila, WA 98168

USA

23E0176

CHAIN OF CUSTODY

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Tetra Tech Inc.

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Lafayette, CA

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Project	SampleID	Medium	Preservation	Date	Time	TOC
T423.20	G4/43REF-A	SED	FREEZE	23-Mar-23	12:46	1
T423.20	G4/43REF-B	SED	FREEZE	23-Mar-23	13:06	1
T423.20	G4/43REF-C	SED	FREEZE	23-Mar-23	13:16	1
T423.20	LAWA-1C1	SED	FREEZE	19-Mar-23	4:40	1
T423.20	LAWA-1C2	SED	FREEZE	19-Mar-23	5:44	1
T423.20	LAWA-1C2-FD	SED	FREEZE	19-Mar-23	5:55	1
T423.20	LAWA-1C3X	SED	FREEZE	19-Mar-23	7:33	1
T423.20	LAWA-1D1	SED	FREEZE	18-Mar-23	11:03	1
T423.20	LAWA-1D2	SED	FREEZE	18-Mar-23	22:49	1
T423.20	LAWA-1D3X	SED	FREEZE	18-Mar-23	22:13	1
T423.20	LAWA-3C1	SED	FREEZE	17-Mar-23	19:07	1
T423.20	LAWA-3C2	SED	FREEZE	17-Mar-23	19:55	1
T423.20	LAWA-3C3	SED	FREEZE	17-Mar-23	20:23	1
T423.20	LAWA-3D1X	SED	FREEZE	17-Mar-23	22:15	1
T423.20	LAWA-3D2	SED	FREEZE	17-Mar-23	23:06	1
T423.20	LAWA-3D3	SED	FREEZE	18-Mar-23	1:00	1

T423.18	MAWA-1C2	SED	FREEZE	22-Mar-23	7:27	1
T423.18	MAWA-1CP2	SED	FREEZE	22-Mar-23	13:29	1
T423.18	MAWA-2B2X	SED	FREEZE	22-Mar-23	4:35	1
T423.18	MAWA-3B2	SED	FREEZE	21-Mar-23	23:28	1
T423.18	MAWA-3C2	SED	FREEZE	21-Mar-23	23:07	1
T423.18	MAWA-4B2X	SED	FREEZE	21-Mar-23	22:45	1
T423.18	MAWB-1B2X	SED	FREEZE	21-Mar-23	3:53	1
T423.18	MAWB-1C2X	SED	FREEZE	21-Mar-23	4:06	1
T423.18	MAWB-2B2X	SED	FREEZE	21-Mar-23	1:50	1
T423.18	MAWB-3B2X	SED	FREEZE	20-Mar-23	23:15	1
T423.18	MAWB-3C2	SED	FREEZE	20-Mar-23	22:52	1
T423.18	MAWB-4B2X	SED	FREEZE	20-Mar-23	21:37	1
T423.18	MAWC-1B2X	SED	FREEZE	20-Mar-23	3:53	1
T423.18	MAWC-1C2	SED	FREEZE	20-Mar-23	5:16	1
T423.18	MAWC-1C2-FD	SED	FREEZE	20-Mar-23	5:27	1
T423.18	MAWC-2B2X	SED	FREEZE	20-Mar-23	1:41	1
T423.18	MAWC-3B2X	SED	FREEZE	19-Mar-23	23:32	1
T423.18	MAWC-3C2	SED	FREEZE	19-Mar-23	23:18	1
T423.18	MAWC-4B2X	SED	FREEZE	19-Mar-23	23:01	1
T423.18	MAWD-1B2X	SED	FREEZE	23-Mar-23	1:09	1
T423.18	MAWD-1C2	SED	FREEZE	23-Mar-23	3:36	1
T423.18	MAWD-2C2X	SED	FREEZE	23-Mar-23	5:07	1

Relinquished by:

Relinquished by:

Received by:

Jacob Walter
 4/18/23
 laca - 41

Received by:



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Control-3-A	23E0176-01	Solid	23-Mar-2023 20:24	05-May-2023 10:00
Control-3-B	23E0176-02	Solid	23-Mar-2023 20:37	05-May-2023 10:00
Control-3-C	23E0176-03	Solid	23-Mar-2023 20:54	05-May-2023 10:00
MAWG-1B1X	23E0176-04	Solid	21-Mar-2023 18:15	05-May-2023 10:00
MAWG-1B2X	23E0176-05	Solid	21-Mar-2023 17:14	05-May-2023 10:00
MAWG-1B3X	23E0176-06	Solid	21-Mar-2023 19:04	05-May-2023 10:00
MAWG-1C1	23E0176-07	Solid	21-Mar-2023 19:44	05-May-2023 10:00
MAWG-1C2	23E0176-08	Solid	21-Mar-2023 19:09	05-May-2023 10:00
MAWG-1C3	23E0176-09	Solid	21-Mar-2023 19:15	05-May-2023 10:00
MAWG-1D1	23E0176-10	Solid	21-Mar-2023 20:12	05-May-2023 10:00
MAWG-1D2	23E0176-11	Solid	21-Mar-2023 20:32	05-May-2023 10:00
MAWG-1D3	23E0176-12	Solid	21-Mar-2023 20:50	05-May-2023 10:00
MAWG-2B2X	23E0176-13	Solid	21-Mar-2023 13:25	05-May-2023 10:00
MAWG-2B2X-FD	23E0176-14	Solid	21-Mar-2023 13:35	05-May-2023 10:00
MAWG-2C2	23E0176-15	Solid	21-Mar-2023 13:08	05-May-2023 10:00
MAWG-3B1X	23E0176-16	Solid	21-Mar-2023 08:02	05-May-2023 10:00
MAWG-3B2X	23E0176-17	Solid	21-Mar-2023 08:08	05-May-2023 10:00
MAWG-3B3X	23E0176-18	Solid	21-Mar-2023 08:52	05-May-2023 10:00
MAWG-3C1	23E0176-19	Solid	21-Mar-2023 10:28	05-May-2023 10:00
MAWG-3C2	23E0176-20	Solid	21-Mar-2023 09:00	05-May-2023 10:00
MAWG-3C2-FD	23E0176-21	Solid	21-Mar-2023 09:45	05-May-2023 10:00
MAWG-3C3	23E0176-22	Solid	21-Mar-2023 09:11	05-May-2023 10:00
MAWG-3D1	23E0176-23	Solid	21-Mar-2023 11:02	05-May-2023 10:00
MAWG-3D2	23E0176-24	Solid	21-Mar-2023 11:26	05-May-2023 10:00
MAWG-3D3	23E0176-25	Solid	21-Mar-2023 11:48	05-May-2023 10:00
MAWG-4B2X	23E0176-26	Solid	21-Mar-2023 12:46	05-May-2023 10:00
MAWG-4C2	23E0176-27	Solid	21-Mar-2023 12:28	05-May-2023 10:00



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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

Work Order Case Narrative

Client: Tetra Tech, Inc. (Lafayette)

Project: Gulf of Thailand

Work Order: 23E0176

Sample receipt

Samples as listed on the preceding page were received 05-May-2023 10:00 under ARI work order 23E0176. For details regarding sample receipt, please refer to the Cooler Receipt Form. Samples were received frozen and stored frozen until prepared for analysis.

Wet Chemistry (Total Organic Carbon)

The sample(s) were prepared and analyzed within the recommended holding times for samples stored frozen.

Initial and continuing calibrations were within method requirements.

The method blank(s) were clean at the reporting limits.

The blank spike (BS/LCS) percent recoveries were within control limits for all batches.

The matrix spike (MS) percent recoveries and the duplicate (DUP) relative percent difference (RPD) were within advisory control limits for all batches. Matrix QC results for batch BLF0737 are reported under work order 23E0175.



Analytical Resources, LLC
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Tetra Tech

Project Name: 7423.19

COC No(s): _____ (NA)

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: 23E0176

Tracking No: 7722 0885 0186 NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of the cooler? YES NO

Were custody papers included with the cooler? YES NO

Were custody papers properly filled out (ink, signed, etc.) YES NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)

Time 1000

-5.4°C

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: SC09708

Cooler Accepted by: PIB Date: 8/5/23 Time: 1000

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES NO

What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: Dry Ice

Was sufficient ice used (if appropriate)? NA YES NO

How were bottles sealed in plastic bags? Individually Grouped Not

Did all bottles arrive in good condition (unbroken)? YES NO

Were all bottle labels complete and legible? YES NO

Did the number of containers listed on COC match with the number of containers received? YES NO

Did all bottle labels and tags agree with custody papers? YES NO

Were all bottles used correct for the requested analyses? YES NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs) ... NA YES NO

Were all VOC vials free of air bubbles? NA YES NO

Was sufficient amount of sample sent in each bottle? YES NO

Date VOC Trip Blank was made at ARI: NA

Were the sample(s) split by ARI? NA YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: PIB Date: 8/18/23 Time: 11:55 Labels checked by: PIB

**** Notify Project Manager of discrepancies or concerns ****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

Client provided electronic COC in case this happened.

By: PIB

Date: 8/5/23



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Lafayette CA, 94549

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Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

Control-3-A
23E0176-01 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: CDE

Sampled: 03/23/2023 20:24
Analyzed: 06/28/2023 16:14

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5754 g (wet)	Extract ID: 23E0176-01 A
	Preparation Batch: BLF0737	Final Volume: 0.5754 g	Dry Weight: 0.26 g
	Prepared: 06/26/2023		% Solids: 46.03

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.38	%	



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Control-3-A
23E0176-01 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/23/2023 20:24

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:21

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-01
	Preparation Batch: BLF0753	Final Volume: 5 g	Dry Weight: 2.30 g
	Prepared: 06/26/2023		% Solids: 46.03

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	46.03	%	



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Reported:
11-Jul-2023 10:52

Control-3-B
23E0176-02 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: CDE

Sampled: 03/23/2023 20:37
Analyzed: 06/28/2023 16:45

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5175 g (wet)	Extract ID: 23E0176-02 A
	Preparation Batch: BLF0737	Final Volume: 0.5175 g	Dry Weight: 0.25 g
	Prepared: 06/26/2023		% Solids: 48.11

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.32	%	



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Reported:
11-Jul-2023 10:52

Control-3-B
23E0176-02 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/23/2023 20:37

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:21

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-02
	Preparation Batch: BLF0753	Final Volume: 5 g	Dry Weight: 2.41 g
	Prepared: 06/26/2023		% Solids: 48.11

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	48.11	%	



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Reported:
11-Jul-2023 10:52

Control-3-C
23E0176-03 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/23/2023 20:54
Analyzed: 07/01/2023 12:13

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5033 g (wet)	Extract ID: 23E0176-03 A
	Preparation Batch: BLF0737	Final Volume: 0.5033 g	Dry Weight: 0.23 g
	Prepared: 06/26/2023		% Solids: 45.16

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.42	%	



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Reported:
11-Jul-2023 10:52

Control-3-C
23E0176-03 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/23/2023 20:54

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:21

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-03
	Preparation Batch: BLF0753	Final Volume: 5 g	Dry Weight: 2.26 g
	Prepared: 06/26/2023		% Solids: 45.16

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	45.16	%	



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Reported:
11-Jul-2023 10:52

MAWG-1B1X
23E0176-04 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 18:15
Analyzed: 07/01/2023 12:43

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.6709 g (wet)	Extract ID: 23E0176-04 A
	Preparation Batch: BLF0737	Final Volume: 0.6709 g	Dry Weight: 0.31 g
	Prepared: 06/26/2023		% Solids: 45.70

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.38	%	



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Reported:
11-Jul-2023 10:52

MAWG-1B1X
23E0176-04 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 18:15

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:21

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-04
	Preparation Batch: BLF0753	Final Volume: 5 g	Dry Weight: 2.29 g
	Prepared: 06/26/2023		% Solids: 45.70

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	45.70	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-1B2X
23E0176-05 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: CDE

Sampled: 03/21/2023 17:14
Analyzed: 06/27/2023 06:20

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.6084 g (wet)	Extract ID: 23E0176-05 A
	Preparation Batch: BLF0738	Final Volume: 0.6084 g	Dry Weight: 0.28 g
	Prepared: 06/26/2023		% Solids: 46.54

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.52	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-1B2X
23E0176-05 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 17:14

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:44

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-05
	Preparation Batch: BLF0755	Final Volume: 5 g	Dry Weight: 2.33 g
	Prepared: 06/26/2023		% Solids: 46.54

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	46.54	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-1B3X
23E0176-06 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 19:04
Analyzed: 07/01/2023 13:13

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5526 g (wet)	Extract ID: 23E0176-06 A
	Preparation Batch: BLF0738	Final Volume: 0.5526 g	Dry Weight: 0.30 g
	Prepared: 06/26/2023		% Solids: 53.80

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	1.07	%	



Tetra Tech, Inc. (Lafayette)
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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-1B3X
23E0176-06 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 19:04

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:44

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-06
	Preparation Batch: BLF0755	Final Volume: 5 g	Dry Weight: 2.69 g
	Prepared: 06/26/2023		% Solids: 53.80

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	53.80	%	



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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-1C1
23E0176-07 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 19:44
Analyzed: 07/01/2023 13:44

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5456 g (wet)	Extract ID: 23E0176-07 A
	Preparation Batch: BLF0738	Final Volume: 0.5456 g	Dry Weight: 0.26 g
	Prepared: 06/26/2023		% Solids: 48.06

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.39	%	



Tetra Tech, Inc. (Lafayette)
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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-1C1
23E0176-07 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 19:44

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:44

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-07
	Preparation Batch: BLF0755	Final Volume: 5 g	Dry Weight: 2.40 g
	Prepared: 06/26/2023		% Solids: 48.06

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	48.06	%	



Tetra Tech, Inc. (Lafayette)
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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-1C2
23E0176-08 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 19:09
Analyzed: 07/01/2023 14:14

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5442 g (wet)	Extract ID: 23E0176-08 A
	Preparation Batch: BLF0738	Final Volume: 0.5442 g	Dry Weight: 0.23 g
	Prepared: 06/26/2023		% Solids: 41.54

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.45	%	



Tetra Tech, Inc. (Lafayette)
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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-1C2
23E0176-08 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 19:09

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:44

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-08
	Preparation Batch: BLF0755	Final Volume: 5 g	Dry Weight: 2.08 g
	Prepared: 06/26/2023		% Solids: 41.54

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	41.54	%	



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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-1C3
23E0176-09 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 19:15
Analyzed: 07/01/2023 14:44

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5262 g (wet)	Extract ID: 23E0176-09 A
	Preparation Batch: BLF0738	Final Volume: 0.5262 g	Dry Weight: 0.25 g
	Prepared: 06/26/2023		% Solids: 48.25

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.39	%	



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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-1C3
23E0176-09 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 19:15

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:44

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-09
	Preparation Batch: BLF0755	Final Volume: 5 g	Dry Weight: 2.41 g
	Prepared: 06/26/2023		% Solids: 48.25

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	48.25	%	



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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-1D1
23E0176-10 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 20:12
Analyzed: 07/01/2023 15:14

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5889 g (wet)	Extract ID: 23E0176-10 A
	Preparation Batch: BLF0738	Final Volume: 0.5889 g	Dry Weight: 0.28 g
	Prepared: 06/26/2023		% Solids: 48.32

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.37	%	



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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-1D1
23E0176-10 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 20:12

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:44

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-10
	Preparation Batch: BLF0755	Final Volume: 5 g	Dry Weight: 2.42 g
	Prepared: 06/26/2023		% Solids: 48.32

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	48.32	%	



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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-1D2
23E0176-11 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 20:32
Analyzed: 07/01/2023 15:44

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5621 g (wet)	Extract ID: 23E0176-11 A
	Preparation Batch: BLF0738	Final Volume: 0.5621 g	Dry Weight: 0.25 g
	Prepared: 06/26/2023		% Solids: 43.60

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.47	%	



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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-1D2
23E0176-11 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 20:32

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:44

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-11
	Preparation Batch: BLF0755	Final Volume: 5 g	Dry Weight: 2.18 g
	Prepared: 06/26/2023		% Solids: 43.60

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	43.60	%	



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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-1D3
23E0176-12 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 20:50
Analyzed: 07/01/2023 16:15

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5609 g (wet)	Extract ID: 23E0176-12 A
	Preparation Batch: BLF0738	Final Volume: 0.5609 g	Dry Weight: 0.24 g
	Prepared: 06/26/2023		% Solids: 42.78

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.45	%	



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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-1D3
23E0176-12 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 20:50

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:44

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-12
	Preparation Batch: BLF0755	Final Volume: 5 g	Dry Weight: 2.14 g
	Prepared: 06/26/2023		% Solids: 42.78

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	42.78	%	



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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-2B2X
23E0176-13 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 13:25
Analyzed: 07/01/2023 16:45

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5871 g (wet)	Extract ID: 23E0176-13 A
	Preparation Batch: BLF0738	Final Volume: 0.5871 g	Dry Weight: 0.28 g
	Prepared: 06/26/2023		% Solids: 47.33

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.39	%	



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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-2B2X
23E0176-13 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 13:25

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:44

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-13
	Preparation Batch: BLF0755	Final Volume: 5 g	Dry Weight: 2.37 g
	Prepared: 06/26/2023		% Solids: 47.33

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	47.33	%	



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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-2B2X-FD
23E0176-14 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 13:35
Analyzed: 06/29/2023 17:55

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5142 g (wet)	Extract ID: 23E0176-14 A
	Preparation Batch: BLF0738	Final Volume: 0.5142 g	Dry Weight: 0.24 g
	Prepared: 06/26/2023		% Solids: 46.83

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.39	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-2B2X-FD
23E0176-14 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 13:35

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:44

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-14
	Preparation Batch: BLF0755	Final Volume: 5 g	Dry Weight: 2.34 g
	Prepared: 06/26/2023		% Solids: 46.83

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	46.83	%	



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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-2C2
23E0176-15 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 13:08
Analyzed: 06/29/2023 18:25

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.6109 g (wet)	Extract ID: 23E0176-15 A
	Preparation Batch: BLF0738	Final Volume: 0.6109 g	Dry Weight: 0.29 g
	Prepared: 06/26/2023		% Solids: 47.07

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.37	%	



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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-2C2
23E0176-15 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 13:08

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:44

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-15
	Preparation Batch: BLF0755	Final Volume: 5 g	Dry Weight: 2.35 g
	Prepared: 06/26/2023		% Solids: 47.07

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	47.07	%	



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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-3B1X
23E0176-16 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 08:02
Analyzed: 06/29/2023 18:55

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5623 g (wet)	Extract ID: 23E0176-16 A
	Preparation Batch: BLF0738	Final Volume: 0.5623 g	Dry Weight: 0.27 g
	Prepared: 06/26/2023		% Solids: 48.87

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.68	%	



Tetra Tech, Inc. (Lafayette)
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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-3B1X
23E0176-16 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 08:02

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:44

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-16
	Preparation Batch: BLF0755	Final Volume: 5 g	Dry Weight: 2.44 g
	Prepared: 06/26/2023		% Solids: 48.87

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	48.87	%	



Tetra Tech, Inc. (Lafayette)
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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-3B2X
23E0176-17 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 08:08
Analyzed: 06/29/2023 19:25

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.6185 g (wet)	Extract ID: 23E0176-17 A
	Preparation Batch: BLF0738	Final Volume: 0.6185 g	Dry Weight: 0.32 g
	Prepared: 06/26/2023		% Solids: 51.02

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.48	%	



Tetra Tech, Inc. (Lafayette)
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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-3B2X
23E0176-17 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 08:08

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:44

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-17
	Preparation Batch: BLF0755	Final Volume: 5 g	Dry Weight: 2.55 g
	Prepared: 06/26/2023		% Solids: 51.02

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	51.02	%	



Tetra Tech, Inc. (Lafayette)
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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-3B3X
23E0176-18 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 08:52
Analyzed: 06/29/2023 19:55

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.6086 g (wet)	Extract ID: 23E0176-18 A
	Preparation Batch: BLF0738	Final Volume: 0.6086 g	Dry Weight: 0.33 g
	Prepared: 06/26/2023		% Solids: 54.09

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.28	%	



Tetra Tech, Inc. (Lafayette)
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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-3B3X
23E0176-18 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 08:52

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:44

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-18
	Preparation Batch: BLF0755	Final Volume: 5 g	Dry Weight: 2.70 g
	Prepared: 06/26/2023		% Solids: 54.09

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	54.09	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-3C1
23E0176-19 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 10:28
Analyzed: 06/29/2023 20:26

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5725 g (wet)	Extract ID: 23E0176-19 A
	Preparation Batch: BLF0738	Final Volume: 0.5725 g	Dry Weight: 0.28 g
	Prepared: 06/26/2023		% Solids: 49.53

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.35	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-3C1
23E0176-19 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 10:28

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:44

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-19
	Preparation Batch: BLF0755	Final Volume: 5 g	Dry Weight: 2.48 g
	Prepared: 06/26/2023		% Solids: 49.53

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	49.53	%	



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-3C2
23E0176-20 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 09:00
Analyzed: 06/29/2023 20:56

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5499 g (wet)	Extract ID: 23E0176-20 A
	Preparation Batch: BLF0738	Final Volume: 0.5499 g	Dry Weight: 0.26 g
	Prepared: 06/26/2023		% Solids: 46.83

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.37	%	



Tetra Tech, Inc. (Lafayette)
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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-3C2
23E0176-20 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 09:00

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:44

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-20
	Preparation Batch: BLF0755	Final Volume: 5 g	Dry Weight: 2.34 g
	Prepared: 06/26/2023		% Solids: 46.83

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	46.83	%	



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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-3C2-FD
23E0176-21 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 09:45
Analyzed: 06/29/2023 21:26

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5937 g (wet)	Extract ID: 23E0176-21 A
	Preparation Batch: BLF0738	Final Volume: 0.5937 g	Dry Weight: 0.28 g
	Prepared: 06/26/2023		% Solids: 46.79

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.40	%	



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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-3C2-FD
23E0176-21 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 09:45

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:44

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-21
	Preparation Batch: BLF0755	Final Volume: 5 g	Dry Weight: 2.34 g
	Prepared: 06/26/2023		% Solids: 46.79

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	46.79	%	



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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-3C3
23E0176-22 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 09:11
Analyzed: 06/29/2023 21:56

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5745 g (wet)	Extract ID: 23E0176-22 A
	Preparation Batch: BLF0738	Final Volume: 0.5745 g	Dry Weight: 0.27 g
	Prepared: 06/26/2023		% Solids: 46.57

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.39	%	



Tetra Tech, Inc. (Lafayette)
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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-3C3
23E0176-22 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 09:11

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:44

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-22
	Preparation Batch: BLF0755	Final Volume: 5 g	Dry Weight: 2.33 g
	Prepared: 06/26/2023		% Solids: 46.57

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	46.57	%	



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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-3D1
23E0176-23 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 11:02
Analyzed: 06/29/2023 22:26

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.6087 g (wet)	Extract ID: 23E0176-23 A
	Preparation Batch: BLF0738	Final Volume: 0.6087 g	Dry Weight: 0.29 g
	Prepared: 06/26/2023		% Solids: 47.54

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.40	%	



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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-3D1
23E0176-23 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 11:02

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:44

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-23
	Preparation Batch: BLF0755	Final Volume: 5 g	Dry Weight: 2.38 g
	Prepared: 06/26/2023		% Solids: 47.54

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	47.54	%	



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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-3D2
23E0176-24 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 11:26
Analyzed: 06/29/2023 23:57

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5028 g (wet)	Extract ID: 23E0176-24 A
	Preparation Batch: BLF0738	Final Volume: 0.5028 g	Dry Weight: 0.24 g
	Prepared: 06/26/2023		% Solids: 47.25

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.38	%	



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Reported:
11-Jul-2023 10:52

MAWG-3D2
23E0176-24 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 11:26

Instrument: BAL2 Analyst: UW

Analyzed: 06/26/2023 16:44

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-24
	Preparation Batch: BLF0755	Final Volume: 5 g	Dry Weight: 2.36 g
	Prepared: 06/26/2023		% Solids: 47.25

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	47.25	%	



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Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-3D3
23E0176-25 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: CDE

Sampled: 03/21/2023 11:48
Analyzed: 06/27/2023 08:51

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5278 g (wet)	Extract ID: 23E0176-25 A
	Preparation Batch: BLF0739	Final Volume: 0.5278 g	Dry Weight: 0.19 g
	Prepared: 06/26/2023		% Solids: 36.16

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.47	%	



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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-3D3
23E0176-25 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 11:48

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 09:39

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-25
	Preparation Batch: BLF0759	Final Volume: 5 g	Dry Weight: 1.81 g
	Prepared: 06/27/2023		% Solids: 36.16

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	36.16	%	



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Reported:
11-Jul-2023 10:52

MAWG-4B2X
23E0176-26 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 12:46
Analyzed: 06/30/2023 00:27

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5688 g (wet)	Extract ID: 23E0176-26 A
	Preparation Batch: BLF0739	Final Volume: 0.5688 g	Dry Weight: 0.28 g
	Prepared: 06/26/2023		% Solids: 49.47

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.33	%	



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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-4B2X
23E0176-26 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 12:46

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 09:39

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-26
	Preparation Batch: BLF0759	Final Volume: 5 g	Dry Weight: 2.47 g
	Prepared: 06/27/2023		% Solids: 49.47

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	49.47	%	



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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-4C2
23E0176-27 (Solid)

Wet Chemistry

Method: Plumb 1981, Combustion IR
Instrument: TOC Cube Analyst: BF

Sampled: 03/21/2023 12:28
Analyzed: 06/30/2023 00:57

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: Plumb 1981	Sample Size: 0.5608 g (wet)	Extract ID: 23E0176-27 A
	Preparation Batch: BLF0739	Final Volume: 0.5608 g	Dry Weight: 0.27 g
	Prepared: 06/26/2023		% Solids: 48.35

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Organic Carbon		1	0.02	0.02	0.35	%	



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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

MAWG-4C2
23E0176-27 (Solid)

Wet Chemistry

Method: SM 2540 G-97

Sampled: 03/21/2023 12:28

Instrument: BAL2 Analyst: UW

Analyzed: 06/27/2023 09:39

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem	Sample Size: 5 g (wet)	Extract ID: 23E0176-27
	Preparation Batch: BLF0759	Final Volume: 5 g	Dry Weight: 2.42 g
	Prepared: 06/27/2023		% Solids: 48.35

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Total Solids		1	0.04	0.04	48.35	%	



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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

Analysis by: Analytical Resources, LLC

Wet Chemistry - Quality Control

Batch BLF0737 - Plumb 1981, Combustion IR

Instrument: TOC Cube Analyst: CDE

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Blank (BLF0737-BLK1)					Prepared: 26-Jun-2023 Analyzed: 26-Jun-2023 22:48					
Total Organic Carbon	ND	0.02	0.02	%						U
LCS (BLF0737-BS1)					Prepared: 26-Jun-2023 Analyzed: 27-Jun-2023 02:19					
Total Organic Carbon	43.4	0.02	0.02	%	44.4		97.7 80-120			
Total Carbon	44.1	0.02	0.02	%	44.4		99.3 80-120			



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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

Analysis by: Analytical Resources, LLC

Wet Chemistry - Quality Control

Batch BLF0738 - Plumb 1981, Combustion IR

Instrument: TOC Cube Analyst: CDE

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BLF0738-BLK1)						Prepared: 26-Jun-2023 Analyzed: 26-Jun-2023 23:18					
Total Organic Carbon	ND	0.02	0.02	%							U
LCS (BLF0738-BS1)						Prepared: 26-Jun-2023 Analyzed: 27-Jun-2023 02:49					
Total Organic Carbon	43.0	0.02	0.02	%	44.4		96.8	80-120			
Total Carbon	44.1	0.02	0.02	%	44.4		99.2	80-120			
Duplicate (BLF0738-DUP1)						Source: 23E0176-05 Prepared: 26-Jun-2023 Analyzed: 27-Jun-2023 06:50					
Total Organic Carbon	0.47	0.02	0.02	%		0.52			8.24	20	
Total Carbon	2.27	0.02	0.02	%		2.42			6.24	20	
Total Inorganic Carbon	1.79	0.02	0.02	%		1.90			5.82	20	
Matrix Spike (BLF0738-MS1)						Source: 23E0176-05 Prepared: 26-Jun-2023 Analyzed: 27-Jun-2023 08:21					
Total Organic Carbon	1.75	0.02	0.02	%	1.31	0.52	94.4	75-125			
Total Carbon	3.61	0.02	0.02	%	1.31	2.42	91.6	75-125			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.



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Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

Analysis by: Analytical Resources, LLC

Wet Chemistry - Quality Control

Batch BLF0739 - Plumb 1981, Combustion IR

Instrument: TOC Cube Analyst: CDE

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BLF0739-BLK1)					Prepared: 26-Jun-2023 Analyzed: 26-Jun-2023 23:48						
Total Organic Carbon	ND	0.02	0.02	%							U
LCS (BLF0739-BS1)					Prepared: 26-Jun-2023 Analyzed: 27-Jun-2023 03:19						
Total Organic Carbon	43.0	0.02	0.02	%	44.4		96.6	80-120			
Total Carbon	44.2	0.02	0.02	%	44.4		99.4	80-120			
Duplicate (BLF0739-DUP1)					Source: 23E0176-25 Prepared: 26-Jun-2023 Analyzed: 27-Jun-2023 09:22						
Total Organic Carbon	0.49	0.02	0.02	%		0.47			2.88	20	
Total Carbon	3.76	0.02	0.02	%		4.05			7.58	20	
Total Inorganic Carbon	3.27	0.02	0.02	%		3.58			8.96	20	
Matrix Spike (BLF0739-MS1)					Source: 23E0176-25 Prepared: 26-Jun-2023 Analyzed: 27-Jun-2023 09:52						
Total Organic Carbon	2.21	0.02	0.02	%	1.86	0.47	93.6	75-125			
Total Carbon	5.45	0.02	0.02	%	1.86	4.05	74.9	75-125			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

Analysis by: Analytical Resources, LLC

Wet Chemistry - Quality Control

Batch BLF0753 - SM 2540 G-97

Instrument: BAL2 Analyst: UW

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD Limit	Notes
Blank (BLF0753-BLK1)									
Prepared: 26-Jun-2023 Analyzed: 26-Jun-2023 16:21									
Total Solids	ND	0.04	0.04	%					U



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

Analysis by: Analytical Resources, LLC

Wet Chemistry - Quality Control

Batch BLF0755 - SM 2540 G-97

Instrument: BAL2 Analyst: UW

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Blank (BLF0755-BLK1)					Prepared: 26-Jun-2023 Analyzed: 26-Jun-2023 16:44					
Total Solids	ND	0.04	0.04	%						U
Duplicate (BLF0755-DUP1)					Source: 23E0176-05 Prepared: 26-Jun-2023 Analyzed: 26-Jun-2023 16:44					
Total Solids	45.41	0.04	0.04	%		46.54		2.45	20	
Duplicate (BLF0755-DUP2)					Source: 23E0176-05 Prepared: 26-Jun-2023 Analyzed: 26-Jun-2023 16:44					
Total Solids	46.04	0.04	0.04	%		46.54		1.08	20	



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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

Analysis by: Analytical Resources, LLC

Wet Chemistry - Quality Control

Batch BLF0759 - SM 2540 G-97

Instrument: BAL2 Analyst: UW

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD Limit	Notes
Blank (BLF0759-BLK1)					Prepared: 27-Jun-2023 Analyzed: 27-Jun-2023 09:39				
Total Solids	ND	0.04	0.04	%					U



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Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

Certified Analyses included in this Report

Analyte	Certifications		
Plumb 1981, Combustion IR in Solid			
Total Organic Carbon		DoD-ELAP	
Code	Description	Number	Expires
ADEC	Alaska Dept of Environmental Conservation	17-015	03/28/2025
DoD-ELAP	DoD-Environmental Laboratory Accreditation Program, PJLA Testing	66169	02/28/2025
NELAP	ORELAP - Oregon Laboratory Accreditation Program	WA100006-012	05/12/2023
WADOE	WA Dept of Ecology	C558	06/30/2023
WA-DW	Ecology - Drinking Water	C558	06/30/2023



Tetra Tech, Inc. (Lafayette)
3697 Mt Diablo Blvd, Suite 150
Lafayette CA, 94549

Project: Gulf of Thailand
Project Number: T423.19
Project Manager: Ted Donn

Reported:
11-Jul-2023 10:52

Notes and Definitions

U	This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
[2C]	Indicates this result was quantified on the second column on a dual column analysis.

Report of Samples Analysis

Issued Date : 10 May 2023
Customer : Tetra Tech Inc.
 77 Soi Udomsuk 39/1, Sukhumvit 103 Road, Bangchak,
 Phrakhanong, Bangkok 10260
 Tel : 0 2361 3767 Fax : 0 2361 3768
Tested by : Physical Analysis Section,
 Technical Support for Material Analysis Division, MTEC
Date received : 18 April 2023
Date analyzed : 26 April 2023
Samples : Seabed Sediment No.28 – 39 of 51 samples.
Identification No. : See sample detail
Instrument : Mastersizer 2000, Malvern Instruments.
Test method : Laser diffraction technique.
Analytical conditions : Red light source : He-Ne laser source, λ : 633 nm.
 Blue light source : Solid state light source
 Beam length : 2.35 mm.
 Particle size range analysis : 0.02 – 2,000 μm .
 Dispersion unit : Hydro 2000S (A)
 Dispersing medium : De-ionized water
 Treatment : Ultrasound 10 minutes with ultrasonic bath.
 : Stir at 2000 rpm during measuring.
 Sample refractive index : 1.5300 (as default standard wet)
 Number of experiments : 3
 Laser power : 86.6

Sample preparation : 1. Prepare the instrument for wet analysis. Stirrer should be
 set at 2000 rpm on Hydro 2000S (A).
 2. 10 – 50 ml. of sample was dispersed and ultrasound
 10 minutes with ultrasonic bath.
 3. Add the dispersed sample into Hydro 2000S (A) unit and
 measure the dispersed sample with Mastersizer 2000.
 4. All measurements are made three times.

Samples detail :

Sample No.	Sample Name	Sample No.	Sample Name
1	MAWC-1B2X	7	MAWD-1B2X
2	MAWC-1C2	8	MAWD-1C2
3	MAWC-2B2X	9	MAWD-2C2X
4	MAWC-3B2X	10	MAWD-3B2
5	MAWC-3C2	11	MAWD-3C2X
6	MAWC-4B2X	12	MAWD-4B2X

Technical Terms

:

Obscuration : value at particle come cover to laser beam (percent), ranging from 10 – 30%.

Residual : on error value of analysis. This value should be less than 5%.

D [4, 3] : mean diameter value by volume.

D [3, 2] : mean diameter value by surface area.

D (v, 0.1) : 10 volume percent less than or equal to a given diameter.

D (v, 0.5) : 50 volume percent less than or equal to a given diameter, median diameter.

D (v, 0.9) : 90 volume percent less than or equal to a given diameter.

Span : the width of the distribution, which is independent of median size (D (v, 0.5)).

Uniformity : a measure of the absolute deviations from the median(D (v, 0.5)).

Specific S.A. : specific surface area, calculated from density and D [3, 2] of a sample.

Results :

MTEC received samples from Tetra Tech Inc. Laser diffraction technique is used in order to analyze the particle size and size distribution by wet analysis.

The results of the particle size and size distribution of samples are shown in tables 1 – 24 and the attachments No.1 – 36.

Table 1 Mastersizer 2000 results of MAWC-1B2X

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	37.78	1.33	17.89	73.61	4.04
	2	34.69	1.33	17.81	72.24	3.98
	3	37.87	1.36	18.15	74.26	4.02
2	1	38.09	1.36	18.28	76.20	4.09
	2	35.74	1.34	17.96	72.38	3.96
	3	37.89	1.36	18.25	74.34	4.00
3	1	34.96	1.35	17.98	72.06	3.93
	2	34.32	1.35	17.99	71.26	3.89
	3	35.65	1.34	18.00	73.19	3.99
Mean		36.33	1.35	18.03	73.28	3.99
STD		1.56	0.01	0.16	1.51	0.06
RSD%		4.29	0.80	0.90	2.06	1.51

Table 2 Mastersizer 2000 results of MAWC-1B2X (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 - 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	23.69	63.49	12.83	29.87
	2	23.59	63.79	12.61	29.66
	3	23.25	63.73	13.02	29.81
2	1	23.15	63.46	13.39	29.94
	2	23.33	64.11	12.56	29.75
	3	23.08	63.83	13.08	29.96
3	1	23.25	64.18	12.58	29.77
	2	23.25	64.36	12.39	29.84
	3	23.23	63.95	12.82	29.61
Mean		23.31	63.88	12.81	29.80
STD		0.20	0.30	0.31	0.12

Table 3 Mastersizer 2000 results of MAWC-1C2

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	34.60	1.57	17.81	81.69	4.50
	2	36.28	1.57	17.86	82.69	4.54
	3	35.94	1.57	17.76	83.12	4.59
2	1	34.90	1.55	17.50	81.30	4.56
	2	35.92	1.56	17.64	83.09	4.62
	3	34.97	1.53	17.00	78.77	4.55
3	1	34.85	1.54	17.07	79.74	4.58
	2	35.70	1.52	16.71	77.95	4.57
	3	35.10	1.51	16.66	78.51	4.62
Mean		35.36	1.55	17.33	80.76	4.57
STD		0.60	0.02	0.48	2.06	0.04
RSD%		1.70	1.45	2.76	2.55	0.87

Table 4 Mastersizer 2000 results of MAWC-1C2 (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 - 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	22.50	62.97	14.53	29.60
	2	22.50	62.77	14.73	29.72
	3	22.56	62.68	14.76	29.68
2	1	22.76	62.78	14.47	29.21
	2	22.71	62.45	14.85	29.41
	3	23.19	62.89	13.91	29.34
3	1	23.12	62.86	14.02	29.33
	2	23.47	62.81	13.72	29.33
	3	23.53	62.78	13.69	29.42
Mean		22.93	62.78	14.30	29.45
STD		0.41	0.15	0.46	0.18

Table 5 Mastersizer 2000 results of MAWC-2B2X

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	27.77	1.41	15.17	58.34	3.75
	2	26.69	1.40	14.89	55.28	3.62
	3	26.67	1.41	15.10	56.69	3.66
2	1	27.53	1.41	15.19	58.04	3.73
	2	26.53	1.40	15.00	56.35	3.66
	3	27.20	1.41	15.17	58.42	3.76
3	1	26.60	1.40	14.81	55.64	3.66
	2	27.82	1.41	14.99	57.13	3.72
	3	27.90	1.39	14.88	57.63	3.78
Mean		27.19	1.40	15.02	57.06	3.71
STD		0.58	0.01	0.14	1.15	0.05
RSD%		2.12	0.48	0.95	2.02	1.47

Table 6 Mastersizer 2000 results of MAWC-2B2X (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	25.38	65.85	8.78	28.94
	2	25.61	66.68	7.72	28.99
	3	25.34	66.45	8.21	28.93
2	1	25.27	66.04	8.70	28.86
	2	25.43	66.47	8.10	28.82
	3	25.29	65.90	8.81	28.91
3	1	25.49	66.62	7.89	28.73
	2	25.27	66.30	8.42	28.63
	3	25.29	66.11	8.60	28.56
Mean		25.37	66.27	8.36	28.82
STD		0.12	0.31	0.40	0.15

Table 7 Mastersizer 2000 results of MAWC-3B2X

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	35.41	1.58	19.65	81.66	4.08
	2	33.96	1.57	19.28	80.02	4.07
	3	34.77	1.56	19.06	80.04	4.12
2	1	33.84	1.55	18.74	77.64	4.06
	2	35.83	1.56	18.97	80.62	4.17
	3	34.41	1.55	18.73	78.48	4.11
3	1	35.47	1.56	18.95	82.52	4.27
	2	34.91	1.54	18.44	80.70	4.29
	3	35.27	1.53	18.47	80.10	4.25
Mean		34.87	1.55	18.92	80.20	4.16
STD		0.69	0.02	0.39	1.48	0.09
RSD%		1.99	0.99	2.04	1.84	2.23

Table 8 Mastersizer 2000 results of MAWC-3B2X (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	22.57	61.86	15.57	34.35
	2	22.54	62.28	15.18	34.03
	3	22.62	62.31	15.07	33.77
2	1	22.82	62.68	14.51	33.99
	2	22.64	62.15	15.21	33.64
	3	22.80	62.54	14.66	33.41
3	1	22.68	61.81	15.51	33.61
	2	23.00	61.89	15.12	33.37
	3	23.05	61.98	14.97	33.56
Mean		22.75	62.17	15.09	33.75
STD		0.18	0.31	0.35	0.32

Table 9 Mastersizer 2000 results of MAWC-3C2

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	26.60	1.51	14.66	61.12	4.07
	2	26.74	1.52	14.70	61.99	4.11
	3	26.27	1.51	14.46	60.78	4.10
2	1	26.80	1.51	14.50	60.81	4.09
	2	26.74	1.52	14.47	62.16	4.19
	3	26.48	1.51	14.43	61.53	4.16
3	1	26.29	1.50	14.12	60.10	4.15
	2	26.70	1.51	14.42	61.59	4.17
	3	26.59	1.49	14.01	60.76	4.23
Mean		26.58	1.51	14.42	61.21	4.14
STD		0.20	0.01	0.23	0.67	0.05
RSD%		0.74	0.67	1.56	1.09	1.27

Table 10 Mastersizer 2000 results of MAWC-3C2 (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	25.00	65.42	9.58	30.02
	2	24.88	65.27	9.85	29.67
	3	25.07	65.44	9.49	29.44
2	1	25.03	65.47	9.50	29.66
	2	25.00	65.10	9.90	29.23
	3	25.01	65.27	9.72	29.42
3	1	25.17	65.53	9.30	29.26
	2	24.90	65.37	9.73	29.41
	3	25.16	65.35	9.49	29.05
Mean		25.02	65.36	9.62	29.46
STD		0.10	0.13	0.20	0.29

Table 11 Mastersizer 2000 results of MAWC-4B2X

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	92.49	2.26	41.66	250.71	5.96
	2	91.89	2.25	41.44	247.00	5.91
	3	94.61	2.22	40.56	248.75	6.08
2	1	87.93	1.86	33.30	251.03	7.48
	2	99.93	1.94	36.13	301.76	8.30
	3	99.75	1.88	34.15	282.29	8.21
3	1	90.07	1.85	33.77	256.92	7.55
	2	88.83	1.83	33.11	253.31	7.60
	3	94.51	1.84	33.87	277.84	8.15
Mean		93.34	1.99	36.44	263.29	7.25
STD		4.34	0.19	3.70	19.29	1.00
RSD%		4.65	9.55	10.14	7.33	13.73

Table 12 Mastersizer 2000 results of MAWC-4B2X (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	15.34	44.96	39.70	73.18
	2	15.44	44.91	39.66	78.62
	3	15.60	45.27	39.13	78.64
2	1	18.24	46.45	35.31	63.03
	2	17.59	44.45	37.95	76.89
	3	18.08	45.53	36.39	71.72
3	1	18.32	45.39	36.29	72.49
	2	18.50	45.69	35.82	72.69
	3	18.35	44.90	36.75	60.13
Mean		17.27	45.28	37.44	71.93
STD		1.39	0.58	1.71	6.47

Table 13 Mastersizer 2000 results of MAWD-1B2X

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	25.20	1.56	16.34	55.01	3.27
	2	25.04	1.57	16.29	54.88	3.27
	3	25.01	1.59	16.45	55.10	3.25
2	1	24.43	1.58	16.00	54.01	3.28
	2	24.49	1.58	15.99	53.91	3.27
	3	25.25	1.56	15.77	54.25	3.34
3	1	24.83	1.56	15.64	54.44	3.38
	2	24.68	1.56	15.42	53.14	3.35
	3	25.00	1.56	15.67	54.39	3.37
Mean		24.88	1.57	15.95	54.35	3.31
STD		0.29	0.01	0.35	0.62	0.05
RSD%		1.18	0.59	2.22	1.14	1.48

Table 14 Mastersizer 2000 results of MAWD-1B2X (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	22.90	69.74	7.36	29.55
	2	22.78	69.92	7.29	29.51
	3	22.57	70.06	7.37	29.58
2	1	22.78	70.19	7.03	29.04
	2	22.81	70.27	6.93	29.40
	3	22.99	69.86	7.15	29.12
3	1	23.11	69.66	7.23	29.03
	2	23.27	70.02	6.71	28.98
	3	23.11	69.69	7.20	29.15
Mean		22.93	69.93	7.14	29.26
STD		0.22	0.22	0.22	0.24

Table 15 Mastersizer 2000 results of MAWD-1C2

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	35.89	1.39	16.86	74.79	4.35
	2	32.14	1.65	17.99	66.17	3.59
	3	36.18	1.61	17.34	69.71	3.93
2	1	33.13	1.59	16.97	67.42	3.88
	2	33.77	1.58	16.85	67.42	3.91
	3	36.39	1.57	16.60	67.61	3.98
3	1	32.94	1.57	16.65	68.83	4.04
	2	32.83	1.54	16.18	66.87	4.04
	3	33.33	1.57	16.54	68.55	4.05
Mean		34.07	1.56	16.89	68.60	3.97
STD		1.63	0.07	0.52	2.55	0.20
RSD%		4.78	4.54	3.09	3.72	5.07

Table 16 Mastersizer 2000 results of MAWD-1C2 (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	23.81	63.22	12.97	29.61
	2	21.62	67.33	11.06	29.61
	3	22.11	66.12	11.77	28.89
2	1	22.40	66.33	11.28	28.84
	2	22.51	66.22	11.27	28.80
	3	22.71	66.02	11.27	28.46
3	1	22.77	65.65	11.58	28.74
	2	23.10	65.83	11.07	28.00
	3	22.84	65.66	11.51	28.63
Mean		22.65	65.82	11.53	28.84
STD		0.62	1.10	0.59	0.51

Table 17 Mastersizer 2000 results of MAWD-2C2X

No.of measurement	Sub-run	D [4,3] (μm)	D (v,0.1) (μm)	D (v,0.5) (μm)	D (v,0.9) (μm)	Span
1	1	34.09	1.74	13.30	83.72	6.17
	2	34.40	1.73	13.24	80.36	5.94
	3	32.48	1.72	13.11	77.24	5.76
2	1	34.89	1.75	13.60	84.61	6.09
	2	32.47	1.74	13.34	80.18	5.88
	3	32.96	1.74	13.39	80.46	5.88
3	1	32.27	1.73	13.25	78.81	5.82
	2	33.18	1.74	13.36	81.85	6.00
	3	33.57	1.74	13.42	82.48	6.01
Mean		33.37	1.74	13.33	81.08	5.95
STD		0.93	0.01	0.14	2.33	0.13
RSD%		2.79	0.53	1.03	2.88	2.20

Table 18 Mastersizer 2000 results of MAWD-2C2X (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	23.31	62.63	14.05	26.51
	2	23.29	63.21	13.50	26.42
	3	23.31	63.62	13.07	26.09
2	1	22.89	62.79	14.32	26.31
	2	23.13	63.32	13.56	26.53
	3	23.09	63.23	13.68	26.03
3	1	23.21	63.49	13.30	26.28
	2	23.08	63.09	13.83	26.03
	3	23.07	63.17	13.77	26.50
Mean		23.15	63.17	13.68	26.30
STD		0.14	0.31	0.38	0.21

Table 19 Mastersizer 2000 results of MAWD-3B2

No.of measurement	Sub-run	D [4,3] (μm)	D (v,0.1) (μm)	D (v,0.5) (μm)	D (v,0.9) (μm)	Span
1	1	26.59	1.51	16.23	54.57	3.27
	2	26.48	1.52	16.36	55.27	3.29
	3	26.42	1.53	16.21	54.17	3.25
2	1	26.61	1.53	16.29	54.94	3.28
	2	25.82	1.52	15.95	53.17	3.24
	3	26.79	1.53	16.07	54.33	3.29
3	1	26.47	1.52	15.87	53.85	3.30
	2	26.09	1.51	15.80	53.67	3.30
	3	25.89	1.51	15.71	54.11	3.35
Mean		26.35	1.52	16.06	54.23	3.28
STD		0.34	0.01	0.23	0.64	0.03
RSD%		1.29	0.61	1.45	1.19	0.99

Table 20 Mastersizer 2000 results of MAWD-3B2 (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	23.26	69.35	7.40	28.34
	2	23.05	69.29	7.66	28.41
	3	23.02	69.74	7.24	28.27
2	1	22.99	69.48	7.53	28.48
	2	23.25	69.89	6.87	28.22
	3	23.13	69.55	7.33	28.25
3	1	23.27	69.54	7.19	27.97
	2	23.34	69.57	7.09	28.11
	3	23.40	69.29	7.31	27.86
Mean		23.19	69.52	7.29	28.21
STD		0.15	0.20	0.23	0.20

Table 21 Mastersizer 2000 results of MAWD-3C2X

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	35.08	1.72	16.30	73.06	4.38
	2	33.76	1.73	16.31	72.59	4.34
	3	35.32	1.73	16.29	71.73	4.30
2	1	34.90	1.74	16.29	73.96	4.43
	2	34.36	1.72	15.99	70.74	4.32
	3	36.24	1.72	15.97	71.44	4.37
3	1	36.17	1.71	15.79	74.70	4.62
	2	34.69	1.70	15.57	69.74	4.37
	3	36.55	1.71	15.81	74.88	4.63
Mean		35.23	1.72	16.04	72.54	4.42
STD		0.94	0.01	0.28	1.78	0.12
RSD%		2.66	0.69	1.72	2.45	2.81

Table 22 Mastersizer 2000 results of MAWD-3C2X (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	22.31	65.28	12.41	28.41
	2	22.21	65.52	12.28	28.37
	3	22.17	65.66	12.16	28.55
2	1	22.07	65.40	12.53	28.31
	2	22.26	65.79	11.96	28.19
	3	22.26	65.66	12.08	28.12
3	1	22.30	65.13	12.57	27.40
	2	22.46	65.82	11.72	27.88
	3	22.18	65.23	12.59	27.69
Mean		22.25	65.50	12.26	28.10
STD		0.11	0.25	0.30	0.38

Table 23 Mastersizer 2000 results of MAWD-4B2X

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	45.07	1.80	26.14	101.68	3.82
	2	44.11	1.80	26.16	102.06	3.83
	3	43.87	1.79	25.92	98.68	3.74
2	1	45.41	1.80	26.05	103.59	3.91
	2	44.63	1.77	25.53	99.48	3.83
	3	45.67	1.78	25.78	104.68	3.99
3	1	47.86	1.80	26.19	107.14	4.02
	2	46.63	1.79	25.76	104.72	4.00
	3	45.47	1.77	25.55	104.13	4.01
Mean		45.41	1.79	25.90	102.91	3.90
STD		1.24	0.01	0.26	2.70	0.10
RSD%		2.73	0.72	0.99	2.62	2.65

Table 24 Mastersizer 2000 results of MAWD-4B2X (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 - 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	18.55	60.18	21.27	37.65
	2	18.45	60.17	21.38	37.56
	3	18.48	60.65	20.87	38.11
2	1	18.36	60.14	21.50	37.58
	2	18.61	60.83	20.57	37.20
	3	18.51	60.07	21.43	36.87
3	1	18.35	59.69	21.96	37.49
	2	18.52	60.00	21.47	37.27
	3	18.75	59.81	21.44	37.50
Mean		18.51	60.17	21.32	37.47
STD		0.12	0.37	0.40	0.34

Note : 1. The specific surface area is inapplicable unless the density of a sample is known.
 2. The results of particle size distribution are dispersion particle only.
 3. Some particle of sample are vary size and size over range of instrument.

Interpretation/Opinion : None

Attached pages :

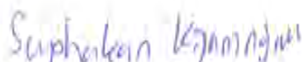
The attachment number	Detail
1 – 3	Mastersizer 2000 results of MAWC-1B2X
4 – 6	Mastersizer 2000 results of MAWC-1C2
7 – 9	Mastersizer 2000 results of MAWC-2B2X
10 – 12	Mastersizer 2000 results of MAWC-3B2X
13 – 15	Mastersizer 2000 results of MAWC-3C2
16 – 18	Mastersizer 2000 results of MAWC-4B2X
19 – 21	Mastersizer 2000 results of MAWD-1B2X
22 – 24	Mastersizer 2000 results of MAWD-1C2
25 – 27	Mastersizer 2000 results of MAWD-2C2X
28 – 30	Mastersizer 2000 results of MAWD-3B2
31 – 33	Mastersizer 2000 results of MAWD-3C2X
34 – 36	Mastersizer 2000 results of MAWD-4B2X

Work performed by :



(Mr.Arintarached Sirinantawittaya)

Approved by :



(Ms.Suphakan Kijamnajsuk)

Remark

1. MTEC does not allow any alteration or modification of this report, or any part of this report, without prior formal written permission from MTEC.
2. MTEC will not accept liability for any damage whatsoever, resulting directly or indirectly, from using data, results, conclusions or recommendations in this report for the purpose of designing, manufacturing or for other purposes.
3. Experimental results are only valid for the specimens tested.

Result : Analysis Report

Attached page 1

Sample Details

Sample ID : MAWC-1B2X_1

Measured : Wednesday, April 26, 2023 9:25:31

Sample File : D:\Data Mastersizer2000\Technical
sample\TS 66\MTEC0859_66_51sam_Tetratex-1.mea

Analysed : Wednesday, April 26, 2023 9:25:32

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

System Details

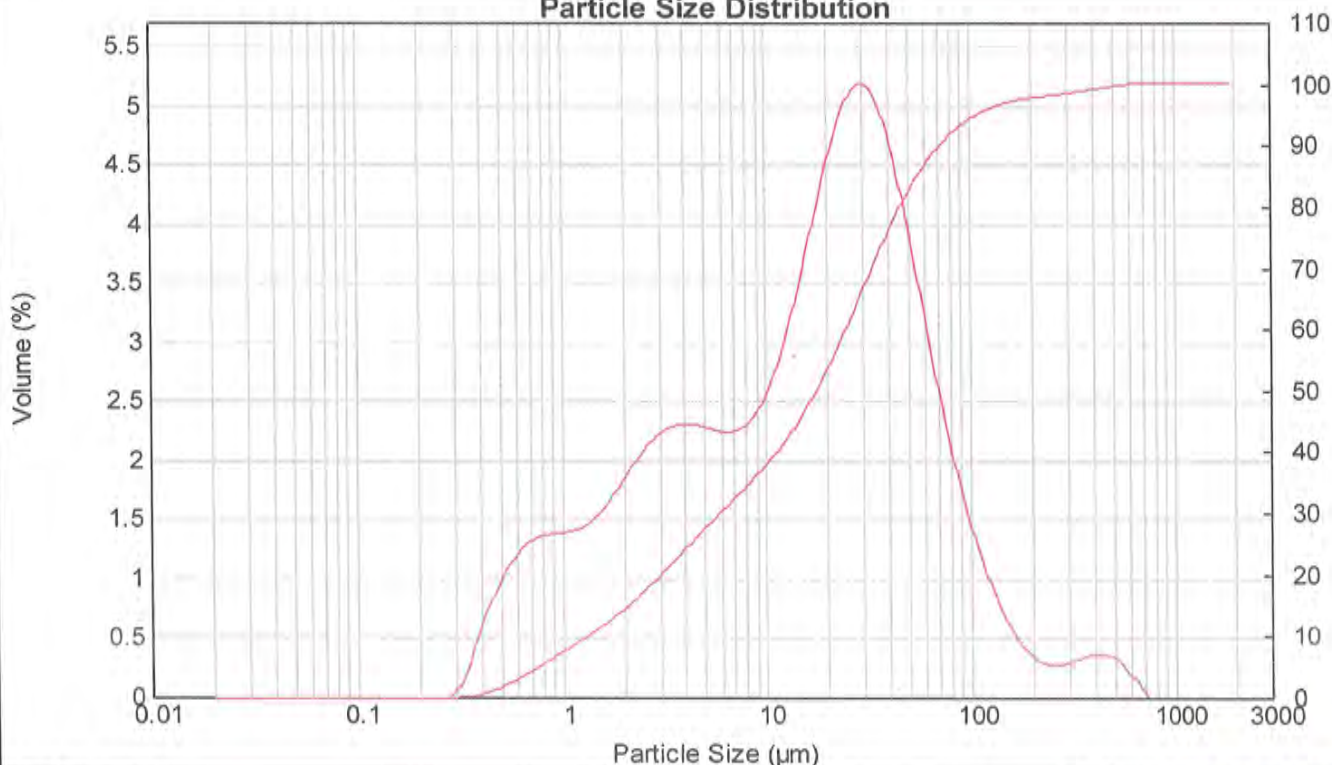
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.84 Residual (%) : 0.426
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0147 %Vol Specific Surface Area : 1.49 m²/g
Mean Diameters : D (0.1) : 1.33 um D (0.5) : 17.81 um D (0.9) : 72.24 um
D [4,3] 34.69 um D [3,2] : 4.02 um Span : 3.982 Uniformity : 1.61

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.41	7.962	2.36	58.573	3.01	430.887	0.35
0.023	0.00	0.172	0.00	1.262	1.47	9.283	2.55	68.291	2.42	502.377	0.29
0.027	0.00	0.200	0.00	1.471	1.59	10.823	2.86	79.621	1.90	585.729	0.15
0.032	0.00	0.233	0.00	1.715	1.74	12.619	3.28	92.832	1.46	682.910	0.01
0.037	0.00	0.272	0.02	2.000	1.92	14.713	3.77	108.234	1.10	796.214	0.00
0.043	0.00	0.317	0.21	2.332	2.08	17.154	4.28	126.191	0.80	926.318	0.00
0.050	0.00	0.370	0.58	2.719	2.21	20.000	4.74	147.128	0.56	1082.339	0.00
0.059	0.00	0.431	0.84	3.170	2.29	23.318	5.07	171.539	0.40	1261.915	0.00
0.068	0.00	0.502	1.08	3.696	2.31	27.187	5.19	200.000	0.30	1471.285	0.00
0.080	0.00	0.585	1.24	4.309	2.30	31.698	5.09	233.183	0.27	1715.392	0.00
0.093	0.00	0.683	1.33	5.024	2.27	36.957	4.76	271.871	0.29	2000.000	0.00
0.108	0.00	0.796	1.38	5.857	2.24	43.089	4.25	316.979	0.32		
0.126	0.00	0.928	1.39	6.829	2.26	50.238	3.64	369.570	0.35		
0.147	0.00	1.082		7.962		58.573		430.887			

Particle Size Distribution



Result : Analysis Report

Attached page 2

Sample Details

Sample ID : MAWC-1B2X_2

Measured : Wednesday, April 26, 2023 9:26:50

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS_66\MTEC0859_66_51sam_TetraTech_1.man

Analysed : Wednesday, April 26, 2023 9:26:51

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

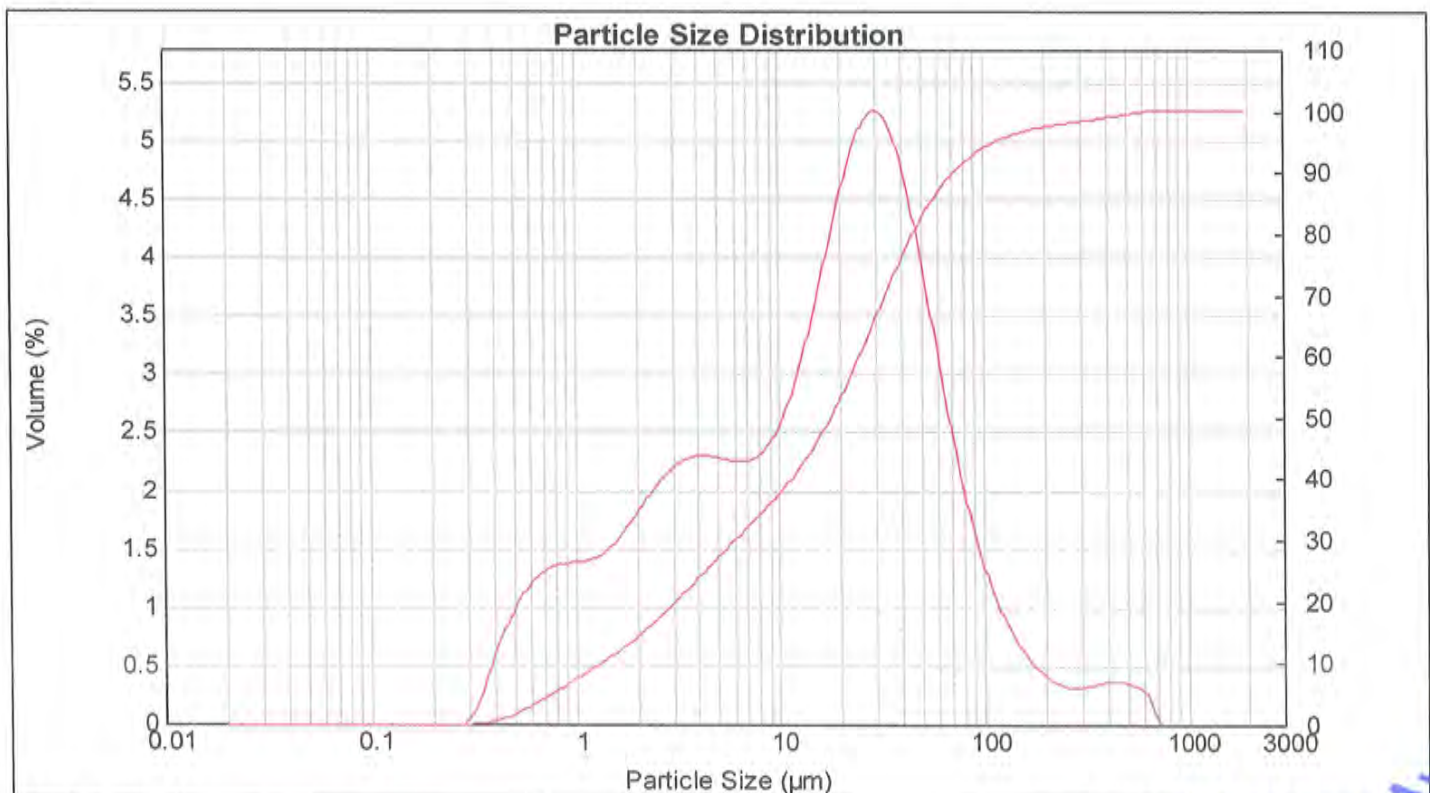
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.61 Residual (%) : 0.401
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0146 %Vol Specific Surface Area : 1.48 m²/g
Mean Diameters : D (0.1) : 1.34 um D (0.5) : 17.96 um D (0.9) : 72.38 um
D [4,3] : 35.74 um D [3,2] : 4.05 um Span : 3.955 Uniformity : 1.65

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.40	7.962	2.36	58.573	2.94	430.887	0.36
0.023	0.00	0.172	0.00	1.262	1.46	9.283	2.56	68.291	2.31	502.377	0.32
0.027	0.00	0.200	0.00	1.471	1.56	10.823	2.87	79.621	1.78	585.729	0.24
0.032	0.00	0.233	0.00	1.715	1.71	12.619	3.29	92.832	1.36	682.910	0.01
0.037	0.00	0.272	0.02	2.000	1.88	14.713	3.79	108.234	1.04	796.214	0.00
0.043	0.00	0.317	0.20	2.332	2.05	17.154	4.31	126.191	0.79	928.318	0.00
0.050	0.00	0.370	0.57	2.719	2.18	20.000	4.78	147.128	0.60	1082.339	0.00
0.059	0.00	0.431	0.84	3.170	2.25	23.318	5.13	171.539	0.46	1261.915	0.00
0.068	0.00	0.502	1.07	3.696	2.30	27.187	5.26	200.000	0.37	1471.285	0.00
0.080	0.00	0.586	1.23	4.309	2.30	31.698	5.16	233.183	0.32	1715.392	0.00
0.093	0.00	0.683	1.33	5.024	2.27	36.957	4.81	271.871	0.31	2000.000	0.00
0.108	0.00	0.796	1.37	5.857	2.25	43.089	4.27	316.979	0.33		
0.126	0.00	0.928	1.39	6.829	2.27	50.238	3.62	369.570	0.35		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 3

Sample Details

Sample ID : MAWC-1B2X_3

Measured : Wednesday, April 26, 2023 9:27:37

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS_66MTEC0859_66_51sam_Tetrattech-1.mea

Analysed : Wednesday, April 26, 2023 9:27:38

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

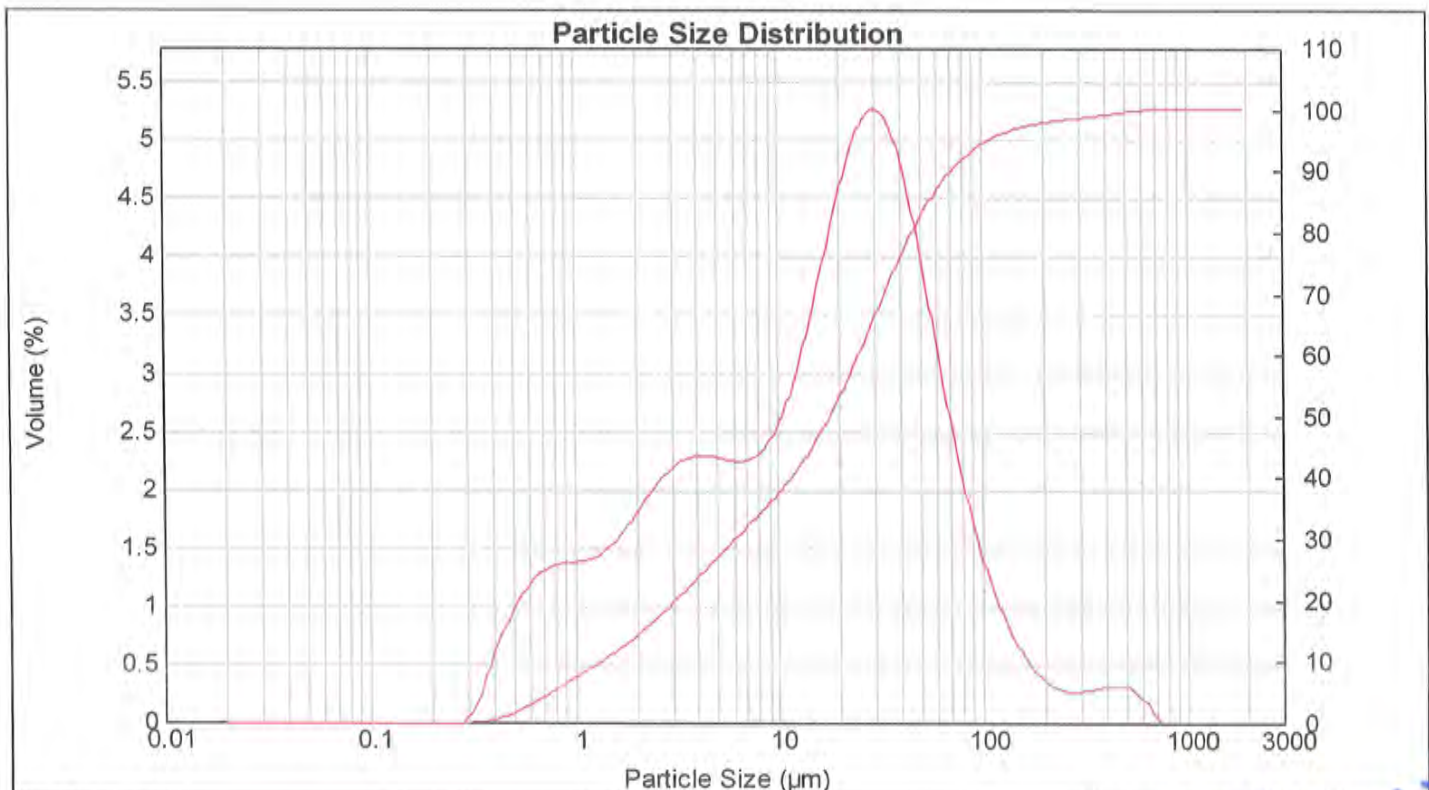
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.59 Residual (%) : 0.421
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0146 %Vol Specific Surface Area : 1.47 m²/g
Mean Diameters : D (0.1) : 1.35 um D (0.5) : 17.99 um D (0.9) : 71.26 um
D [4,3] : 34.32 um D [3,2] : 4.07 um Span : 3.886 Uniformity : 1.56

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.40	7.962	2.37	58.573	3.03	430.887	0.31
0.023	0.00	0.172	0.00	1.262	1.46	9.283	2.56	68.291	2.40	502.377	0.27
0.027	0.00	0.200	0.00	1.471	1.56	10.823	2.88	79.621	1.87	585.729	0.16
0.032	0.00	0.233	0.00	1.715	1.71	12.619	3.30	92.832	1.42	682.910	0.01
0.037	0.00	0.272	0.02	2.000	1.88	14.713	3.80	106.234	1.07	796.214	0.00
0.043	0.00	0.317	0.20	2.332	2.04	17.154	4.32	126.191	0.78	928.318	0.00
0.050	0.00	0.370	0.57	2.719	2.17	20.000	4.79	147.128	0.57	1082.339	0.00
0.059	0.00	0.431	0.83	3.170	2.25	23.318	5.13	171.539	0.41	1261.915	0.00
0.068	0.00	0.502	1.06	3.696	2.29	27.187	5.27	200.000	0.32	1471.285	0.00
0.080	0.00	0.586	1.23	4.309	2.29	31.698	5.17	233.183	0.27	1715.392	0.00
0.093	0.00	0.683	1.32	5.024	2.27	36.957	4.84	271.871	0.26	2000.000	0.00
0.108	0.00	0.796	1.37	5.857	2.25	43.089	4.32	316.979	0.28		
0.126	0.00	0.928	1.38	6.829	2.27	50.238	3.69	369.570	0.31		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 4

Sample Details

Sample ID : MAWC-1C2_1

Measured : Wednesday, April 26, 2023 9:48:27

Sample File : D:\Data Mastersizer2000\Technical
service\TS 66\MTec0859_66_51sam_Tetratosh 1.mea

Analysed : Wednesday, April 26, 2023 9:48:29

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

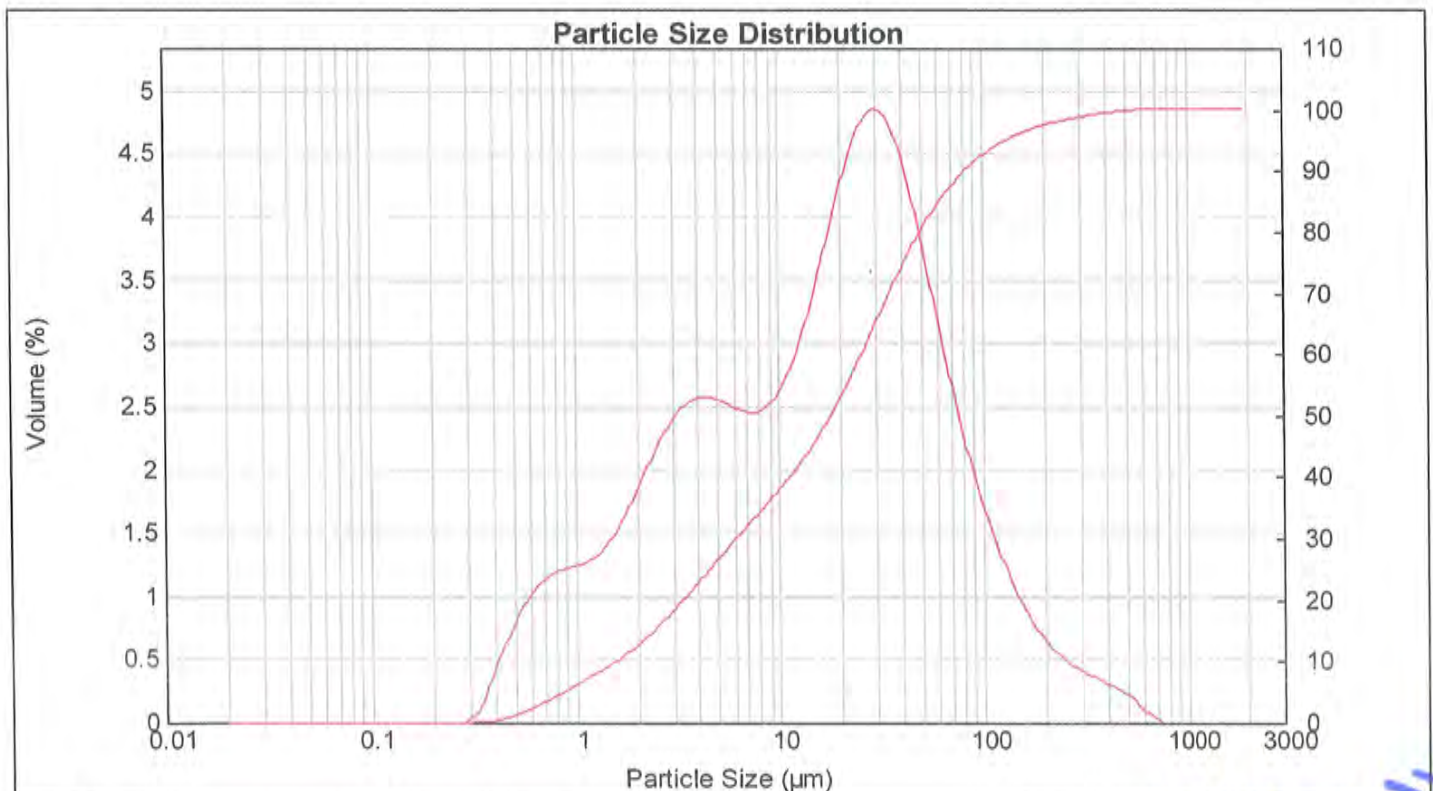
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.11 Residual (%) : 0.761
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0149 %Vol Specific Surface Area : 1.36 m²/g
Mean Diameters : D (0.1) : 1.57 um D (0.5) : 17.86 um D (0.9) : 82.69 um
D [4,3] : 36.28 um D [3,2] : 4.43 um Span : 4.542 Uniformity : 1.69

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.28	7.962	2.49	58.573	3.00	430.887	0.24
0.023	0.00	0.172	0.00	1.262	1.37	9.283	2.62	68.291	2.51	502.377	0.17
0.027	0.00	0.200	0.00	1.471	1.51	10.823	2.86	79.621	2.08	585.729	0.08
0.032	0.00	0.233	0.00	1.715	1.71	12.619	3.19	92.832	1.71	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.95	14.713	3.61	108.234	1.39	796.214	0.00
0.043	0.00	0.317	0.12	2.332	2.17	17.154	4.05	126.191	1.12	928.318	0.00
0.050	0.00	0.370	0.41	2.719	2.37	20.000	4.45	147.128	0.90	1082.339	0.00
0.059	0.00	0.431	0.66	3.170	2.57	23.318	4.74	171.539	0.72	1261.915	0.00
0.068	0.00	0.502	0.88	3.696	2.57	27.187	4.85	200.000	0.58	1471.285	0.00
0.080	0.00	0.586	1.05	4.309	2.53	31.698	4.05	233.183	0.36	1715.392	0.00
0.093	0.00	0.683	1.15	5.024	2.48	36.957	3.53	271.871	0.41	2000.000	0.00
0.108	0.00	0.796	1.21	5.857	2.45	43.089		316.979			
0.126	0.00	0.928	1.24	6.829		50.238		369.570			
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 5

Sample Details

Sample ID : MAWC-1C2_2

Measured : Wednesday, April 26, 2023 9:49:31

Sample File : D:\Data Mastersizer2000\Technical
sample\TS_66\MTEC0959_66_51um_Telrotech_1.mea

Analysed : Wednesday, April 26, 2023 9:49:32

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

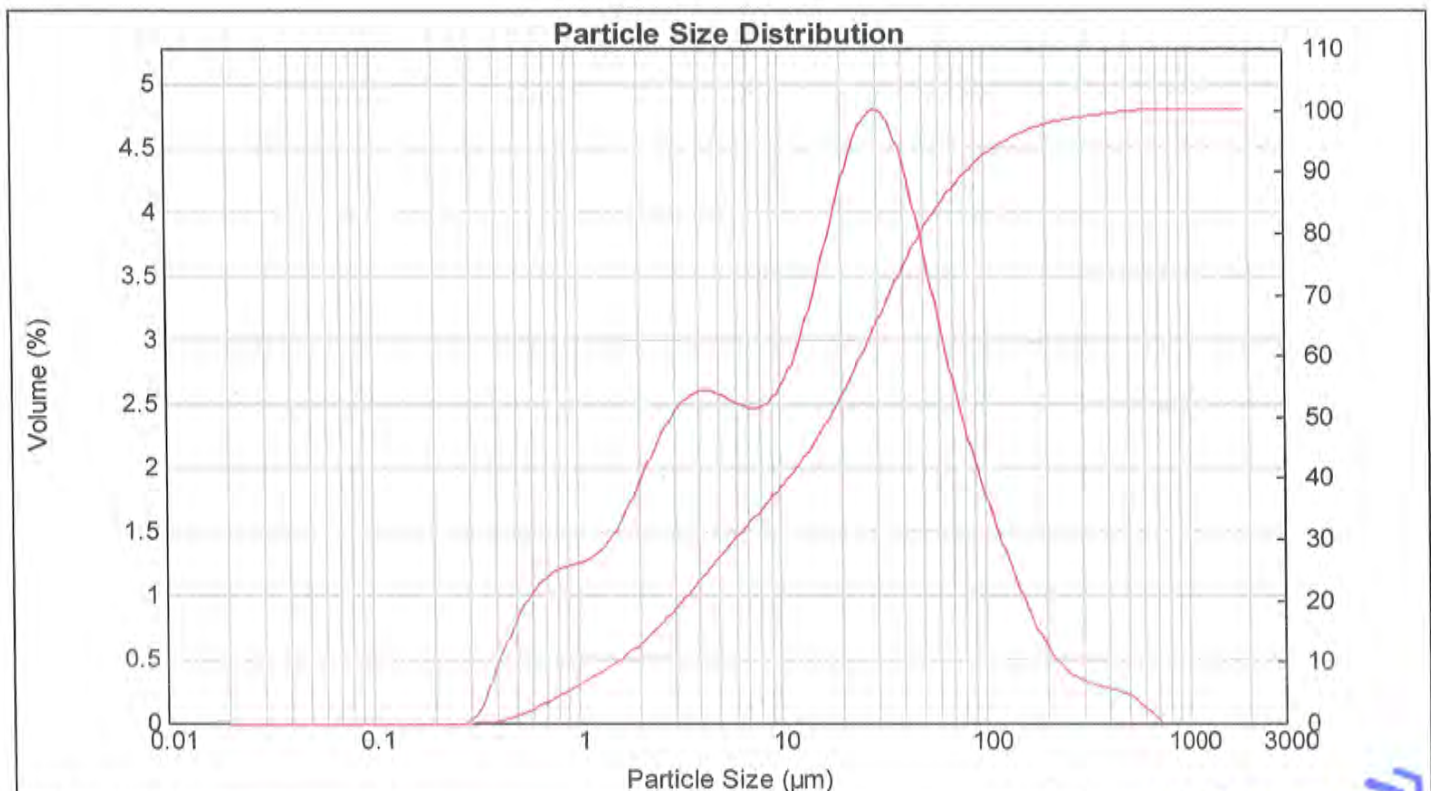
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.05 Residual (%) : 0.749
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0148 %Vol Specific Surface Area : 1.36 m²/g
Mean Diameters : D (0.1) : 1.56 um D (0.5) : 17.64 um D (0.9) : 83.09 um
D [4,3] : 35.92 um D [3,2] : 4.4 um Span : 4.623 Uniformity : 1.69

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.29	7.962	2.50	58.573	2.99	430.887	0.24
0.023	0.00	0.172	0.00	1.262	1.38	9.283	2.63	68.291	2.54	502.377	0.19
0.027	0.00	0.200	0.00	1.471	1.53	10.823	2.86	79.621	2.15	585.729	0.10
0.032	0.00	0.233	0.00	1.715	1.73	12.619	3.19	92.832	1.81	682.910	0.01
0.037	0.00	0.272	0.01	2.000	1.97	14.713	3.60	108.234	1.49	796.214	0.00
0.043	0.00	0.317	0.12	2.332	2.20	17.154	4.03	126.191	1.19	928.318	0.00
0.050	0.00	0.370	0.42	2.719	2.40	20.000	4.42	147.128	0.92	1082.339	0.00
0.059	0.00	0.431	0.89	3.170	2.53	23.318	4.70	171.539	0.70	1261.915	0.00
0.068	0.00	0.502	0.89	3.696	2.60	27.187	4.80	200.000	0.53	1471.285	0.00
0.080	0.00	0.586	1.05	4.309	2.60	31.698	4.70	233.183	0.41	1715.392	0.00
0.093	0.00	0.683	1.16	5.024	2.55	36.957	4.41	271.871	0.34	2000.000	0.00
0.108	0.00	0.796	1.21	5.857	2.50	43.089	3.98	316.979	0.30		
0.126	0.00	0.928	1.25	6.829	2.47	50.238	3.48	369.570	0.27		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 6

Sample Details

Sample ID : MAWC-1C2_3

Measured : Wednesday, April 26, 2023 9:51:06

Sample File : D:\Data Mastersizer2000\Technical
series\TS_66\MTec00859_66_51sam_Tetrastach 1.mea

Analysed : Wednesday, April 26, 2023 9:51:07

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

System Details

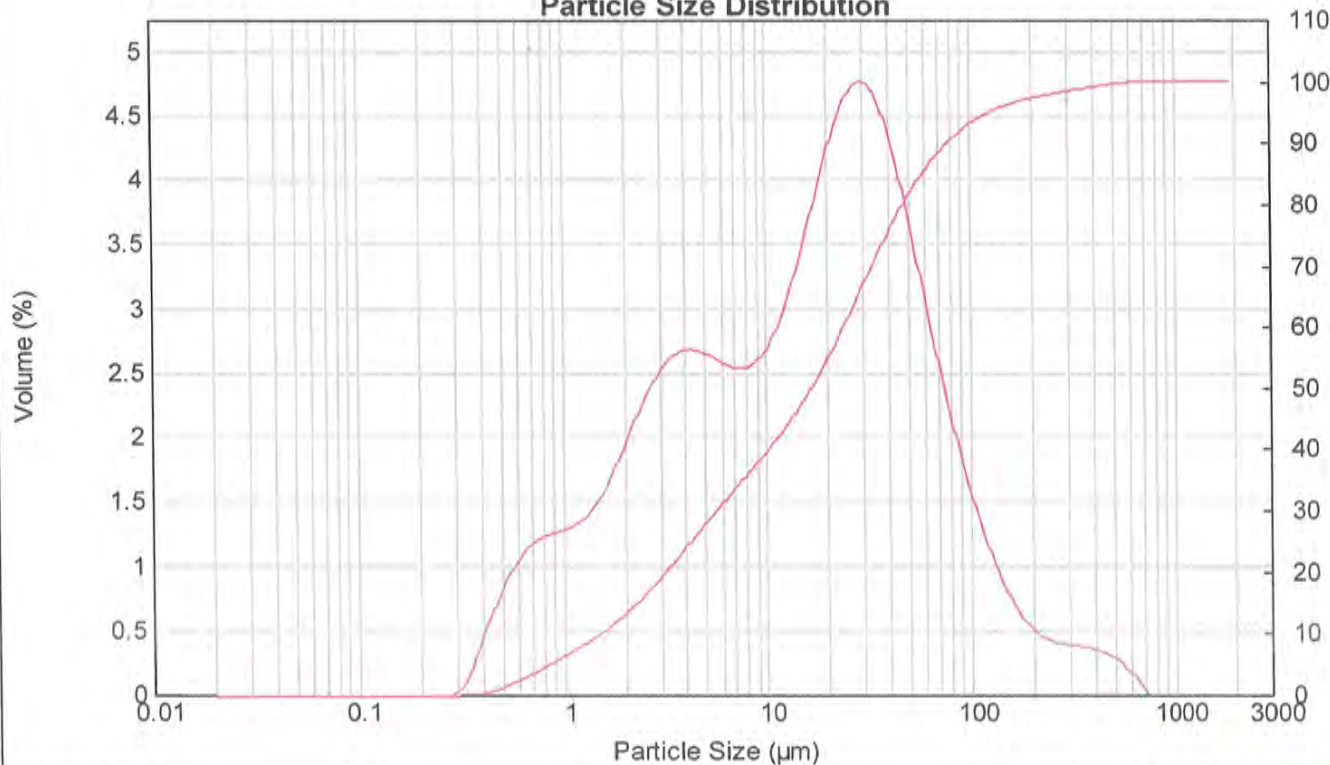
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 18.95 Residual (%) : 0.747
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0143 %Vol Specific Surface Area : 1.4 m²/g
Mean Diameters : D (0.1) : 1.51 um D (0.5) : 16.71 um D (0.9) : 77.95 um
D [4,3] : 35.7 um D [3,2] : 4.28 um Span : 4.574 Uniformity : 1.79

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.33	7.962	2.57	58.573	2.91	430.887	0.31
0.023	0.00	0.172	0.00	1.262	1.42	9.283	2.69	68.291	2.41	502.377	0.24
0.027	0.00	0.200	0.00	1.471	1.58	10.823	2.91	79.621	1.96	585.729	0.14
0.032	0.00	0.233	0.00	1.715	1.80	12.619	3.23	92.832	1.57	682.910	0.01
0.037	0.00	0.272	0.00	2.000	2.05	14.713	3.63	108.234	1.23	796.214	0.00
0.043	0.00	0.317	0.01	2.332	2.29	17.154	4.04	126.191	0.94	928.318	0.00
0.050	0.00	0.370	0.13	2.719	2.49	20.000	4.42	147.128	0.72	1082.339	0.00
0.059	0.00	0.431	0.43	3.170	2.62	23.318	4.68	171.539	0.56	1261.915	0.00
0.068	0.00	0.502	0.88	3.696	2.68	27.187	4.77	200.000	0.47	1471.285	0.00
0.080	0.00	0.586	0.91	4.309	2.68	31.698	4.67	233.183	0.41	1715.392	0.00
0.093	0.00	0.683	1.08	5.024	2.63	36.957	4.38	271.871	0.39	2000.000	0.00
0.108	0.00	0.796	1.19	5.857	2.57	43.089	3.95	316.979	0.38		
0.126	0.00	0.928	1.25	6.829	2.54	50.238	3.43	369.570	0.36		
0.147	0.00	1.082	1.28	7.962		58.573		430.887			

Particle Size Distribution



Result : Analysis Report

Attached page 7

Sample Details

Sample ID : MAWC-2B2X_1

Measured : Wednesday, April 26, 2023 10:03:52

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTEC0859_66_51sam_Tetratexh 1.mea

Analysed : Wednesday, April 26, 2023 10:03:54

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

System Details

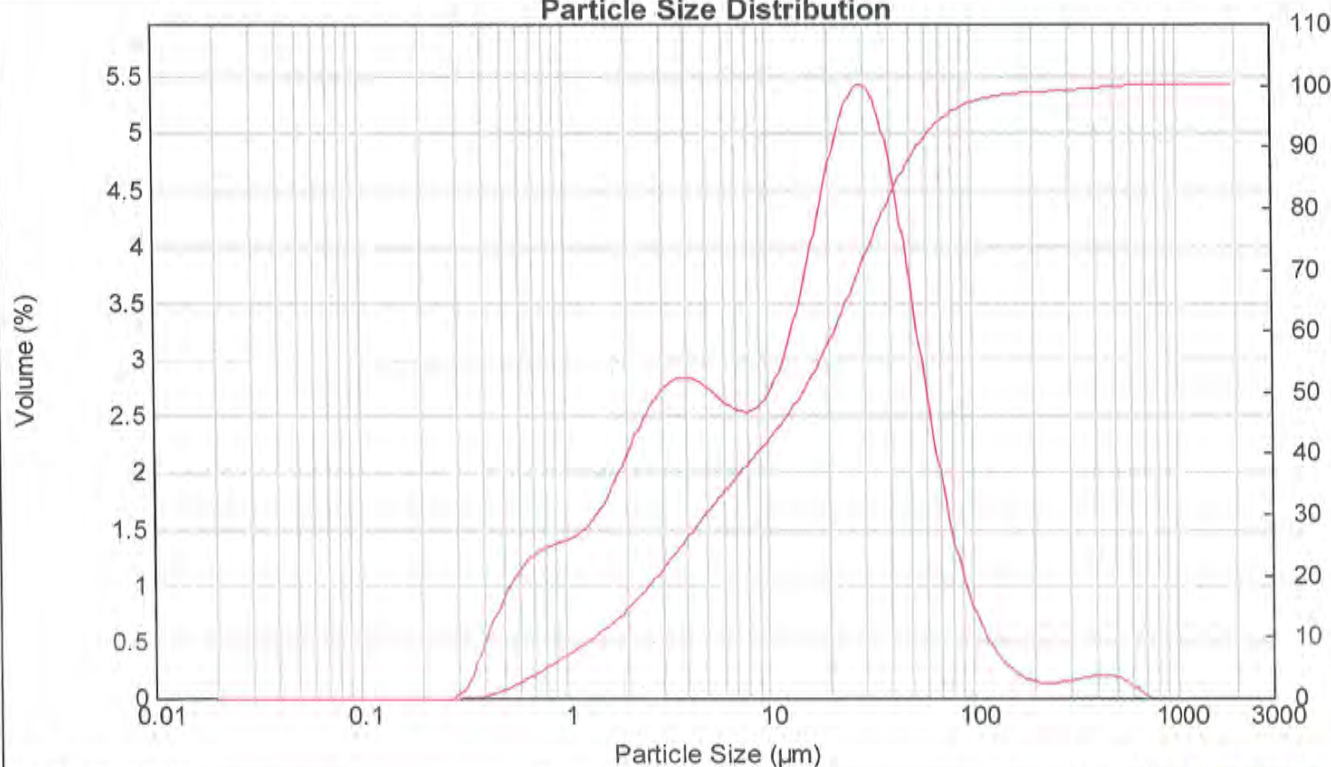
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.66 Residual (%) : 0.756
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0146 %Vol Specific Surface Area : 1.51 m²/g
Mean Diameters : D (0.1) : 1.39 um D (0.5) : 14.89 um D (0.9) : 55.28 um
D [4,3] : 26.69 um D [3,2] : 3.97 um Span : 3.620 Uniformity : 1.45

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.062	1.45	7.962	2.56	58.573	2.48	430.887	0.20
0.023	0.00	0.172	0.00	1.262	1.56	9.283	2.69	68.291	1.79	502.377	0.16
0.027	0.00	0.200	0.00	1.471	1.75	10.823	2.96	79.621	1.23	585.729	0.09
0.032	0.00	0.233	0.00	1.715	1.99	12.619	3.36	92.832	0.83	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.26	14.713	3.88	108.234	0.54	796.214	0.00
0.043	0.00	0.317	0.13	2.332	2.51	17.154	4.44	126.191	0.35	928.318	0.00
0.050	0.00	0.370	0.46	2.719	2.71	20.000	4.95	147.128	0.23	1082.339	0.00
0.059	0.00	0.431	0.74	3.170	2.82	23.318	5.44	171.539	0.16	1261.915	0.00
0.068	0.00	0.502	0.99	3.696	2.85	27.187	5.25	200.000	0.13	1471.285	0.00
0.080	0.00	0.596	1.17	4.309	2.72	31.698	4.78	233.183	0.15	1715.392	0.00
0.093	0.00	0.683	1.29	5.024	2.61	36.957	4.08	271.871	0.20	2000.000	0.00
0.108	0.00	0.796	1.36	5.857	2.55	43.069	3.28	316.979			
0.126	0.00	0.928	1.40	6.829		50.238		369.570			
0.147	0.00	1.062		7.962		58.573		430.887			

Particle Size Distribution



Result : Analysis Report

Attached page 8

Sample Details

Sample ID : MAWC-2B2X_2

Measured : Wednesday, April 26, 2023 10:04:56

Sample File : D:\Data Mastersizer2000\Technical
serial\TS_68MTEC0950_68_51cm_Tetratech_1.mea

Analysed : Wednesday, April 26, 2023 10:04:58

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

System Details

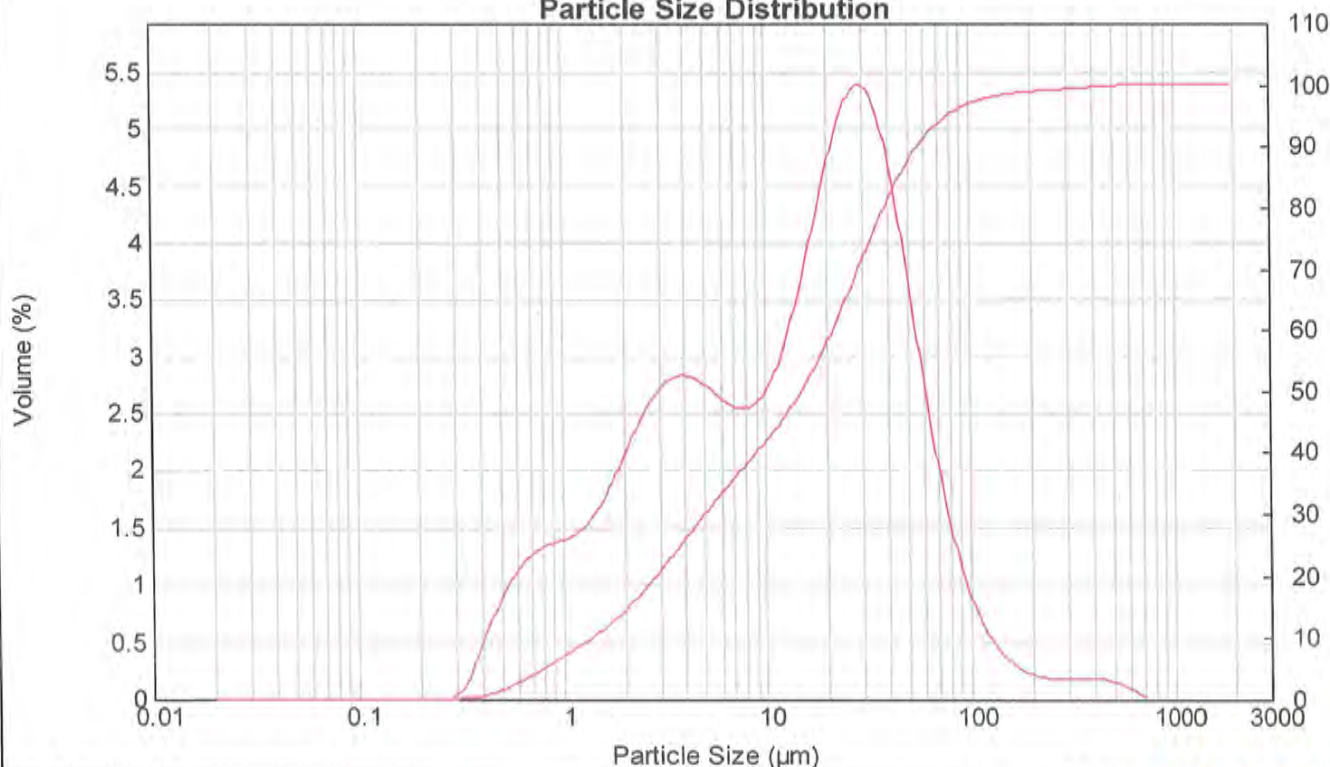
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.41 Residual (%) : 0.755
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0145 %Vol Specific Surface Area : 1.5 m²/g
Mean Diameters : D (0.1) : 1.4 um D (0.5) : 15 um D (0.9) : 56.35 um
D [4,3] : 26.53 um D [3,2] : 3.99 um Span : 3.663 Uniformity : 1.43

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.44	7.962	2.57	58.573	2.50	430.887	0.15
0.023	0.00	0.172	0.00	1.262	1.55	9.283	2.70	68.291	1.83	502.377	0.11
0.027	0.00	0.200	0.00	1.471	1.74	10.823	2.97	79.621	1.30	585.729	0.05
0.032	0.00	0.233	0.00	1.715	1.98	12.619	3.38	92.832	0.90	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.25	14.713	3.89	108.234	0.62	796.214	0.00
0.043	0.00	0.317	0.13	2.332	2.49	17.154	4.44	126.191	0.43	928.318	0.00
0.050	0.00	0.370	0.46	2.719	2.69	20.000	4.94	147.128	0.30	1082.339	0.00
0.059	0.00	0.431	0.73	3.170	2.80	23.318	5.29	171.539	0.22	1261.915	0.00
0.068	0.00	0.502	0.98	3.696	2.83	27.187	5.40	200.000	0.18	1471.285	0.00
0.080	0.00	0.586	1.16	4.309	2.79	31.698	5.21	233.183	0.16	1715.392	0.00
0.093	0.00	0.683	1.28	5.024	2.70	36.957	4.73	271.871	0.16	2000.000	0.00
0.108	0.00	0.796	1.35	5.857	2.61	43.089	4.05	316.979	0.16		
0.126	0.00	0.928	1.39	6.829	2.55	50.238	3.27	369.570	0.16		
0.147	0.00	1.082		7.962		58.573		430.887	0.16		

Particle Size Distribution



Result : Analysis Report

Attached page 9

Sample Details

Sample ID : MAWC-2B2X_3

Measured : Wednesday, April 26, 2023 10:07:03

Sample File : D:\Data Mastersizer2000\Technical
MTEC0809_06_53sam_TetraTech-1.mea

Analysed : Wednesday, April 26, 2023 10:07:04

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

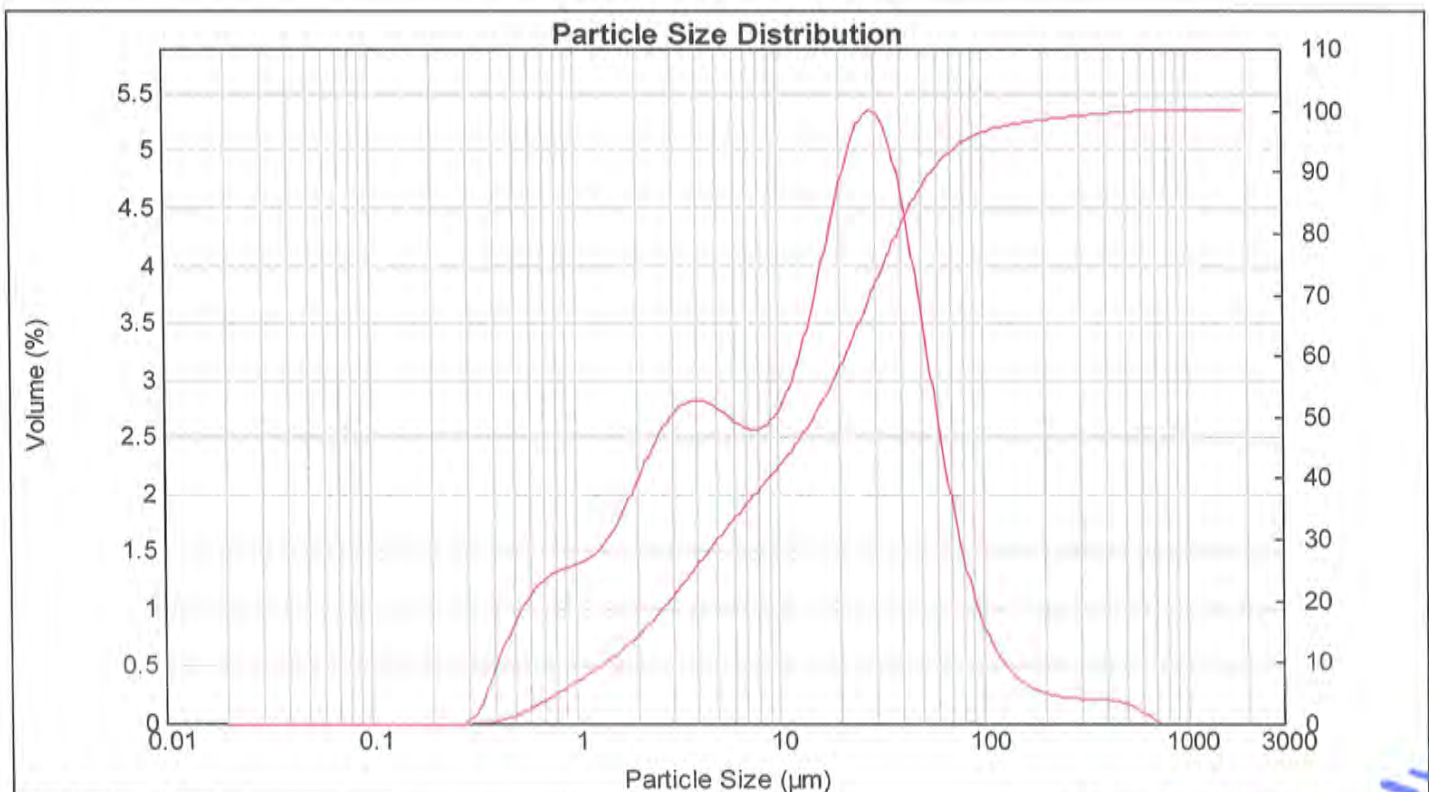
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.13 Residual (%) : 0.765
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0143 %Vol Specific Surface Area : 1.5 m²/g
Mean Diameters : D (0.1) : 1.41 um D (0.5) : 14.99 um D (0.9) : 57.13 um
D [4,3] : 27.82 um D [3,2] : 4.01 um Span : 3.717 Uniformity : 1.51

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.44	7.962	2.60	58.573	2.42	430.887	0.19
0.023	0.00	0.172	0.00	1.262	1.55	9.283	2.73	68.291	1.76	502.377	0.15
0.027	0.00	0.200	0.00	1.471	1.72	10.823	3.00	79.621	1.24	585.729	0.08
0.032	0.00	0.233	0.00	1.715	1.96	12.619	3.40	92.832	0.87	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.22	14.713	3.90	108.234	0.62	796.214	0.00
0.043	0.00	0.317	0.13	2.332	2.47	17.154	4.44	126.191	0.45	928.318	0.00
0.050	0.00	0.370	0.45	2.719	2.67	20.000	4.93	147.128	0.35	1082.339	0.00
0.059	0.00	0.431	0.72	3.170	2.79	23.318	5.27	171.539	0.28	1261.915	0.00
0.068	0.00	0.502	0.98	3.696	2.83	27.187	5.36	200.000	0.25	1471.285	0.00
0.080	0.00	0.586	1.16	4.309	2.80	31.698	5.16	233.183	0.23	1715.392	0.00
0.093	0.00	0.683	1.28	5.024	2.72	36.957	4.68	271.871	0.22	2000.000	0.00
0.108	0.00	0.796	1.34	5.857	2.63	43.089	3.98	316.979	0.22		
0.126	0.00	0.928	1.39	6.829	2.57	50.238	3.19	369.570	0.21		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 10

Sample Details

Sample ID : MAWC-3B2X_1

Measured : Wednesday, April 26, 2023 10:24:50

Sample File : D:\Data Mastersizer2000\Technical
series\TS 66\MTEC0859_66_51sam_Tetratosh 1.mex

Analysed : Wednesday, April 26, 2023 10:24:52

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

System Details

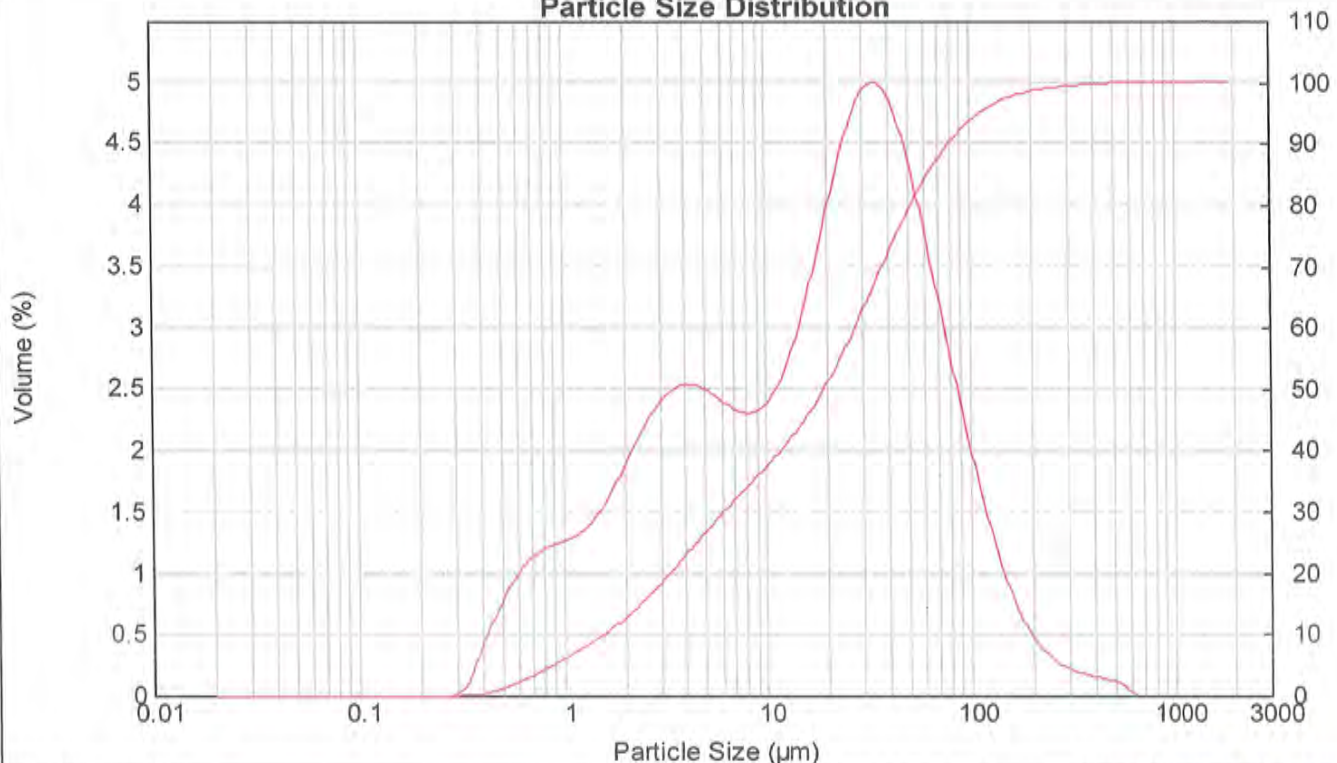
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.99 Residual (%) : 0.762
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0158 %Vol Specific Surface Area : 1.34 m²/g
Mean Diameters : D (0.1) : 1.57 um D (0.5) : 19.28 um D (0.9) : 80.02 um
D [4,3] : 33.96 um D [3,2] : 4.48 um Span : 4.068 Uniformity : 1.43

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.31	7.962	2.31	58.573	3.61	430.887	0.12
0.023	0.00	0.172	0.00	1.262	1.40	9.283	2.38	68.291	3.07	502.377	0.09
0.027	0.00	0.200	0.00	1.471	1.55	10.823	2.55	79.621	2.53	585.729	0.01
0.032	0.00	0.233	0.00	1.715	1.75	12.619	2.85	92.832	2.02	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.97	14.713	3.24	108.234	1.55	796.214	0.00
0.043	0.00	0.317	0.10	2.332	2.19	17.154	3.71	126.191	1.14	928.318	0.00
0.050	0.00	0.370	0.39	2.719	2.36	20.000	4.19	147.128	0.82	1062.339	0.00
0.059	0.00	0.431	0.63	3.170	2.54	23.318	4.61	171.539	0.57	1261.915	0.00
0.068	0.00	0.502	0.86	3.696	2.54	27.187	4.90	200.000	0.40	1471.285	0.00
0.080	0.00	0.586	1.04	4.309	2.52	31.698	5.00	233.183	0.29	1715.392	0.00
0.093	0.00	0.683	1.15	5.024	2.46	36.957	4.88	271.871	0.22	2000.000	0.00
0.108	0.00	0.796	1.22	5.857	2.38	43.089	4.58	316.979	0.18		
0.126	0.00	0.928	1.26	6.829	2.32	50.238	4.14	369.570	0.15		
0.147	0.00	1.082		7.962		58.573		430.887			

Particle Size Distribution



Result : Analysis Report

Attached page 11

Sample Details

Sample ID : MAWC-3B2X_2

Measured : Wednesday, April 26, 2023 10:26:09

Sample File : D:\Data Mastersizer2000\Technical
sample\TS 66\MTEC0859_66_51sam_Tetratex 1.m

Analysed : Wednesday, April 26, 2023 10:26:11

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

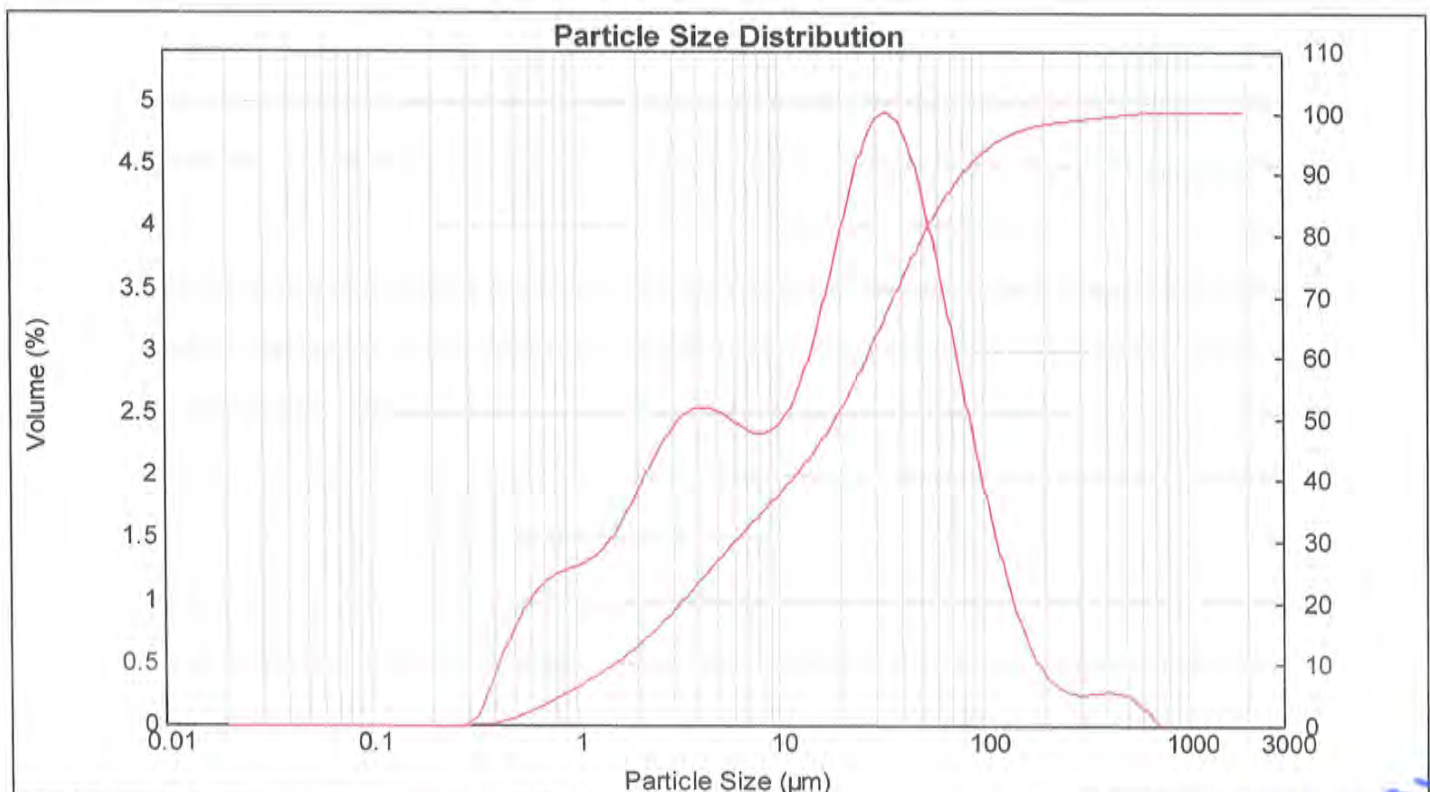
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.69 Residual (%) : 0.758
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0154 %Vol Specific Surface Area : 1.35 m²/g
Mean Diameters : D (0.1) : 1.56 um D (0.5) : 18.97 um D (0.9) : 80.62 um
D [4,3] : 35.83 um D [3,2] : 4.46 um Span : 4.169 Uniformity : 1.56

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.32	7.962	2.35	58.573	3.55	430.887	0.26
0.023	0.00	0.172	0.00	1.262	1.41	9.283	2.42	68.291	3.01	502.377	0.21
0.027	0.00	0.200	0.00	1.471	1.55	10.823	2.59	79.621	2.47	585.729	0.11
0.032	0.00	0.233	0.00	1.715	1.75	12.619	2.88	92.832	1.96	682.910	0.01
0.037	0.00	0.272	0.01	2.000	1.97	14.713	3.27	108.234	1.49	796.214	0.00
0.043	0.00	0.317	0.10	2.332	2.18	17.154	3.72	126.191	1.08	928.318	0.00
0.050	0.00	0.370	0.39	2.719	2.36	20.000	4.18	147.128	0.75	1082.339	0.00
0.059	0.00	0.431	0.64	3.170	2.49	23.318	4.58	171.539	0.50	1261.915	0.00
0.068	0.00	0.502	0.87	3.686	2.55	27.187	4.85	200.000	0.35	1471.285	0.00
0.080	0.00	0.586	1.05	4.309	2.54	31.698	4.92	233.183	0.27	1715.392	0.00
0.093	0.00	0.683	1.16	5.024	2.49	36.957	4.80	271.871	0.25	2000.000	0.00
0.108	0.00	0.796	1.23	5.857	2.42	43.089	4.50	316.979	0.25		
0.126	0.00	0.928	1.27	6.829	2.36	50.238	4.06	369.570	0.26		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 12

Sample Details

Sample ID : MAWC-3B2X_3

Measured : Wednesday, April 26, 2023 10:27:44

Sample File : D:\Data Mastersizer2000\Technical
sample\TS_66\MTEC0950_66_51sam_TetraTech_1.mea

Analysed : Wednesday, April 26, 2023 10:27:46

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

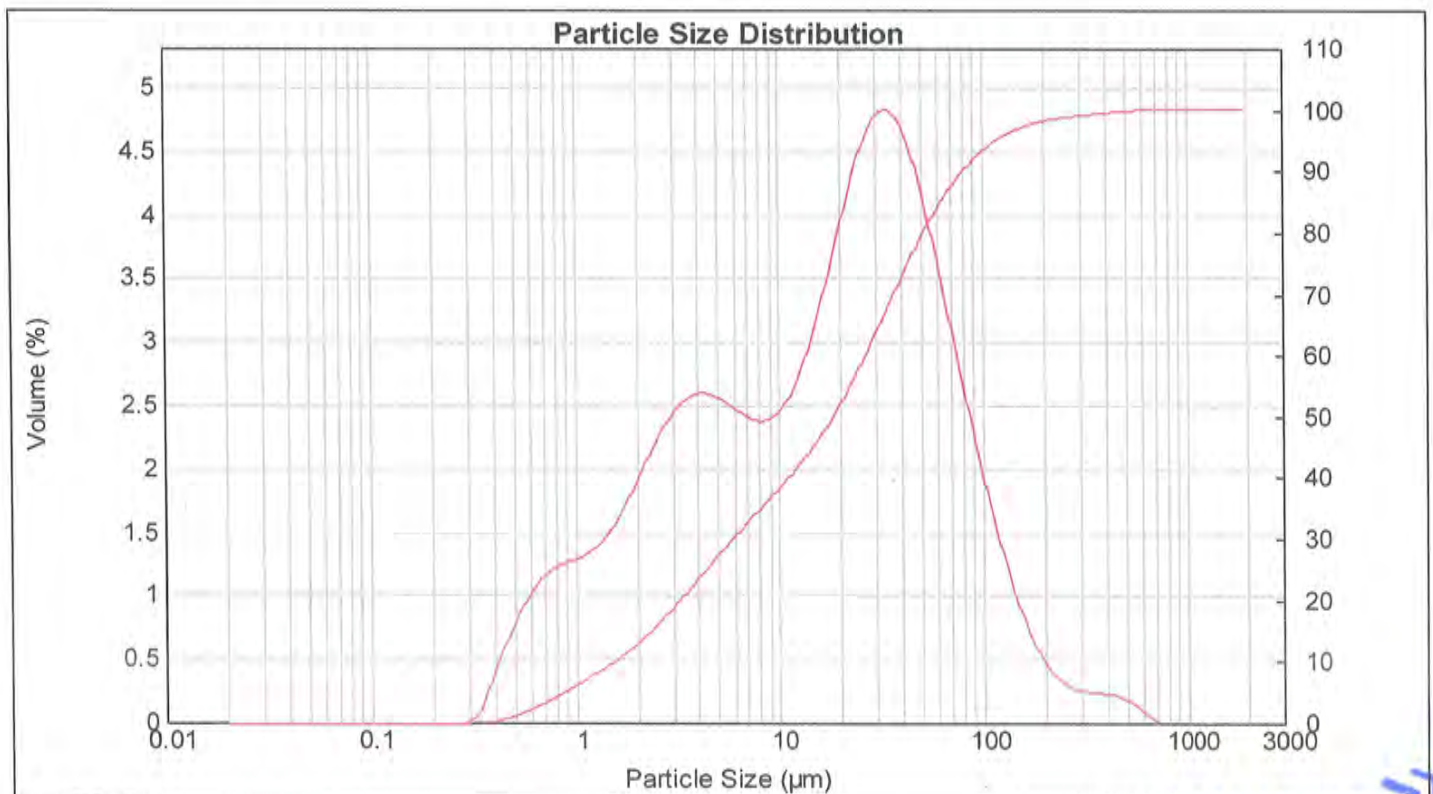
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.49 Residual (%) : 0.733
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0151 %Vol Specific Surface Area : 1.36 m²/g
Mean Diameters : D (0.1) : 1.54 um D (0.5) : 18.44 um D (0.9) : 80.7 um
D [4,3] : 34.91 um D [3,2] : 4.4 um Span : 4.294 Uniformity : 1.56

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.34	7.962	2.39	58.573	3.46	430.887	0.20
0.023	0.00	0.172	0.00	1.262	1.43	9.283	2.45	68.291	2.94	502.377	0.15
0.027	0.00	0.200	0.00	1.471	1.58	10.823	2.62	79.621	2.43	585.729	0.07
0.032	0.00	0.233	0.00	1.715	1.78	12.619	2.90	92.832	1.95	682.910	0.00
0.037	0.00	0.272	0.00	2.000	2.01	14.713	3.27	108.234	1.51	796.214	0.00
0.043	0.00	0.317	0.01	2.332	2.23	17.154	3.71	126.191	1.12	928.318	0.00
0.050	0.00	0.370	0.10	2.719	2.41	20.000	4.15	147.128	0.80	1082.339	0.00
0.059	0.00	0.431	0.39	3.170	2.53	23.318	4.52	171.539	0.56	1261.915	0.00
0.068	0.00	0.502	0.64	3.696	2.60	27.187	4.77	200.000	0.40	1471.285	0.00
0.080	0.00	0.586	0.88	4.309	2.59	31.698	4.83	233.183	0.30	1715.392	0.00
0.093	0.00	0.683	1.06	5.024	2.46	36.957	4.70	271.871	0.26	2000.000	0.00
0.108	0.00	0.796	1.18	5.857	2.54	43.089	4.40	316.979	0.24		
0.126	0.00	0.928	1.25	6.829	2.40	50.238	3.97	369.570	0.23		
0.147	0.00	1.082	1.29	7.962		58.573		430.887			



Result : Analysis Report

Attached page 13

Sample Details

Sample ID : MAWC-3C2_1

Measured : Wednesday, April 26, 2023 10:41:46

Sample File : D:\Data Mastersizer2000\Technical
MTEC0859_66_51sam_TetraTech_1.msa

Analysed : Wednesday, April 26, 2023 10:41:47

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

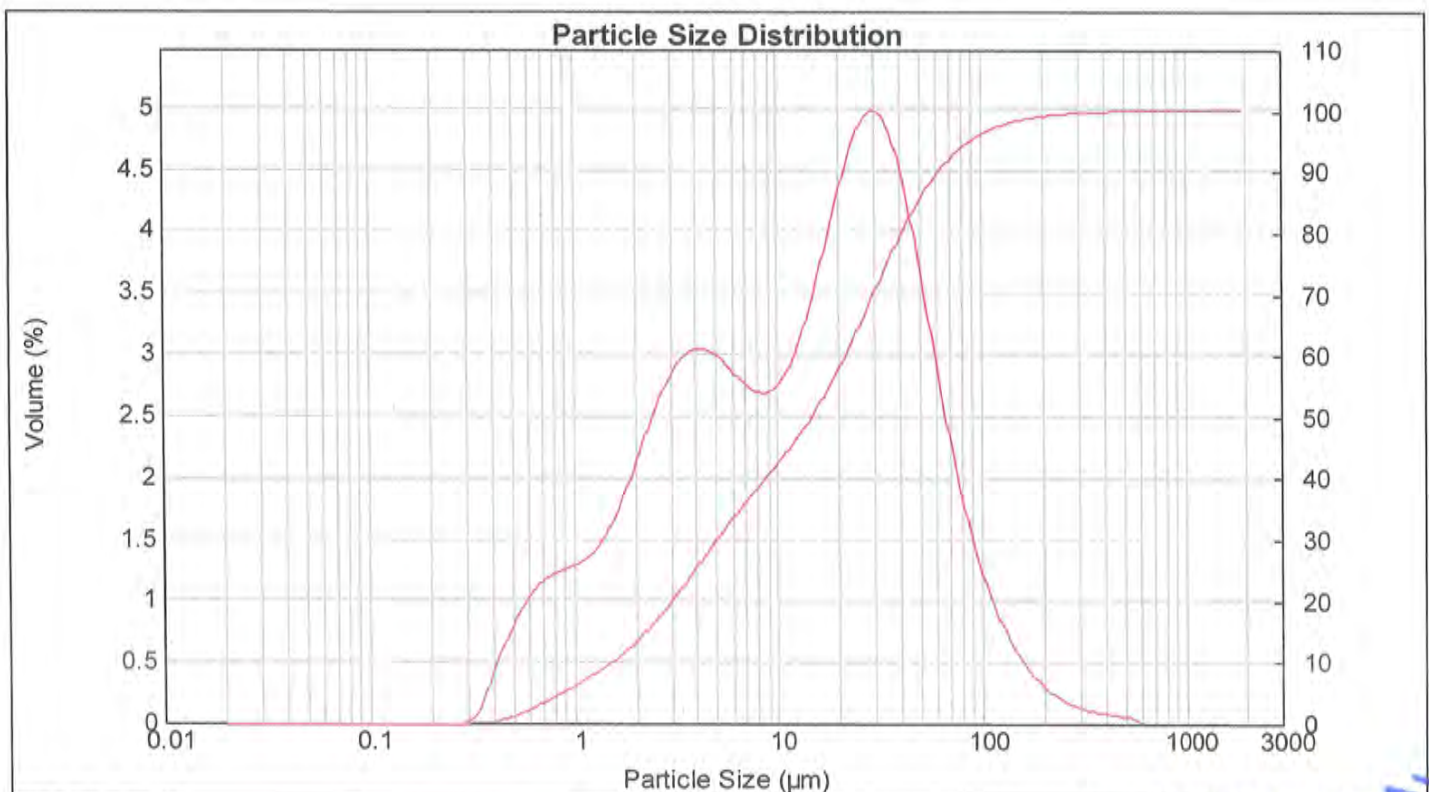
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.02 Residual (%) : 0.685
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0146 %Vol Specific Surface Area : 1.44 m²/g
Mean Diameters : D (0.1) : 1.52 um D (0.5) : 14.7 um D (0.9) : 61.99 um
D [4,3] : 26.74 um D [3,2] : 4.17 um Span : 4.114 Uniformity : 1.47

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.35	7.962	2.69	58.573	2.73	430.887	0.07
0.023	0.00	0.172	0.00	1.262	1.47	9.283	2.75	68.291	2.14	502.377	0.04
0.027	0.00	0.200	0.00	1.471	1.67	10.823	2.93	79.621	1.64	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.94	12.619	3.24	92.832	0.93	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.25	14.713	3.64	108.234	0.69	796.214	0.00
0.043	0.00	0.317	0.10	2.332	2.55	17.154	4.10	126.191	0.50	928.318	0.00
0.050	0.00	0.370	0.40	2.719	2.80	20.000	4.53	147.126	0.36	1062.339	0.00
0.059	0.00	0.431	0.66	3.170	2.97	23.318	4.85	171.539	0.25	1261.915	0.00
0.068	0.00	0.502	0.89	3.696	3.03	27.187	4.98	200.000	0.18	1471.285	0.00
0.080	0.00	0.586	1.07	4.309	2.95	31.698	4.53	233.183	0.10	1715.392	0.00
0.093	0.00	0.683	1.18	5.024	2.84	36.957	4.00	271.871	0.08	2000.000	0.00
0.108	0.00	0.796	1.24	5.857	2.73	43.089	3.37	316.979			
0.126	0.00	0.928	1.29	6.829		50.238		369.570			
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 14

Sample Details

Sample ID : MAWC-3C2_2

Measured : Wednesday, April 26, 2023 10:42:49

Sample File : D:\Data Mastersizer2000\Technical
sample\TS_66\MTEC0859_66_51sam_Tetratosh 1.mea

Analysed : Wednesday, April 26, 2023 10:42:50

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

System Details

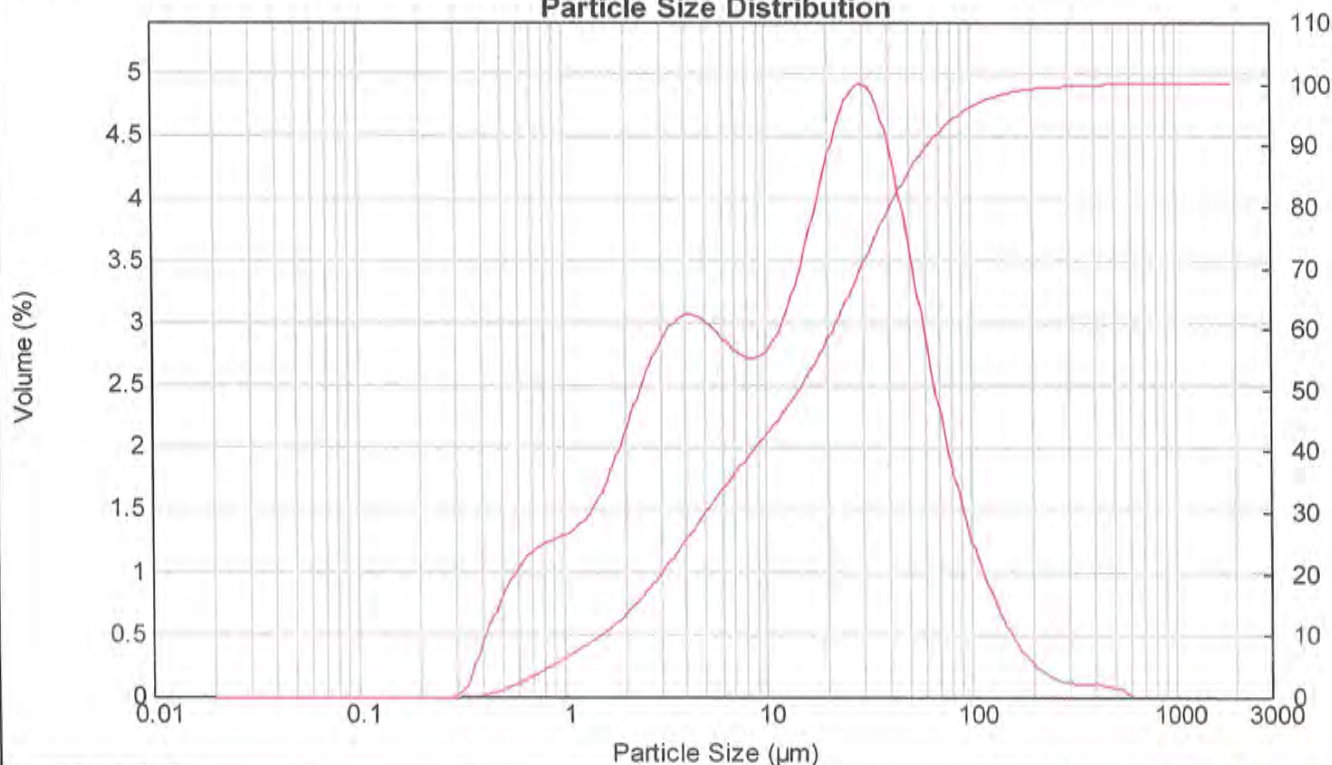
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.76 Residual (%) : 0.681
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0143 %Vol Specific Surface Area : 1.45 m²/g
Mean Diameters : D (0.1) : 1.51 um D (0.5) : 14.47 um D (0.9) : 62.16 um
D [4,3] : 26.74 um D [3,2] : 4.15 um Span : 4.191 Uniformity : 1.5

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.062	1.36	7.962	2.72	58.573	2.70	430.887	0.09
0.023	0.00	0.172	0.00	1.262	1.48	9.283	2.78	68.291	2.14	502.377	0.06
0.027	0.00	0.200	0.00	1.471	1.68	10.823	2.96	79.621	1.67	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.95	12.619	3.26	92.832	1.28	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.25	14.713	3.66	108.234	0.96	796.214	0.00
0.043	0.00	0.317	0.10	2.332	2.56	17.154	4.11	126.191	0.70	928.318	0.00
0.050	0.00	0.370	0.40	2.719	2.81	20.000	4.52	147.128	0.49	1082.339	0.00
0.059	0.00	0.431	0.66	3.170	2.99	23.318	4.82	171.539	0.33	1261.915	0.00
0.068	0.00	0.502	0.90	3.696	3.07	27.187	4.93	200.000	0.22	1471.285	0.00
0.080	0.00	0.586	1.07	4.309	3.06	31.698	4.80	233.163	0.15	1715.392	0.00
0.093	0.00	0.683	1.19	5.024	2.97	36.957	4.44	271.871	0.12	2000.000	0.00
0.108	0.00	0.796	1.25	5.857	2.86	43.089	3.92	316.979	0.10		
0.126	0.00	0.928	1.29	6.829	2.76	50.238	3.31	369.570	0.10		
0.147	0.00	1.082		7.962		58.573		430.887	0.10		

Particle Size Distribution



Result : Analysis Report

Attached page 15

Sample Details

Sample ID : MAWC-3C2_3

Measured : Wednesday, April 26, 2023 10:43:52

Sample File : D:\Data Mastersizer2000\Technical
session\TS_66\MTEC0859_66_51sam_TetraTech_1.mes

Analysed : Wednesday, April 26, 2023 10:43:53

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

System Details

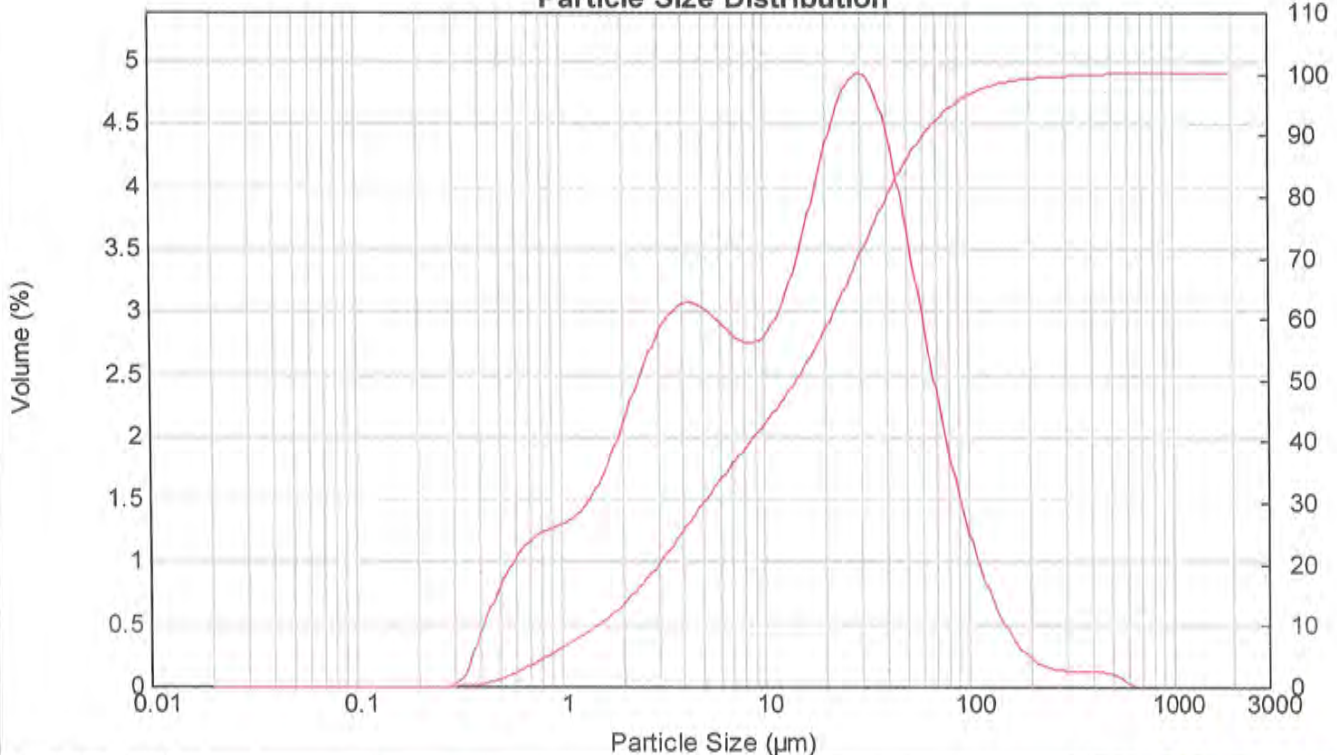
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.54 Residual (%) : 0.683
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0141 %Vol Specific Surface Area : 1.45 m²/g
Mean Diameters : D (0.1) : 1.51 um D (0.5) : 14.42 um D (0.9) : 61.59 um
D [4,3] : 26.7 um D [3,2] : 4.15 um Span : 4.167 Uniformity : 1.5

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.36	7.962	2.75	58.573	2.75	430.887	0.11
0.023	0.00	0.172	0.00	1.262	1.48	9.283	2.81	68.291	2.18	502.377	0.08
0.027	0.00	0.200	0.00	1.471	1.67	10.823	2.98	79.621	1.68	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.93	12.619	3.28	92.832	1.26	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.23	14.713	3.67	108.234	0.91	796.214	0.00
0.043	0.00	0.317	0.10	2.332	2.53	17.154	4.10	126.191	0.63	928.318	0.00
0.050	0.00	0.370	0.40	2.719	2.79	20.000	4.51	147.128	0.42	1082.339	0.00
0.059	0.00	0.431	0.66	3.170	2.97	23.318	4.91	171.539	0.27	1261.915	0.00
0.068	0.00	0.502	0.90	3.696	3.06	27.187	4.80	200.000	0.19	1471.285	0.00
0.080	0.00	0.586	1.07	4.309	3.07	31.698	4.80	233.183	0.14	1715.392	0.00
0.093	0.00	0.683	1.19	5.024	3.00	36.957	4.47	271.871	0.12	2000.000	0.00
0.108	0.00	0.796	1.26	5.857	2.89	43.089	3.96	316.979	0.12		
0.126	0.00	0.928	1.30	6.829	2.79	50.238	3.36	369.570	0.12		
0.147	0.00	1.082		7.962		58.573		430.887	0.12		

Particle Size Distribution



Result : Analysis Report

Attached page 16

Sample Details

Sample ID : MAWC-4B2X_1

Measured : Wednesday, April 26, 2023 11:01:06

Sample File : D:\Data Mastersizer2000\Technical
serial\TS_66\MTEC0859_66_51sam_Tetratosh 1.mea

Analysed : Wednesday, April 26, 2023 11:01:07

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

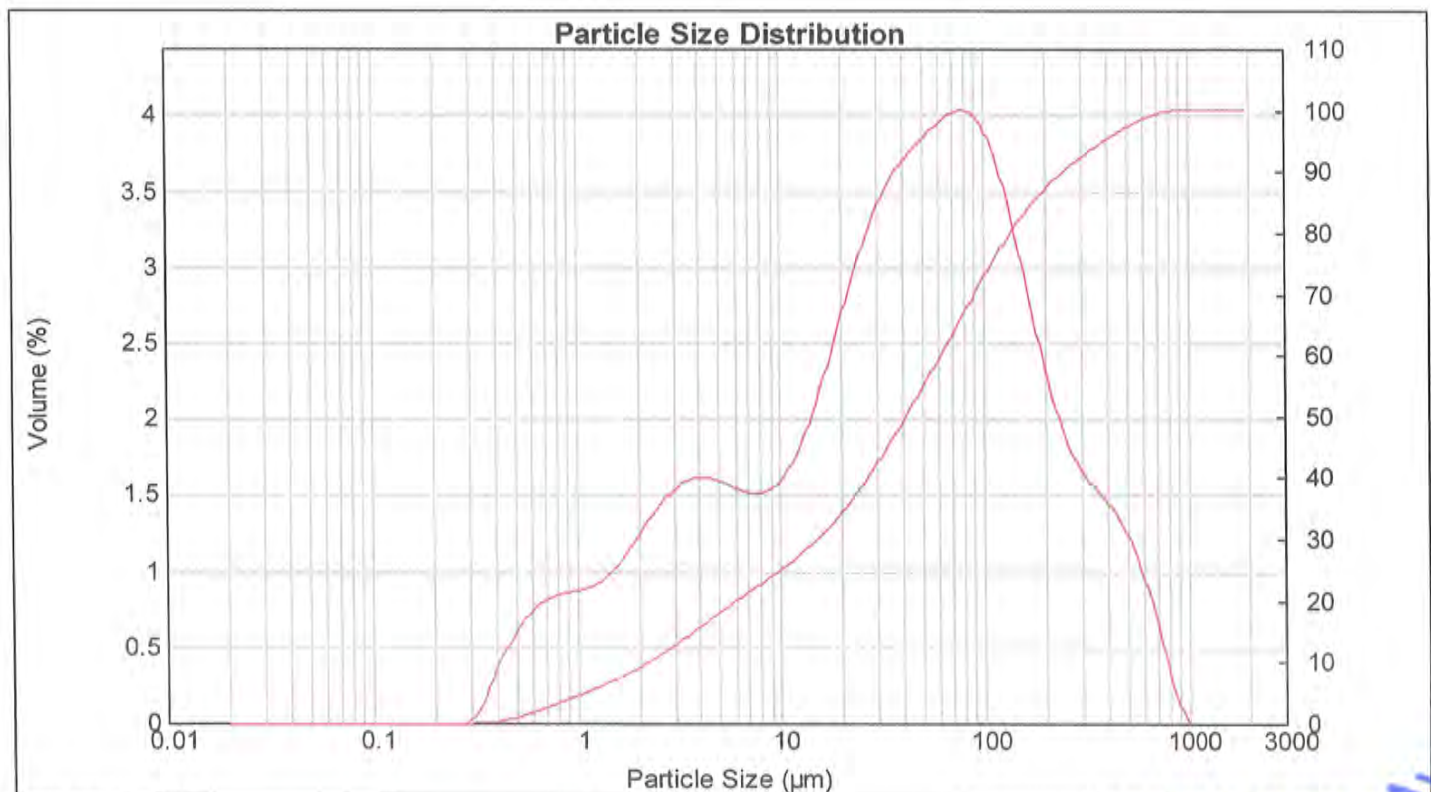
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.94 Residual (%) : 0.300
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0224 %Vol Specific Surface Area : 0.967 m²/g
Mean Diameters : D (0.1) : 2.25 um D (0.5) : 41.44 um D (0.9) : 247 um
D [4,3] : 91.89 um D [3,2] : 6.2 um Span : 5.906 Uniformity : 1.88

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.062	0.90	7.962	1.53	58.573	3.99	430.887	1.33
0.023	0.00	0.172	0.00	1.262	0.95	9.283	1.60	68.291	4.04	502.377	1.15
0.027	0.00	0.200	0.00	1.471	1.04	10.823	1.74	79.621	4.03	585.729	0.88
0.032	0.00	0.233	0.00	1.715	1.16	12.619	1.95	92.832	3.92	682.910	0.57
0.037	0.00	0.272	0.00	2.000	1.30	14.713	2.22	108.234	3.68	796.214	0.21
0.043	0.00	0.317	0.11	2.332	1.42	17.154	2.53	126.191	3.34	928.318	0.01
0.050	0.00	0.370	0.35	2.719	1.53	20.000	2.85	147.128	2.93	1082.339	0.00
0.059	0.00	0.431	0.51	3.170	1.59	23.318	3.14	171.539	2.52	1261.915	0.00
0.068	0.00	0.502	0.66	3.696	1.61	27.187	3.38	200.000	2.16	1471.285	0.00
0.080	0.00	0.596	0.76	4.309	1.61	31.698	3.57	233.183	1.88	1715.392	0.00
0.093	0.00	0.683	0.83	5.024	1.58	36.957	3.71	271.871	1.69	2000.000	0.00
0.108	0.00	0.796	0.86	5.857	1.54	43.089	3.81	316.979	1.56		
0.126	0.00	0.928	0.88	6.829	1.51	50.238	3.90	369.570	1.46		
0.147	0.00	1.062		7.962		58.573		430.887			



Result : Analysis Report

Attached page 17

Sample Details

Sample ID : MAWC-4B2X_2

Measured : Wednesday, April 26, 2023 11:14:52

Sample File : D:\Data Mastersizer2000\Technical
residualTS 66\MTEC0859_66_51sam_Tetrattech 1.mea

Analysed : Wednesday, April 26, 2023 11:14:54

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

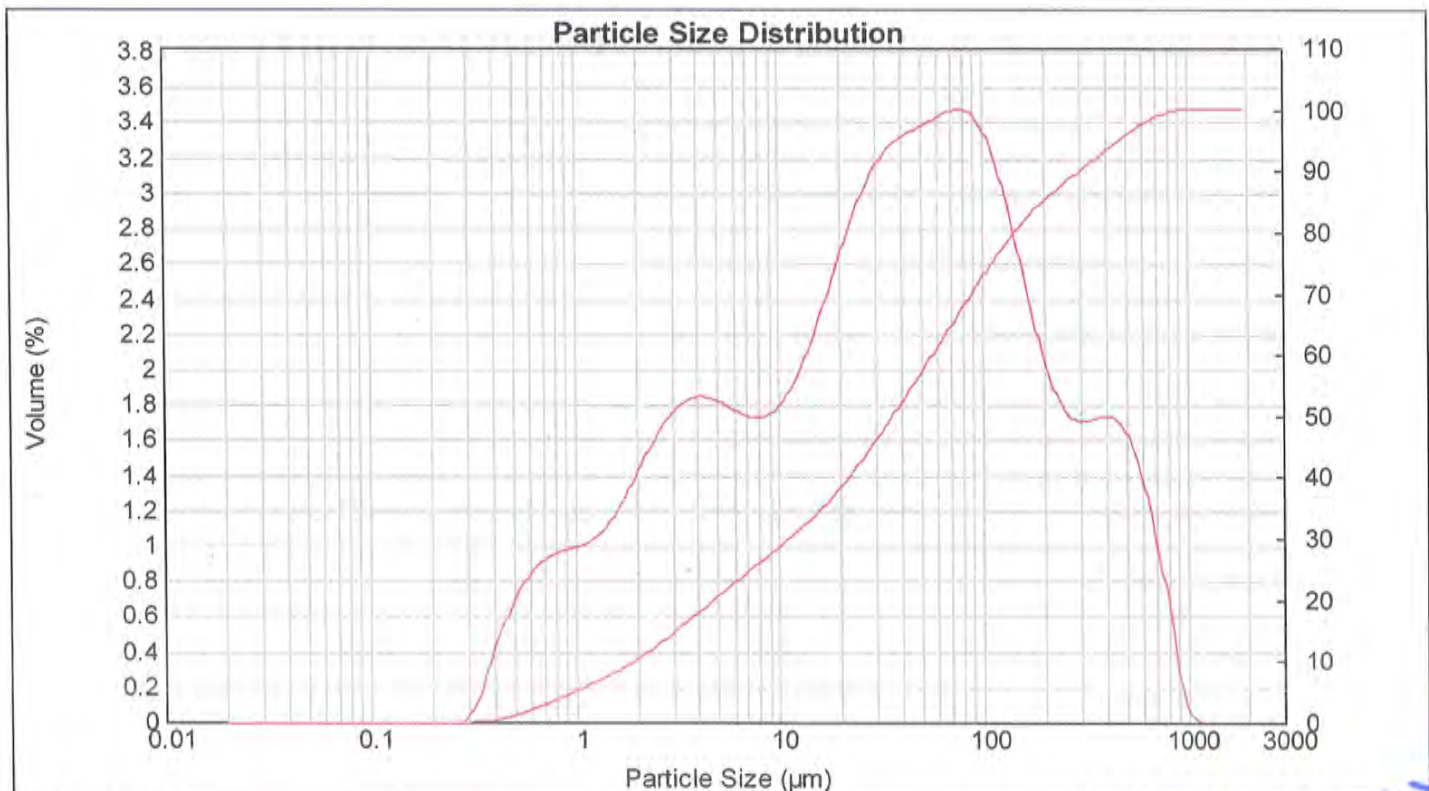
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 18.69 Residual (%) : 0.323
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0186 %Vol Specific Surface Area : 1.09 m²/g
Mean Diameters : D (0.1) : 1.94 um D (0.5) : 36.13 um D (0.9) : 301.75 um
D [4,3] : 99.93 um D [3,2] : 5.52 um Span : 8.299 Uniformity : 2.45

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.02	7.962	1.74	58.573	3.45	430.887	1.70
0.023	0.00	0.172	0.00	1.262	1.08	9.283	1.80	68.291	3.48	502.377	1.55
0.027	0.00	0.200	0.00	1.471	1.19	10.823	1.91	79.621	3.47	585.729	1.28
0.032	0.00	0.233	0.00	1.715	1.33	12.619	2.08	92.832	3.37	682.910	0.90
0.037	0.00	0.272	0.01	2.000	1.48	14.713	2.30	108.234	3.17	796.214	0.49
0.043	0.00	0.317	0.14	2.332	1.63	17.154	2.54	126.191	2.87	928.318	0.08
0.050	0.00	0.370	0.40	2.719	1.74	20.000	2.78	147.128	2.20	1082.339	0.00
0.059	0.00	0.431	0.59	3.170	1.82	23.318	2.99	171.539	2.53	1261.915	0.00
0.068	0.00	0.502	0.75	3.696	1.85	27.187	3.15	200.000	1.93	1471.285	0.00
0.080	0.00	0.586	0.87	4.309	1.84	31.698	3.26	233.183	1.77	1715.362	0.00
0.093	0.00	0.683	0.94	5.024	1.76	36.957	3.32	271.871	1.72	2000.000	0.00
0.108	0.00	0.796	0.97	5.857	1.73	43.089	3.41	316.979	1.74		
0.126	0.00	0.928	0.99	6.829		50.238		369.570			
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 18

Sample Details

Sample ID : MAWC-4B2X_3

Measured : Wednesday, April 26, 2023 11:17:15

Sample File : D:\Data Mastersizer2000\Technical
records\TS 66MTEC0950 66 51cm_Technical_1.nea

Analysed : Wednesday, April 26, 2023 11:17:16

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

System Details

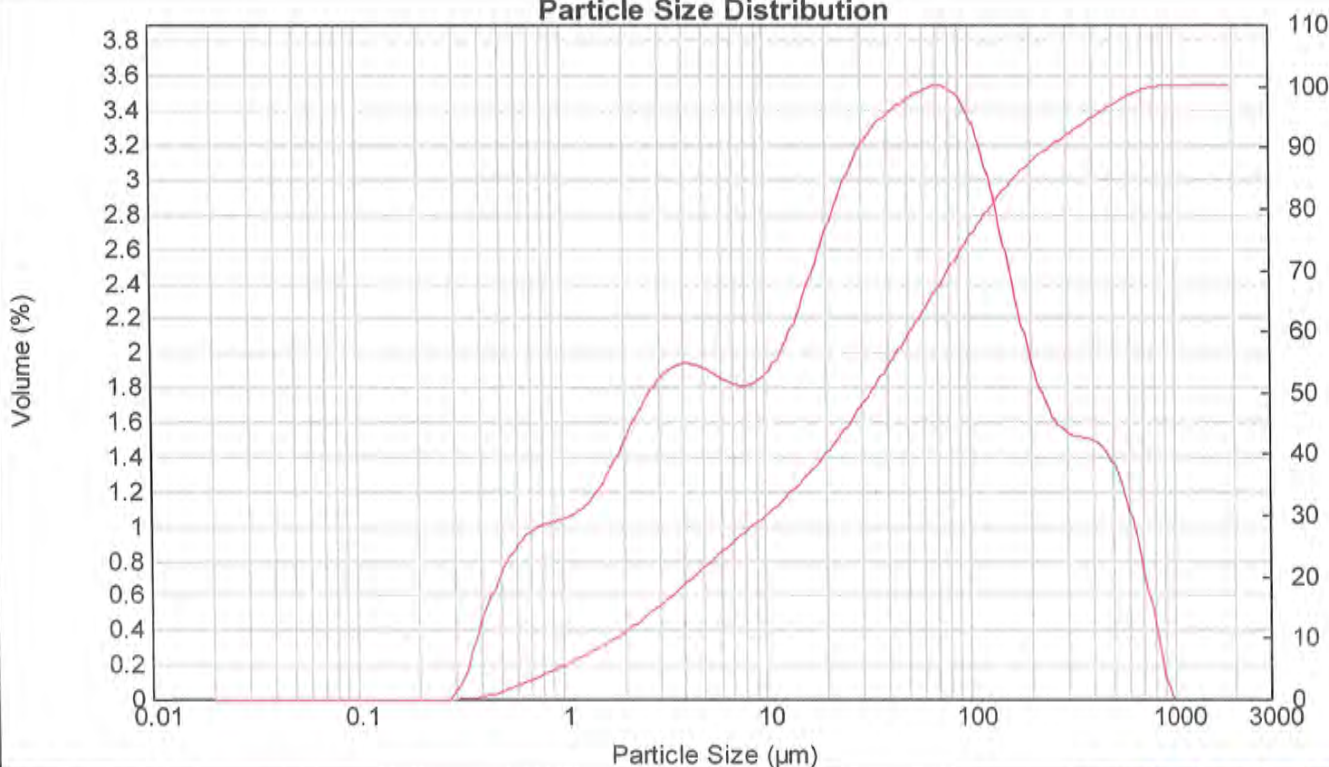
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 18.51 Residual (%) : 0.333
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0176 %Vol Specific Surface Area : 1.14 m²/g
Mean Diameters : D (0.1) : 1.83 um D (0.5) : 33.11 um D (0.9) : 253.31 um
D [4,3] : 88.83 um D [3,2] : 5.26 um Span : 7.595 Uniformity : 2.37

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.07	7.952	1.82	58.573	3.53	430.887	1.44
0.023	0.00	0.172	0.00	1.262	1.14	9.283	1.88	68.291	3.55	502.377	1.28
0.027	0.00	0.200	0.00	1.471	1.25	10.823	1.99	79.621	3.51	585.729	1.02
0.032	0.00	0.233	0.00	1.715	1.40	12.619	2.15	92.832	3.38	682.910	0.66
0.037	0.00	0.272	0.00	2.000	1.56	14.713	2.36	108.234	3.15	796.214	0.29
0.043	0.00	0.317	0.02	2.332	1.71	17.154	2.59	126.191	2.83	928.318	0.00
0.050	0.00	0.370	0.15	2.719	1.83	20.000	2.82	147.128	2.47	1082.339	0.00
0.059	0.00	0.431	0.43	3.170	1.91	23.318	3.02	171.539	2.13	1261.915	0.00
0.068	0.00	0.502	0.62	3.696	1.94	27.187	3.18	200.000	1.84	1471.285	0.00
0.080	0.00	0.586	0.79	4.309	1.93	31.698	3.30	233.183	1.65	1715.392	0.00
0.093	0.00	0.683	0.91	5.024	1.90	36.957	3.38	271.871	1.52	2000.000	0.00
0.108	0.00	0.796	0.98	5.857	1.85	43.089	3.44	316.979	1.55		
0.126	0.00	0.928	1.02	6.829	1.82	50.238	3.49	369.570	1.50		
0.147	0.00	1.082	1.04	7.962		58.573		430.887			

Particle Size Distribution



Result : Analysis Report

Attached page 19

Sample Details

Sample ID : MAWD-1B2X_1

Measured : Wednesday, April 26, 2023 13:38:49

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTEC0959_66_51sam_Tetratosh 1.mea

Analysed : Wednesday, April 26, 2023 13:38:51

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

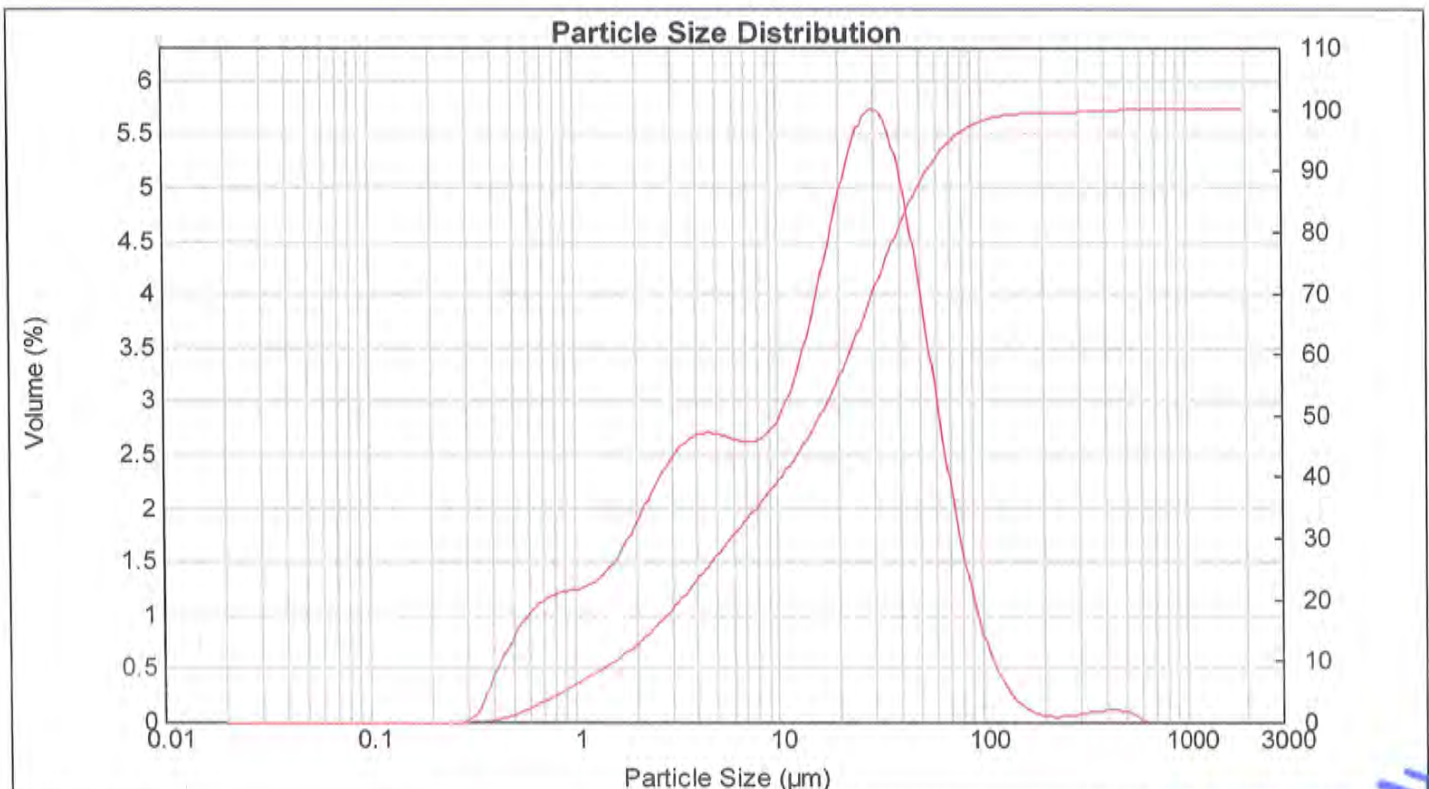
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.18 Residual (%) : 0.831
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0155 %Vol Specific Surface Area : 1.38 m²/g
Mean Diameters : D (0.1) : 1.57 um D (0.5) : 16.29 um D (0.9) : 54.88 um
D [4,3] : 25.04 um D [3,2] : 4.34 um Span : 3.272 Uniformity : 1.18

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.28	7.962	2.67	58.573	2.77	430.887	0.11
0.023	0.00	0.172	0.00	1.262	1.36	9.283	2.83	68.291	1.99	502.377	0.08
0.027	0.00	0.200	0.00	1.471	1.36	10.823	3.12	79.621	1.35	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.73	12.619	3.54	92.832	0.86	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.97	14.713	4.07	108.234	0.51	796.214	0.00
0.043	0.00	0.317	0.10	2.332	2.22	17.154	4.65	126.191	0.28	928.318	0.00
0.050	0.00	0.370	0.40	2.719	2.44	20.000	5.20	147.128	0.14	1082.339	0.00
0.059	0.00	0.431	0.65	3.170	2.60	23.318	5.59	171.539	0.08	1261.915	0.00
0.068	0.00	0.502	0.89	3.696	2.68	27.187	5.75	200.000	0.06	1471.285	0.00
0.080	0.00	0.586	1.06	4.309	2.71	31.698	5.60	233.183	0.06	1715.392	0.00
0.093	0.00	0.683	1.16	5.024	2.68	36.957	5.15	271.871	0.07	2000.000	0.00
0.108	0.00	0.796	1.22	5.857	2.64	43.089	4.45	316.979	0.10		
0.126	0.00	0.928	1.24	6.829	2.62	50.238	3.62	369.570	0.11		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 20

Sample Details

Sample ID : MAWD-1B2X_2

Measured : Wednesday, April 26, 2023 13:40:41

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS_66\MTEC0950_66_51sam_Tetratosh 1.mea

Analysed : Wednesday, April 26, 2023 13:40:42

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

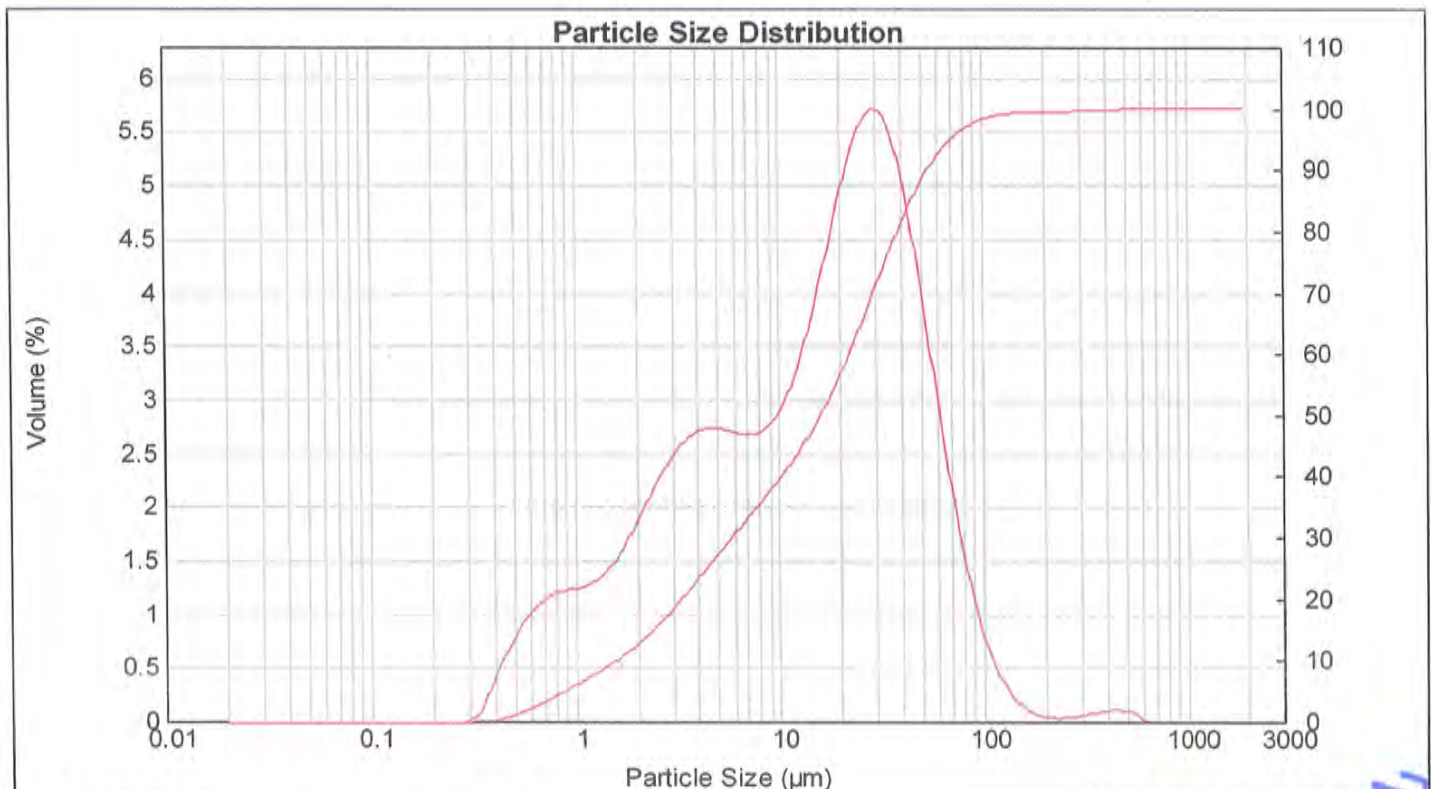
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.68 Residual (%) : 0.824
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0150 %Vol Specific Surface Area : 1.38 m²/g
Mean Diameters : D (0.1) : 1.57 um D (0.5) : 15.99 um D (0.9) : 53.91 um
D [4,3] : 24.49 um D [3,2] : 4.34 um Span : 3.274 Uniformity : 1.17

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.062	1.28	7.962	2.74	58.573	2.72	430.887	0.11
0.023	0.00	0.172	0.00	1.262	1.37	9.283	2.90	68.291	1.94	502.377	0.09
0.027	0.00	0.200	0.00	1.471	1.37	10.823	3.18	79.621	1.29	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.52	12.619	3.59	92.832	0.81	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.73	14.713	4.11	108.234	0.47	796.214	0.00
0.043	0.00	0.317	0.10	2.332	1.98	17.154	4.67	126.191	0.25	928.318	0.00
0.050	0.00	0.370	0.40	2.719	2.23	20.000	5.20	147.128	0.12	1082.339	0.00
0.059	0.00	0.431	0.65	3.170	2.45	23.318	5.58	171.539	0.06	1261.915	0.00
0.068	0.00	0.502	0.88	3.696	2.61	27.187	5.73	200.000	0.04	1471.285	0.00
0.080	0.00	0.586	1.05	4.309	2.75	31.698	5.12	233.183	0.06	1715.392	0.00
0.093	0.00	0.683	1.16	5.024	2.70	36.957	4.42	271.871	0.08	2000.000	0.00
0.108	0.00	0.796	1.22	5.857	2.69	43.089	3.58	316.979	0.10		
0.126	0.00	0.928	1.24	6.829		50.236		369.570			
0.147	0.00	1.062		7.962		58.573		430.887			



Result : Analysis Report

Attached page 21

Sample Details

Sample ID : MAWD-1B2X_3

Measured : Wednesday, April 26, 2023 13:42:31

Sample File : D:\Data Mastersizer2000\Technical
MTEC0859_66_51sam_Tetratex 1.mea

Analysed : Wednesday, April 26, 2023 13:42:32

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

System Details

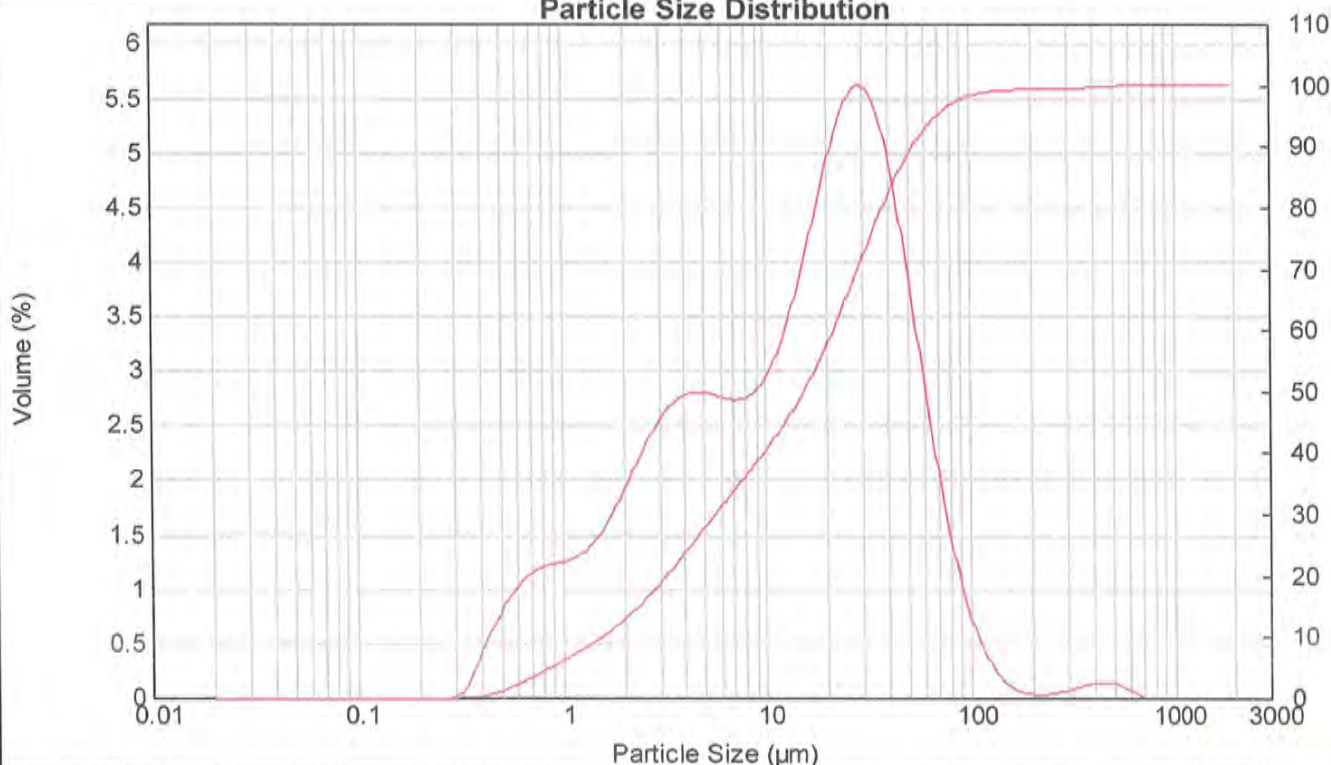
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.39 Residual (%) : 0.804
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0145 %Vol Specific Surface Area : 1.4 m²/g
Mean Diameters : D (0.1) : 1.56 um D (0.5) : 15.42 um D (0.9) : 53.14 um
D [4,3] : 24.68 um D [3,2] : 4.28 um Span : 3.345 Uniformity : 1.24

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.30	7.962	2.80	58.573	2.61	430.887	0.14
0.023	0.00	0.172	0.00	1.262	1.39	9.283	2.95	68.291	1.85	502.377	0.11
0.027	0.00	0.200	0.00	1.471	1.55	10.823	3.22	79.621	1.23	585.729	0.05
0.032	0.00	0.233	0.00	1.715	1.77	12.619	4.13	92.832	0.76	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.03	14.713	4.67	108.234	0.43	796.214	0.00
0.043	0.00	0.317	0.10	2.332	2.29	17.154	5.17	126.191	0.22	928.318	0.00
0.050	0.00	0.370	0.40	2.719	2.52	20.000	5.52	147.128	0.04	1082.339	0.00
0.059	0.00	0.431	0.65	3.170	2.68	23.316	5.64	171.539	0.03	1261.915	0.00
0.068	0.00	0.502	0.89	3.696	2.78	27.187	5.46	200.000	0.07	1471.285	0.00
0.080	0.00	0.586	1.05	4.309	2.80	31.668	4.98	233.183	0.10	1715.392	0.00
0.093	0.00	0.683	1.17	5.024	2.76	36.957	4.28	271.871	0.13	2000.000	0.00
0.108	0.00	0.796	1.26	5.857	2.74	43.089	3.45	316.979			
0.126	0.00	0.928		6.829		50.238		369.570			
0.147	0.00	1.082		7.962		58.573		430.887			

Particle Size Distribution



Result : Analysis Report

Attached page 22

Sample Details

Sample ID : MAWD-1C2_1

Measured : Wednesday, April 26, 2023 13:58:34

Sample File : D:\Data Mastersizer2000\Technical
series\TS 66\MTFC0859_66_51sam_Tetratosh 1.mea

Analysed : Wednesday, April 26, 2023 13:58:35

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

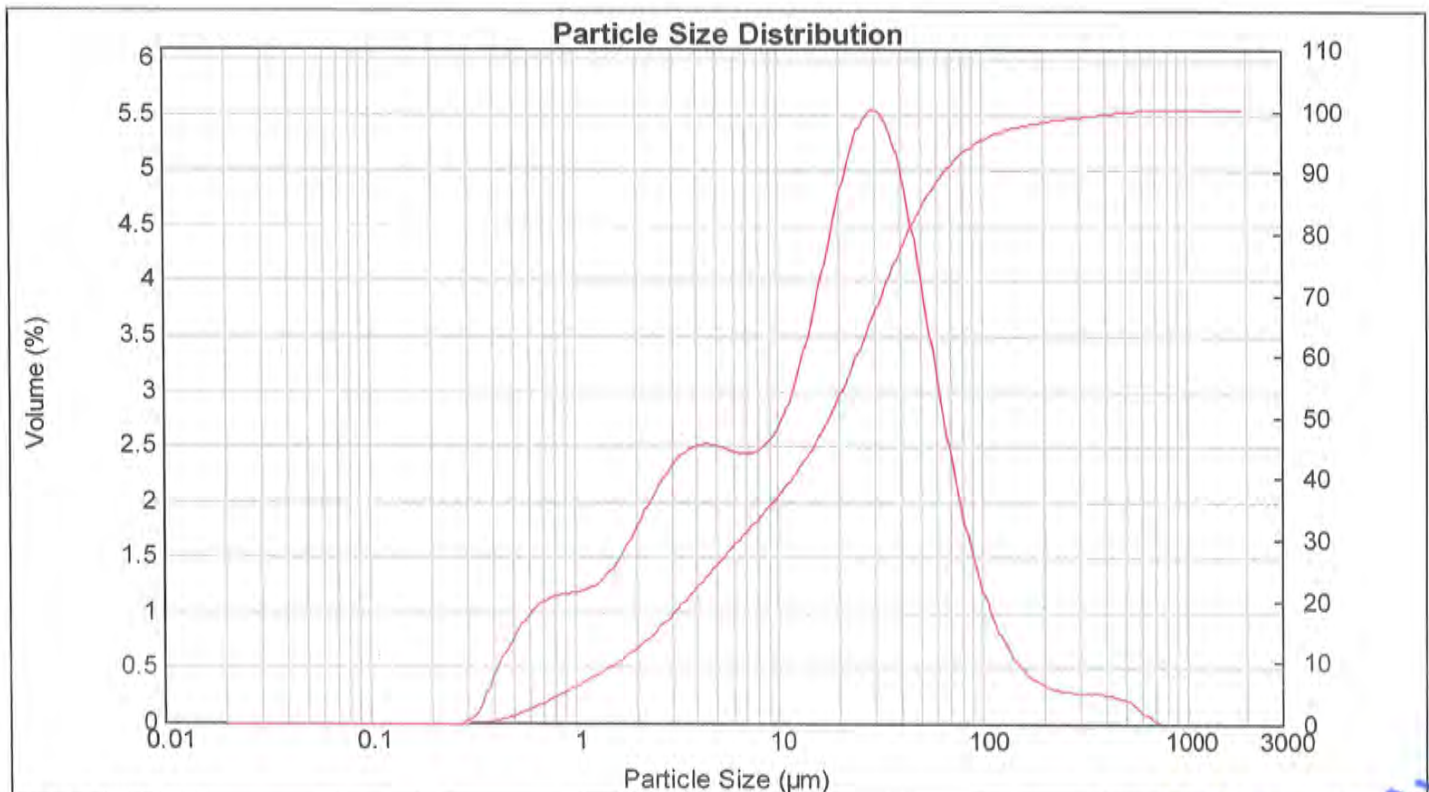
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.87 Residual (%) : 0.858
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0160 %Vol Specific Surface Area : 1.32 m²/g
Mean Diameters : D (0.1) : 1.64 um D (0.5) : 17.99 um D (0.9) : 66.17 um
D [4,3] : 32.13 um D [3,2] : 4.54 um Span : 3.587 Uniformity : 1.43

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.21	7.962	2.51	58.573	2.92	430.887	0.23
0.023	0.00	0.172	0.00	1.262	1.29	9.283	2.68	68.291	2.24	502.377	0.18
0.027	0.00	0.200	0.00	1.471	1.43	10.823	2.98	79.621	1.67	585.729	0.09
0.032	0.00	0.233	0.00	1.715	1.63	12.619	3.40	92.832	1.23	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.87	14.713	3.93	108.234	0.89	796.214	0.00
0.043	0.00	0.317	0.11	2.332	2.10	17.154	4.49	126.191	0.65	928.318	0.00
0.050	0.00	0.370	0.40	2.719	2.30	20.000	5.02	147.128	0.48	1082.339	0.00
0.059	0.00	0.431	0.64	3.170	2.44	23.318	5.40	171.539	0.38	1261.915	0.00
0.068	0.00	0.502	0.85	3.696	2.51	27.187	5.55	200.000	0.32	1471.285	0.00
0.080	0.00	0.586	1.01	4.309	2.53	31.698	5.42	233.183	0.29	1715.392	0.00
0.093	0.00	0.683	1.11	5.024	2.50	36.957	5.01	271.871	0.28	2000.000	0.00
0.108	0.00	0.796	1.16	5.857	2.46	43.089	4.40	316.979	0.27		
0.126	0.00	0.928	1.18	6.829	2.45	50.238	3.66	369.570	0.26		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 23

Sample Details

Sample ID : MAWD-1C2_2

Measured : Wednesday, April 26, 2023 14:03:35

Sample File : D:\Data Mastersizer2000\Technical
MTEC0959_66_51sam_Tetrattech-1.me

Analysed : Wednesday, April 26, 2023 14:03:36

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

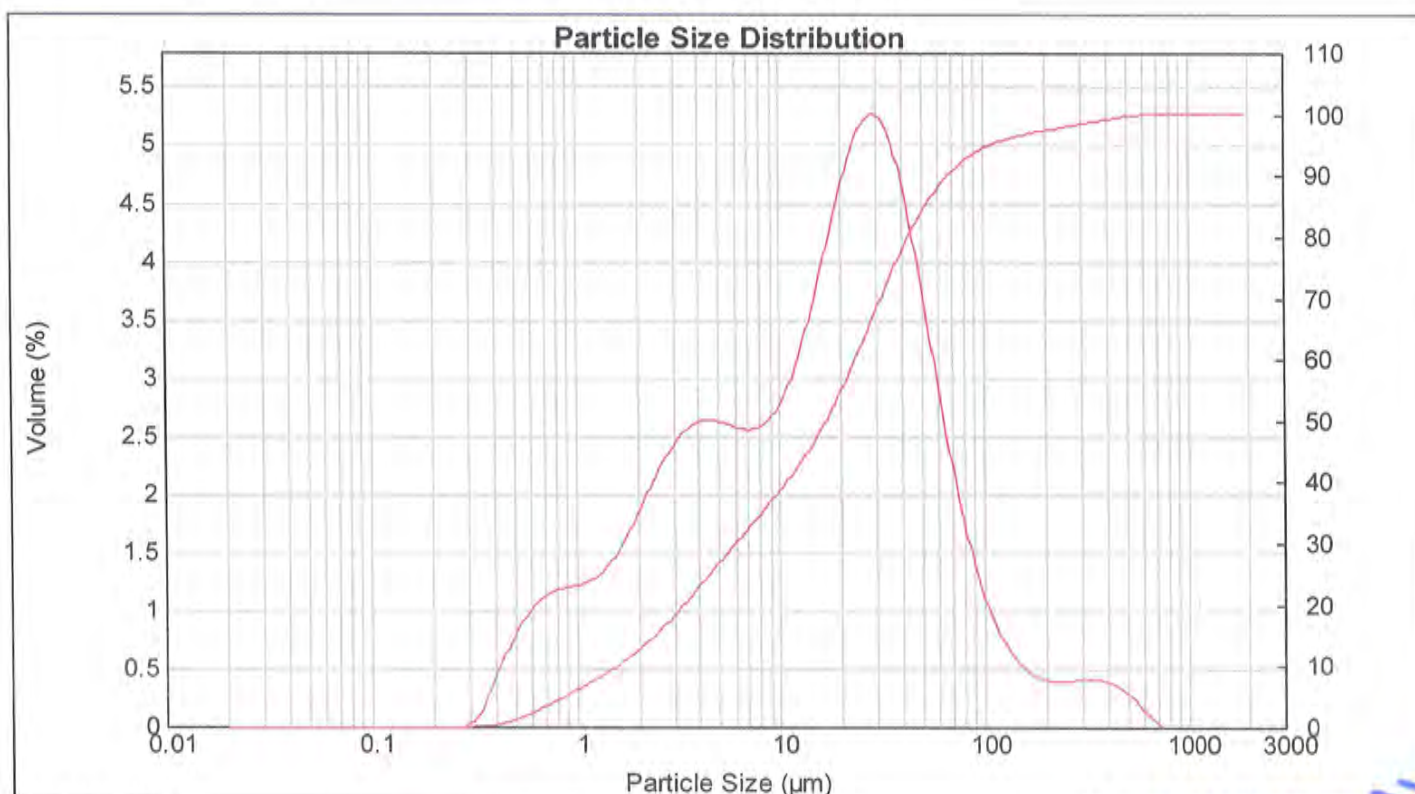
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.32 Residual (%) : 0.816
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0150 %Vol Specific Surface Area : 1.36 m²/g
Mean Diameters : D (0.1) : 1.58 um D (0.5) : 16.85 um D (0.9) : 67.42 um
D [4,3] : 33.77 um D [3,2] : 4.4 um Span : 3.906 Uniformity : 1.65

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.26	7.962	2.63	58.573	2.69	430.887	0.33
0.023	0.00	0.172	0.00	1.262	1.34	9.283	2.79	68.291	2.06	502.377	0.24
0.027	0.00	0.200	0.00	1.471	1.49	10.823	3.06	79.621	1.54	585.729	0.11
0.032	0.00	0.233	0.00	1.715	1.71	12.619	3.45	92.832	1.14	682.910	0.01
0.037	0.00	0.272	0.01	2.000	1.95	14.713	3.92	108.234	0.84	796.214	0.00
0.043	0.00	0.317	0.12	2.332	2.19	17.154	4.42	126.191	0.63	928.318	0.00
0.050	0.00	0.370	0.41	2.719	2.40	20.000	4.87	147.128	0.42	1082.339	0.00
0.059	0.00	0.431	0.66	3.170	2.55	23.318	5.18	171.539	0.39	1261.915	0.00
0.068	0.00	0.502	0.88	3.696	2.64	27.187	5.27	200.000	0.39	1471.285	0.00
0.080	0.00	0.586	1.05	4.309	2.62	31.698	4.69	233.183	0.41	1715.392	0.00
0.093	0.00	0.683	1.20	5.024	2.57	36.957	3.39	271.871	0.39	2000.000	0.00
0.108	0.00	0.796	1.22	5.857	2.57	43.089	4.09	316.979	0.41		
0.126	0.00	0.928	1.22	6.829	2.57	50.238	3.39	369.570	0.39		
0.147	0.00	1.082	1.26	7.962	2.63	58.573	2.69	430.887	0.33		



Result : Analysis Report

Attached page 24

Sample Details

Sample ID : MAWD-1C2_3

Measured : Wednesday, April 26, 2023 14:05:26

Sample File : D:\Data Mastersizer2000\Technical
series\TS 66\MTEC0859_66_51sam_TetraTech_1.mea

Analysed : Wednesday, April 26, 2023 14:05:28

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

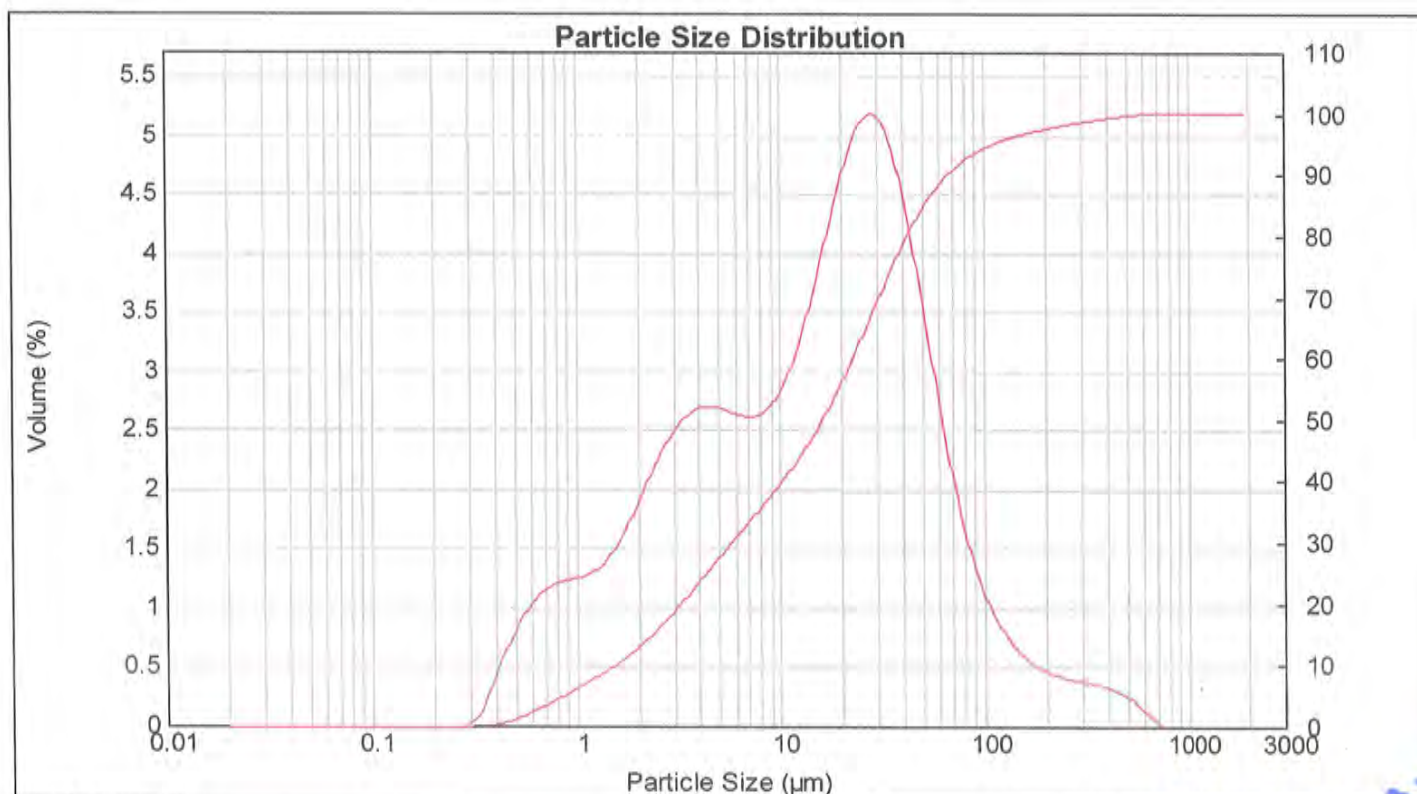
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.17 Residual (%) : 0.797
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0145 %Vol Specific Surface Area : 1.4 m²/g
Mean Diameters : D (0.1) : 1.54 um D (0.5) : 16.18 um D (0.9) : 66.87 um
D [4,3] : 32.83 um D [3,2] : 4.3 um Span : 4.039 Uniformity : 1.68

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.29	7.962	2.68	58.573	2.52	430.887	0.28
0.023	0.00	0.172	0.00	1.262	1.38	9.283	2.84	68.291	1.94	502.377	0.21
0.027	0.00	0.200	0.00	1.471	1.53	10.823	3.11	79.621	1.47	585.729	0.10
0.032	0.00	0.233	0.00	1.715	1.75	12.619	3.49	92.832	1.12	682.910	0.01
0.037	0.00	0.272	0.01	2.000	2.01	14.713	3.96	108.234	0.87	796.214	0.00
0.043	0.00	0.317	0.12	2.332	2.25	17.154	4.44	126.191	0.70	928.318	0.00
0.050	0.00	0.370	0.42	2.719	2.46	20.000	4.86	147.128	0.58	1082.339	0.00
0.059	0.00	0.431	0.68	3.170	2.61	23.318	5.13	171.539	0.44	1261.915	0.00
0.068	0.00	0.502	0.91	3.696	2.69	27.187	5.18	200.000	0.41	1471.285	0.00
0.080	0.00	0.586	1.07	4.309	2.71	31.698	4.97	233.183	0.38	1715.392	0.00
0.093	0.00	0.683	1.18	5.024	2.68	36.957	4.52	271.871	0.36	2000.000	0.00
0.108	0.00	0.796	1.23	5.857	2.63	43.089	3.90	316.979	0.33		
0.126	0.00	0.928	1.25	6.829	2.62	50.238	3.20	369.570			
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 25

Sample Details

Sample ID : MAWD-2C2X_1

Measured : Wednesday, April 26, 2023 14:12:41

Sample File : D:\Data Mastersizer2000\Technical
MTEC0859_66_51sem_Tetratosh-1.mea

Analysed : Wednesday, April 26, 2023 14:12:43

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

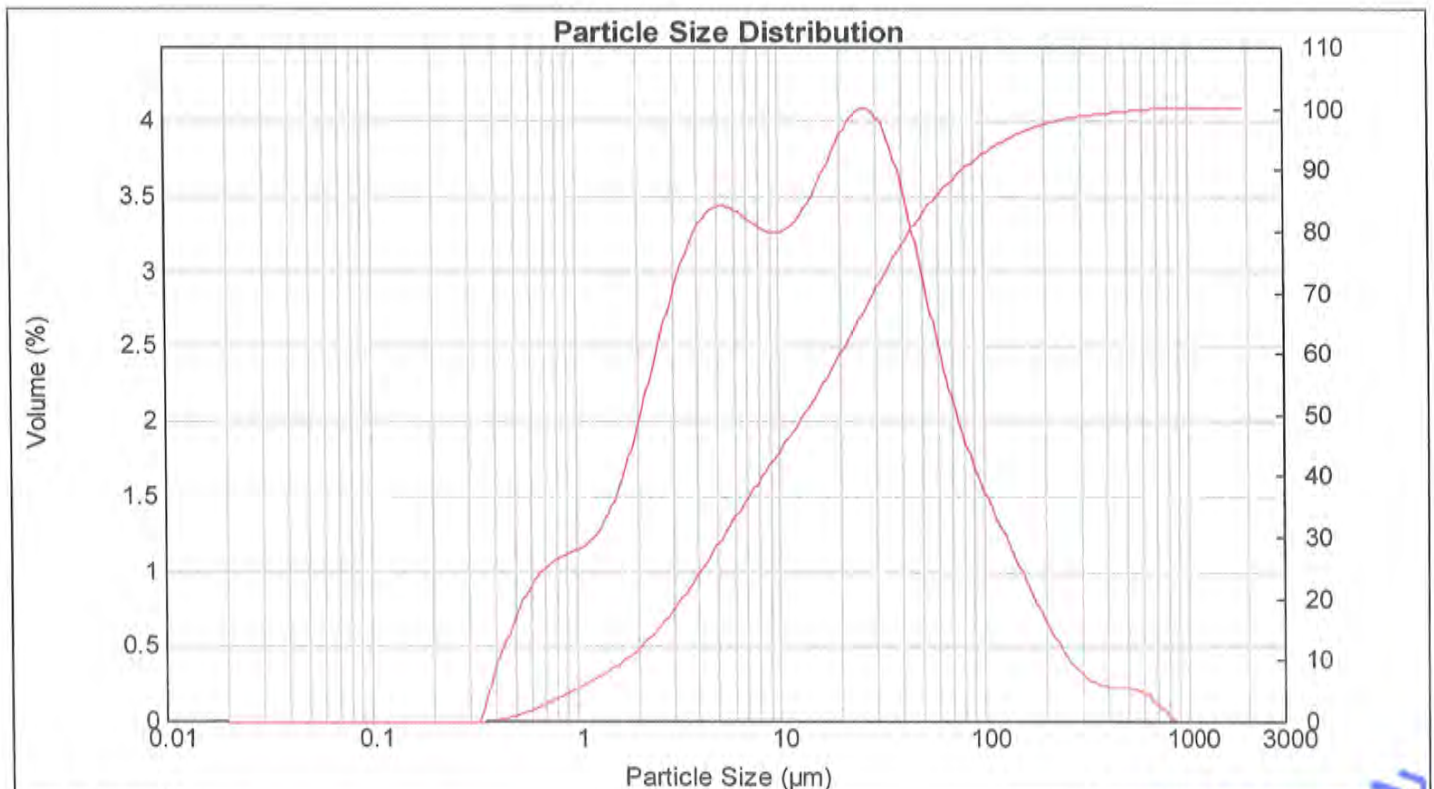
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.86 Residual (%) : 0.685
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0151 %Vol Specific Surface Area : 1.34 m²/g
Mean Diameters : D (0.1) : 1.73 um D (0.5) : 13.24 um D (0.9) : 80.36 um
D [4,3] : 34.4 um D [3,2] : 4.48 um Span : 5.939 Uniformity : 2.22

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.062	1.20	7.962	3.28	58.573	2.39	430.887	0.23
0.023	0.00	0.172	0.00	1.262	1.31	9.283	3.27	68.291	2.05	502.377	0.21
0.027	0.00	0.200	0.00	1.471	1.51	10.823	3.32	79.621	1.78	585.729	0.18
0.032	0.00	0.233	0.00	1.715	1.78	12.619	3.44	92.832	1.55	682.910	0.10
0.037	0.00	0.272	0.00	2.000	2.11	14.713	3.62	108.234	1.34	796.214	0.00
0.043	0.00	0.317	0.02	2.332	2.46	17.154	3.82	126.191	1.15	926.318	0.00
0.050	0.00	0.370	0.02	2.719	2.80	20.000	3.99	147.128	0.95	1082.339	0.00
0.059	0.00	0.431	0.33	3.170	3.09	23.318	4.09	171.539	0.77	1261.915	0.00
0.068	0.00	0.502	0.55	3.696	3.30	27.187	4.06	200.000	0.59	1471.285	0.00
0.080	0.00	0.586	0.78	4.309	3.42	31.698	3.89	233.183	0.44	1715.392	0.00
0.093	0.00	0.683	0.94	5.024	3.44	36.957	3.59	271.871	0.33	2000.000	0.00
0.108	0.00	0.796	1.10	5.857	3.41	43.089	3.20	316.979	0.26		
0.126	0.00	0.928	1.14	6.829	3.34	50.238	2.79	369.570	0.23		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 26

Sample Details

Sample ID : MAWD-2C2X_2

Measured : Wednesday, April 26, 2023 14:14:00

Sample File : D:\Data Mastersizer2000\Technical
serialTS 68MTEC0959_68_51sam_Tetratech-1.mea

Analysed : Wednesday, April 26, 2023 14:14:02

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

System Details

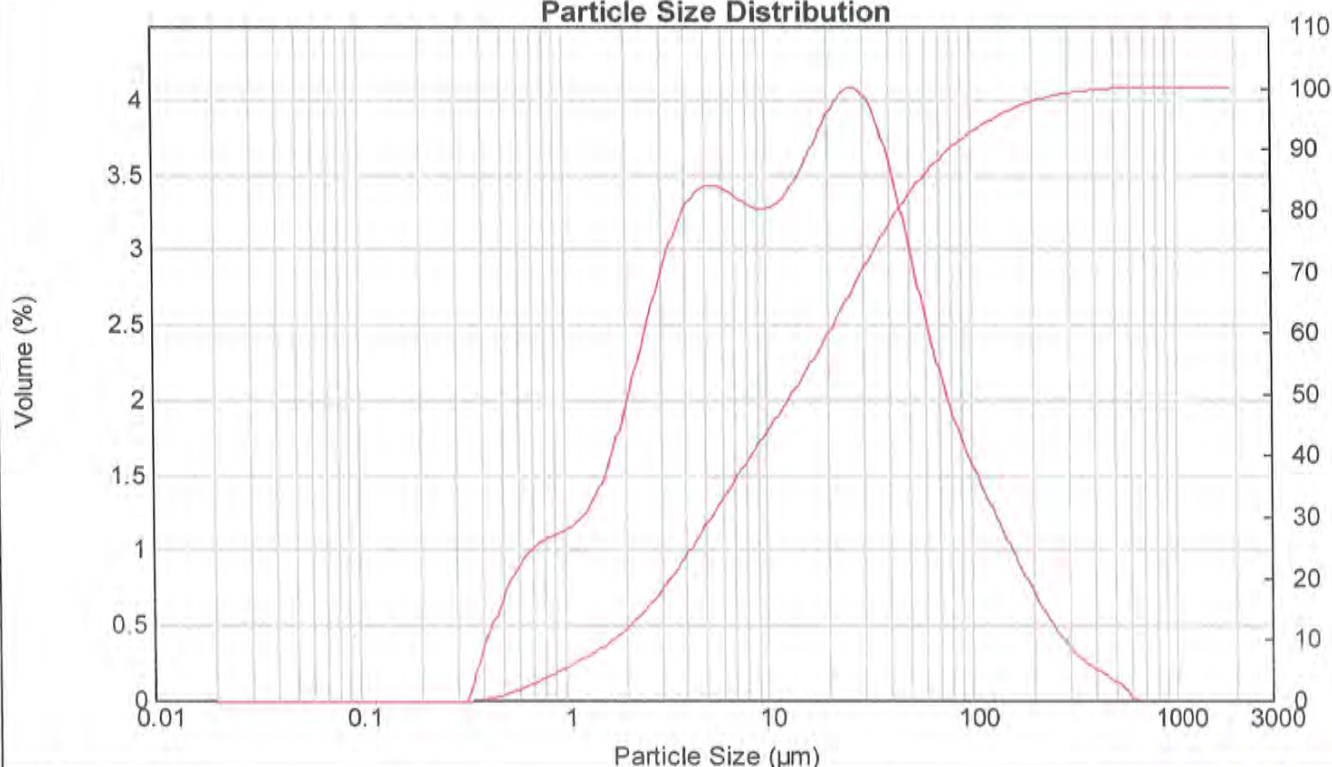
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.61 Residual (%) : 0.655
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0150 %Vol Specific Surface Area : 1.33 m²/g
Mean Diameters : D (0.1) : 1.74 um D (0.5) : 13.34 um D (0.9) : 80.18 um
D [4,3] : 32.47 um D [3,2] : 4.5 um Span : 5.882 Uniformity : 2.06

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.19	7.962	3.29	58.573	2.44	430.887	0.16
0.023	0.00	0.172	0.00	1.262	1.31	9.283	3.28	68.291	2.10	502.377	0.10
0.027	0.00	0.200	0.00	1.471	1.50	10.823	3.33	79.621	1.82	585.729	0.01
0.032	0.00	0.233	0.00	1.715	1.77	12.619	3.45	92.832	1.59	682.910	0.00
0.037	0.00	0.272	0.00	2.000	2.09	14.713	3.62	108.234	1.39	796.214	0.00
0.043	0.00	0.317	0.02	2.332	2.44	17.154	3.82	126.191	1.19	928.318	0.00
0.050	0.00	0.370	0.32	2.719	2.78	20.000	3.99	147.128	1.00	1082.339	0.00
0.059	0.00	0.431	0.55	3.170	3.07	23.318	4.08	171.539	0.82	1261.915	0.00
0.068	0.00	0.502	0.77	3.696	3.28	27.187	4.05	200.000	0.65	1471.285	0.00
0.080	0.00	0.586	0.93	4.309	3.40	31.698	3.90	233.183	0.50	1715.392	0.00
0.093	0.00	0.683	1.03	5.024	3.44	36.957	3.61	271.871	0.37	2000.000	0.00
0.108	0.00	0.796	1.09	5.857	3.41	43.089	3.24	316.979	0.28		
0.126	0.00	0.928	1.14	6.829	3.35	50.238	2.83	369.570	0.21		
0.147	0.00	1.082		7.962		58.573		430.887			

Particle Size Distribution



Result : Analysis Report

Attached page 27

Sample Details

Sample ID : MAWD-2C2X_3

Measured : Wednesday, April 26, 2023 14:14:49

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTEC0859_66_51um_Tetratosh 1 mea

Analysed : Wednesday, April 26, 2023 14:14:51

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

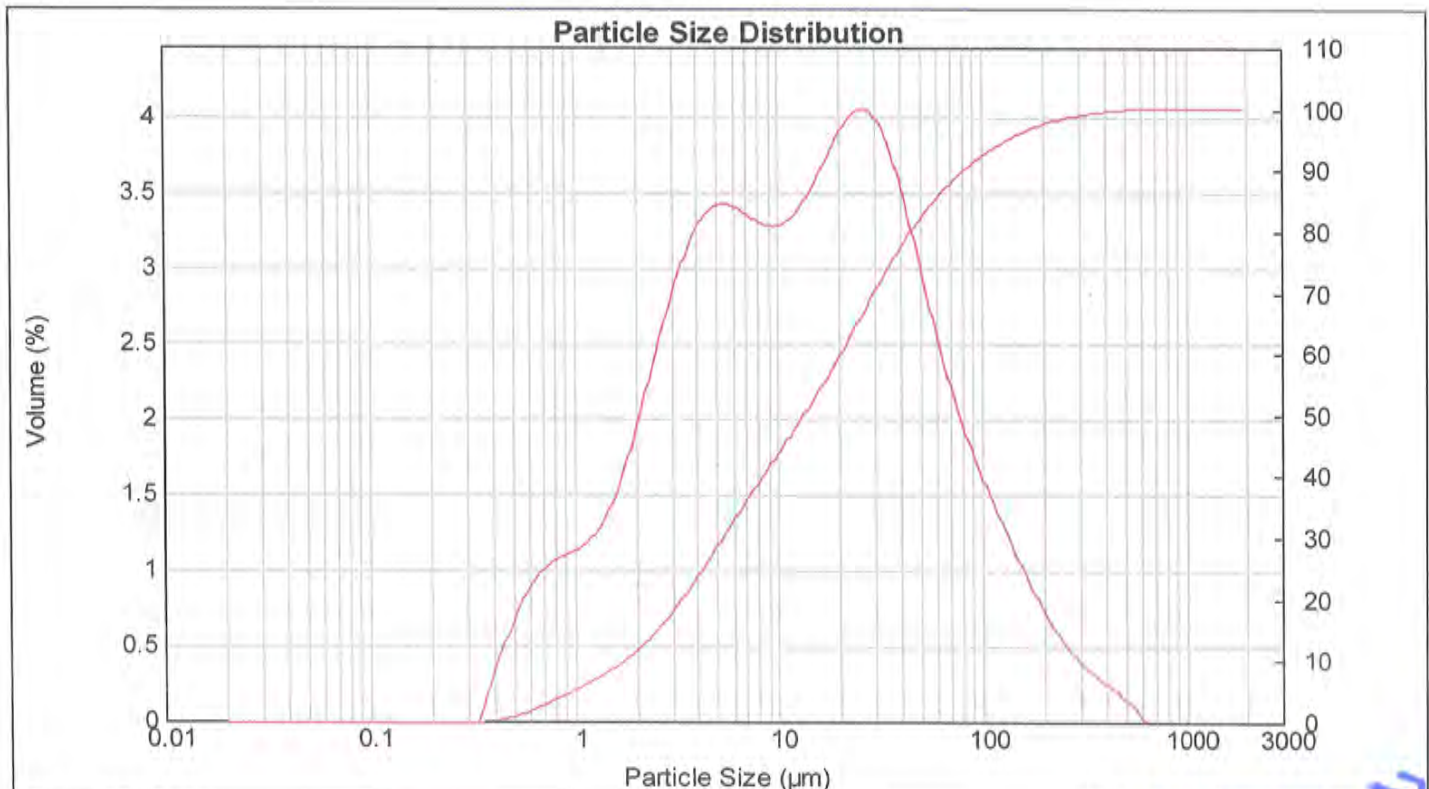
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.53 Residual (%) : 0.655
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0150 %Vol Specific Surface Area : 1.33 m²/g
Mean Diameters : D (0.1) : 1.74 um D (0.5) : 13.36 um D (0.9) : 81.85 um
D [4,3] : 33.18 um D [3,2] : 4.51 um Span : 5.997 Uniformity : 2.11

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.062	1.19	7.962	3.30	58.573	2.43	430.887	0.19
0.023	0.00	0.172	0.00	1.262	1.31	9.283	3.29	68.291	2.11	502.377	0.11
0.027	0.00	0.200	0.00	1.471	1.31	10.823	3.34	79.621	1.85	585.729	0.01
0.032	0.00	0.233	0.00	1.715	1.77	12.619	3.46	92.832	1.61	682.910	0.00
0.037	0.00	0.272	0.00	2.000	2.09	14.713	3.63	108.234	1.40	796.214	0.00
0.043	0.00	0.317	0.02	2.332	2.44	17.154	3.82	126.191	1.20	928.318	0.00
0.050	0.00	0.370	0.02	2.719	2.77	20.000	3.98	147.128	1.00	1082.339	0.00
0.059	0.00	0.431	0.04	3.170	3.06	23.318	4.05	171.539	0.82	1261.915	0.00
0.068	0.00	0.502	0.06	3.696	3.27	27.187	4.02	200.000	0.66	1471.285	0.00
0.080	0.00	0.586	0.09	4.309	3.39	31.698	3.85	233.183	0.52	1715.392	0.00
0.093	0.00	0.683	0.13	5.024	3.43	36.957	3.56	271.871	0.41	2000.000	0.00
0.108	0.00	0.796	0.19	5.857	3.40	43.089	3.19	316.979	0.32		
0.126	0.00	0.928	0.25	6.829	3.35	50.238	2.80	369.570	0.25		
0.147	0.00	1.082	0.33	7.962	3.30	58.573	2.43	430.887	0.19		



Result : Analysis Report

Attached page 28

Sample Details

Sample ID : MAWD-3B2_1

Measured : Wednesday, April 26, 2023 14:27:53

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTEC0850_66_51um_Tetratex 1.mes

Analysed : Wednesday, April 26, 2023 14:27:54

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

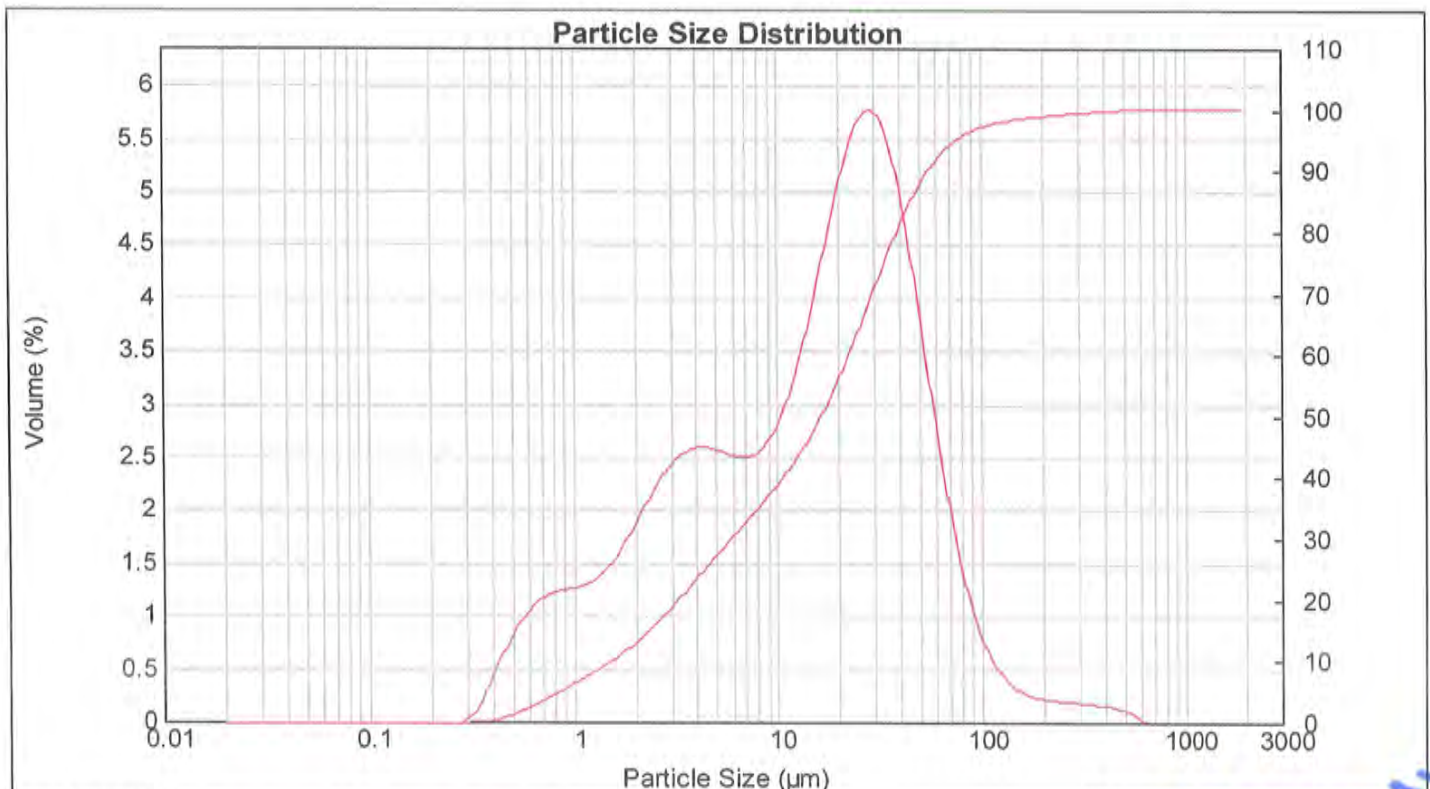
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.58 Residual (%) : 0.853
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0157 %Vol Specific Surface Area : 1.41 m²/g
Mean Diameters : D (0.1) : 1.52 um D (0.5) : 16.36 um D (0.9) : 55.27 um
D [4,3] : 26.48 um D [3,2] : 4.27 um Span : 3.286 Uniformity : 1.26

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.31	7.962	2.61	58.573	2.52	430.887	0.13
0.023	0.00	0.172	0.00	1.262	1.40	9.283	2.82	68.291	1.78	502.377	0.09
0.027	0.00	0.200	0.00	1.471	1.54	10.823	3.16	79.621	1.21	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.75	12.619	3.64	92.832	0.79	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.99	14.713	4.21	108.234	0.53	796.214	0.00
0.043	0.00	0.317	0.13	2.332	2.22	17.154	4.81	126.191	0.37	928.318	0.00
0.050	0.00	0.370	0.43	2.719	2.41	20.000	5.34	147.128	0.28	1082.339	0.00
0.059	0.00	0.431	0.69	3.170	2.54	23.318	5.69	171.539	0.23	1261.915	0.00
0.068	0.00	0.502	0.92	3.696	2.60	27.187	5.78	200.000	0.21	1471.285	0.00
0.080	0.00	0.586	1.09	4.309	2.60	31.698	5.55	233.183	0.19	1715.392	0.00
0.093	0.00	0.683	1.19	5.024	2.56	36.957	5.01	271.871	0.18	2000.000	0.00
0.108	0.00	0.796	1.25	5.857	2.52	43.089	4.25	316.979	0.17		
0.126	0.00	0.928	1.27	6.829	2.52	50.238	3.38	369.570	0.15		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 29

Sample Details

Sample ID : MAWD-3B2_2

Measured : Wednesday, April 26, 2023 14:29:13

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 68MTEC0059 68 51sam_Tetrach 1.mea

Analysed : Wednesday, April 26, 2023 14:29:14

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

System Details

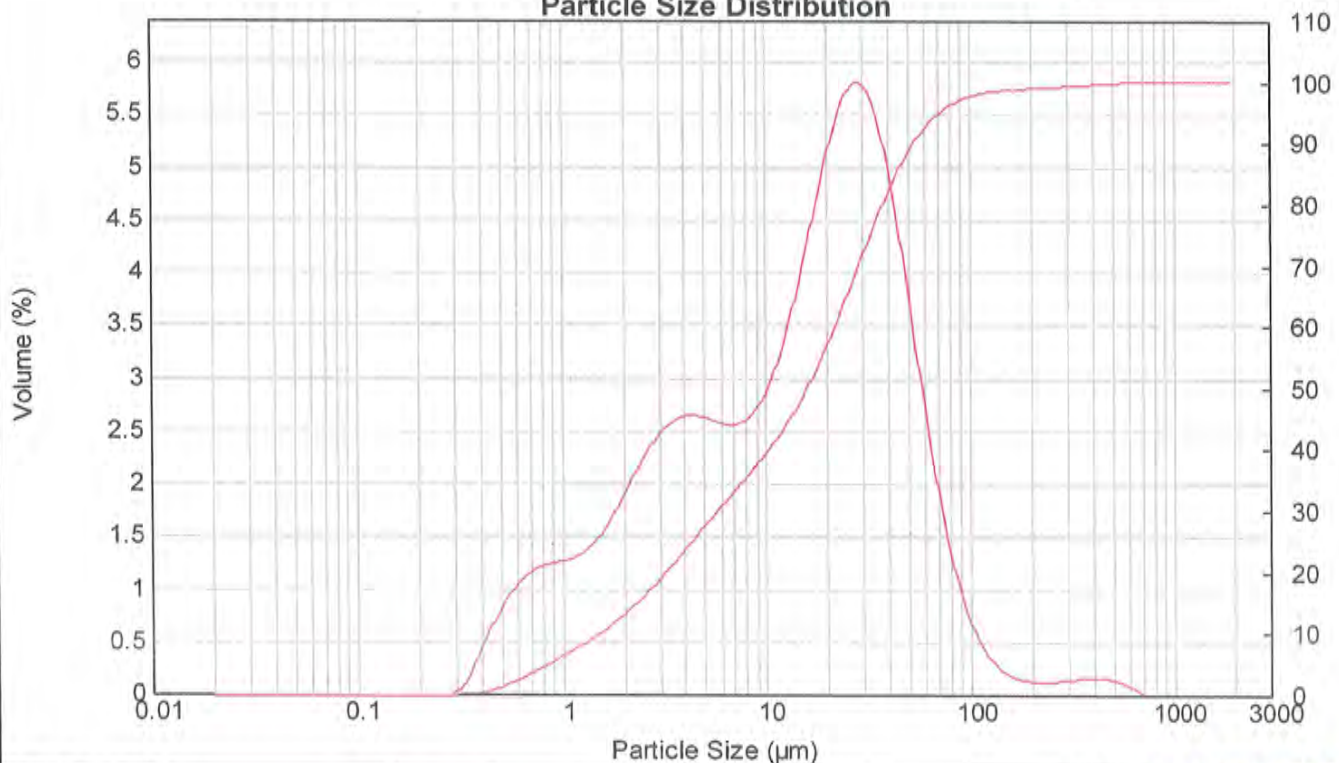
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.13 Residual (%) : 0.850
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0151 %Vol Specific Surface Area : 1.41 m²/g
Mean Diameters : D (0.1) : 1.52 um D (0.5) : 15.95 um D (0.9) : 53.17 um
D [4,3] : 25.82 um D [3,2] : 4.24 um Span : 3.237 Uniformity : 1.26

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.31	7.962	2.67	58.573	2.46	430.887	0.15
0.023	0.00	0.172	0.00	1.262	1.40	9.283	2.87	68.291	1.70	502.377	0.12
0.027	0.00	0.200	0.00	1.471	1.56	10.823	3.21	79.621	1.12	585.729	0.06
0.032	0.00	0.233	0.00	1.715	1.77	12.619	4.26	92.832	0.70	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.02	14.713	4.86	108.234	0.43	796.214	0.00
0.043	0.00	0.317	0.13	2.332	2.45	17.154	5.74	126.191	0.18	928.318	0.00
0.050	0.00	0.370	0.43	2.719	2.58	20.000	5.81	147.128	0.12	1082.339	0.00
0.059	0.00	0.431	0.69	3.170	2.65	23.318	5.56	171.539	0.14	1261.915	0.00
0.068	0.00	0.502	0.92	3.695	2.61	27.187	5.00	200.000	0.15	1471.285	0.00
0.080	0.00	0.596	1.09	4.309	2.58	31.698	4.22	233.183	0.16	1715.392	0.00
0.093	0.00	0.683	1.19	5.024	2.58	36.957	3.33	271.871	0.15	2000.000	0.00
0.108	0.00	0.796	1.25	5.857	2.58	43.089		316.979			
0.126	0.00	0.928	1.28	6.829		50.238		369.570			
0.147	0.00	1.082		7.962		58.573		430.887			

Particle Size Distribution



Result : Analysis Report

Attached page 30

Sample Details

Sample ID : MAWD-3B2_3

Measured : Wednesday, April 26, 2023 14:30:16

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 68MTEC0859 68 51nm TetraTech 1.mcs

Analysed : Wednesday, April 26, 2023 14:30:17

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

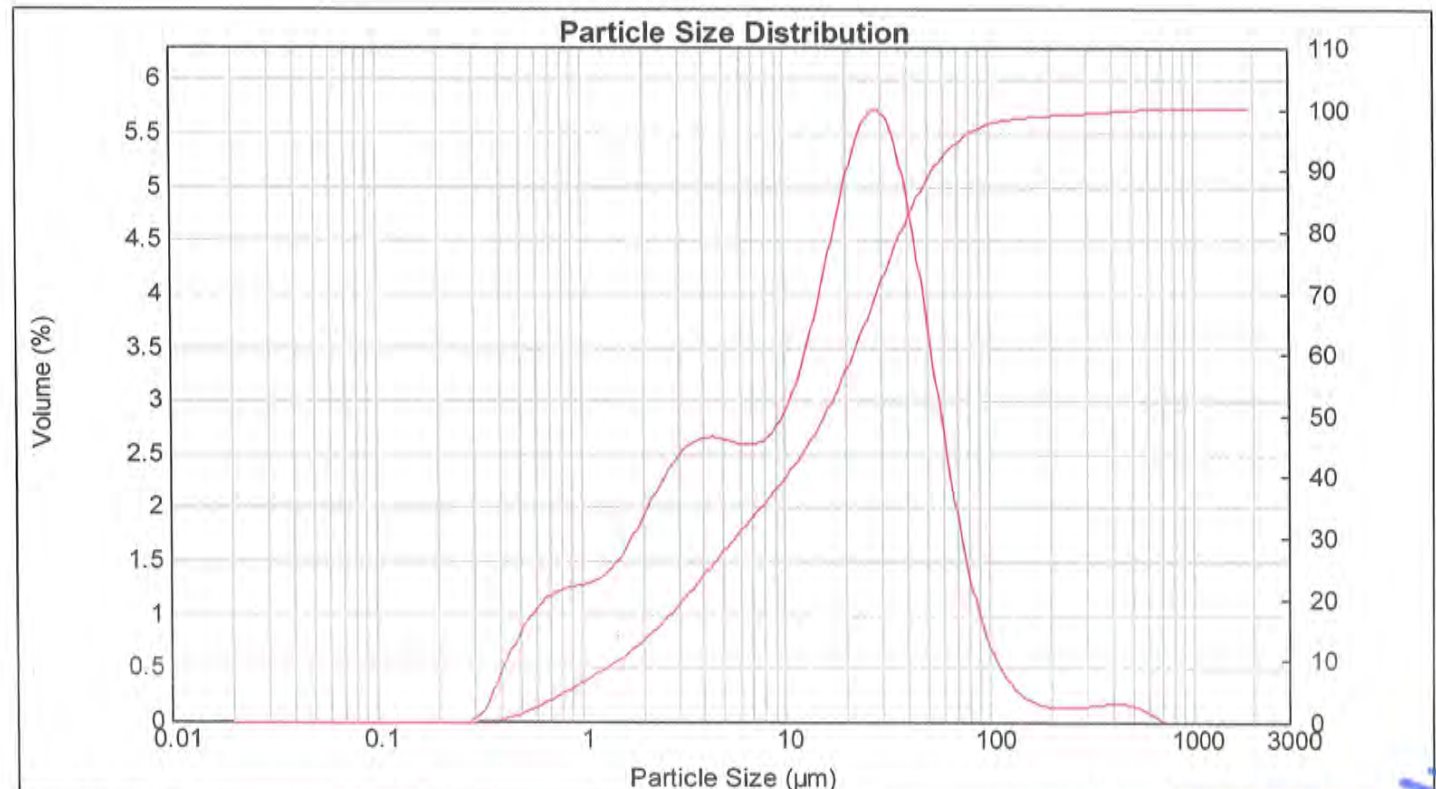
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.94 Residual (%) : 0.841
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0149 %Vol Specific Surface Area : 1.42 m²/g
Mean Diameters : D (0.1) : 1.51 um D (0.5) : 15.8 um D (0.9) : 53.67 um
D [4,3] : 26.09 um D [3,2] : 4.22 um Span : 3.302 Uniformity : 1.29

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.32	7.962	2.70	58.573	2.45	430.887	0.16
0.023	0.00	0.172	0.00	1.262	1.41	9.283	2.90	68.291	1.72	502.377	0.13
0.027	0.00	0.200	0.00	1.471	1.55	10.823	3.24	79.621	1.14	585.729	0.05
0.032	0.00	0.233	0.00	1.715	1.78	12.619	3.70	92.832	0.73	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.02	14.713	4.25	108.234	0.46	796.214	0.00
0.043	0.00	0.317	0.13	2.332	2.26	17.154	4.83	126.191	0.29	928.318	0.00
0.050	0.00	0.370	0.44	2.719	2.46	20.000	5.33	147.128	0.20	1082.339	0.00
0.059	0.00	0.431	0.69	3.170	2.59	23.318	5.73	171.539	0.15	1261.915	0.00
0.068	0.00	0.502	0.93	3.696	2.66	27.187	5.66	200.000	0.13	1471.285	0.00
0.080	0.00	0.596	1.09	4.309	2.63	31.698	5.48	233.183	0.13	1715.362	0.00
0.093	0.00	0.683	1.20	5.024	2.60	36.957	4.93	271.871	0.16	2000.000	0.00
0.108	0.00	0.796	1.25	5.857	2.61	43.089	4.17	316.979	0.17		
0.126	0.00	0.928	1.28	6.829		50.238		369.570			
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 31

Sample Details

Sample ID : MAWD-3C2X_1

Measured : Wednesday, April 26, 2023 14:40:17

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTEC0859_66_51um_Tetrated_1.msi

Analysed : Wednesday, April 26, 2023 14:40:19

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

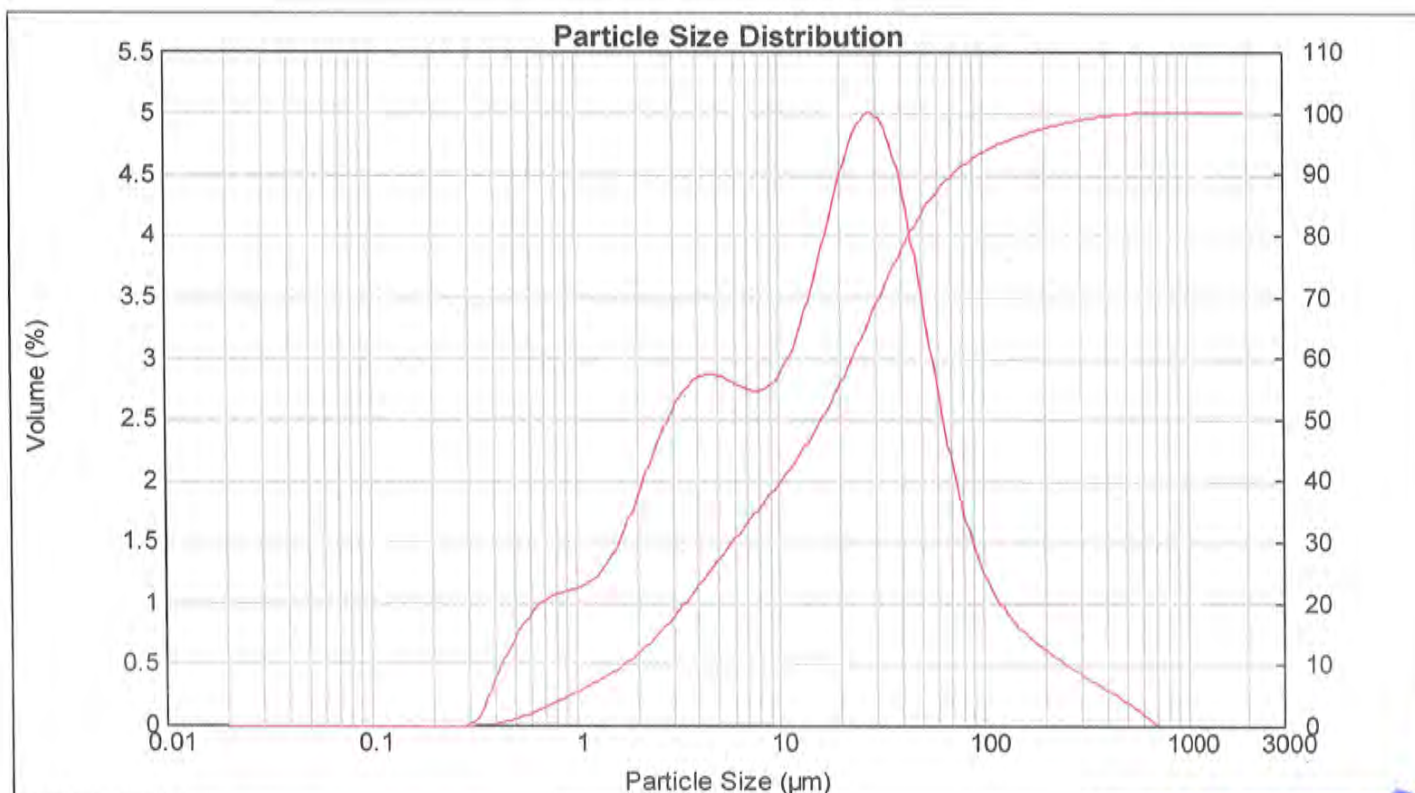
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.78 Residual (%) : 0.759
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0157 %Vol Specific Surface Area : 1.31 m²/g
Mean Diameters : D (0.1) : 1.73 um D (0.5) : 16.31 um D (0.9) : 72.59 um
D [4,3] : 33.76 um D [3,2] : 4.58 um Span : 4.344 Uniformity : 1.71

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.18	7.962	2.76	58.573	2.57	430.887	0.23
0.023	0.00	0.172	0.00	1.262	1.28	9.283	2.87	68.291	2.03	502.377	0.15
0.027	0.00	0.200	0.00	1.471	1.28	10.823	3.08	79.621	1.59	585.729	0.06
0.032	0.00	0.233	0.00	1.715	1.46	12.619	3.41	92.832	1.27	682.910	0.00
0.037	0.00	0.272	0.00	2.000	1.71	14.713	3.83	108.234	1.04	796.214	0.00
0.043	0.00	0.317	0.00	2.332	2.00	17.154	4.28	126.191	0.88	928.318	0.00
0.050	0.00	0.370	0.09	2.719	2.29	20.000	4.68	147.128	0.75	1082.339	0.00
0.059	0.00	0.431	0.35	3.170	2.55	23.318	4.95	171.539	0.67	1261.915	0.00
0.068	0.00	0.502	0.58	3.696	2.74	27.187	5.02	200.000	0.58	1471.285	0.00
0.080	0.00	0.586	0.79	4.309	2.85	31.698	4.84	233.183	0.50	1715.362	0.00
0.093	0.00	0.683	0.95	5.024	2.88	36.957	4.43	271.871	0.43	2000.000	0.00
0.108	0.00	0.796	1.04	5.857	2.79	43.089	3.86	316.979	0.36		
0.126	0.00	0.928	1.09	6.829	2.75	50.238	3.21	369.570	0.30		
0.147	0.00	1.082	1.13	7.962		58.573		430.887			



Result : Analysis Report

Attached page 32

Sample Details

Sample ID : MAWD-3C2X_2

Measured : Wednesday, April 26, 2023 14:42:08

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTEC0859_66_51sam_Tetrattech-1.me

Analysed : Wednesday, April 26, 2023 14:42:10

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

System Details

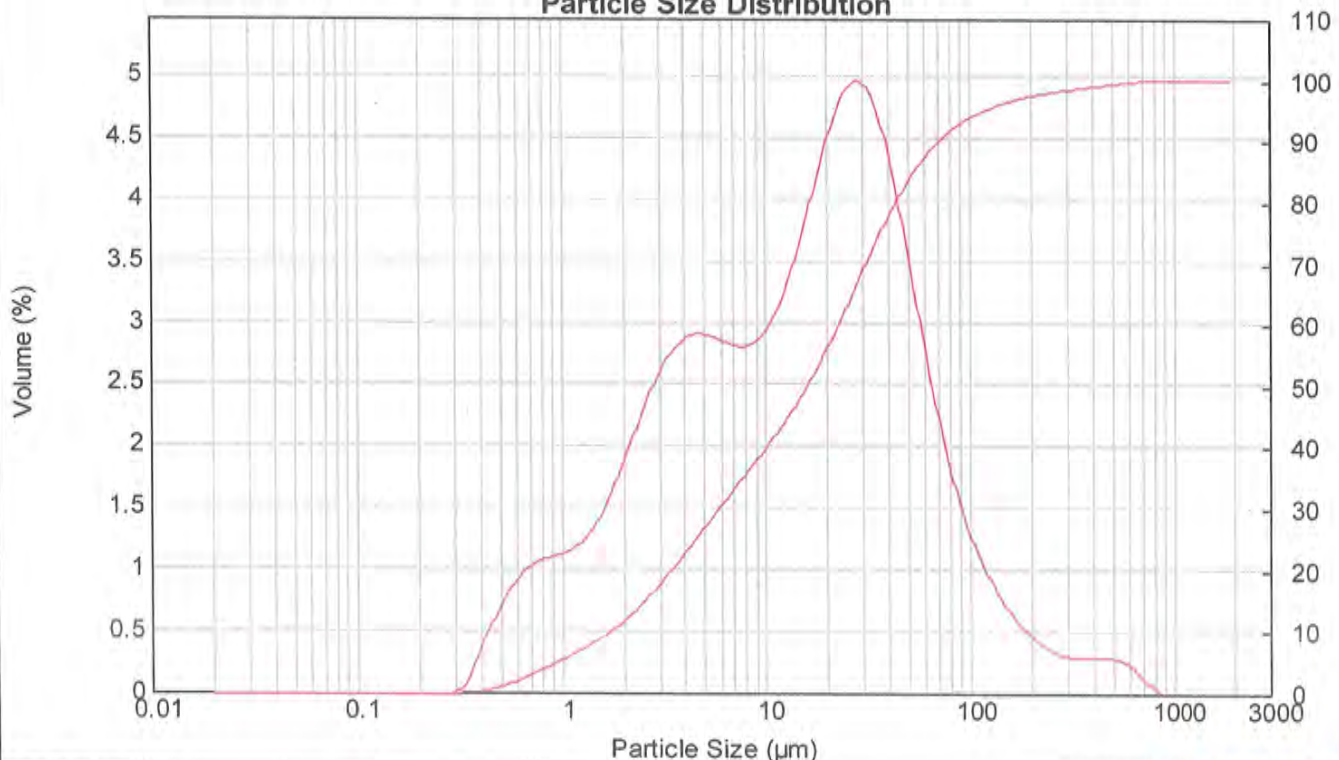
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.31 Residual (%) : 0.771
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0152 %Vol Specific Surface Area : 1.31 m²/g
Mean Diameters : D (0.1) : 1.72 um D (0.5) : 15.99 um D (0.9) : 70.74 um
D [4,3] : 34.36 um D [3,2] : 4.56 um Span : 4.316 Uniformity : 1.79

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.18	7.962	2.83	58.573	2.61	430.887	0.29
0.023	0.00	0.172	0.00	1.262	1.28	9.283	2.93	68.291	2.08	502.377	0.27
0.027	0.00	0.200	0.00	1.471	1.46	10.823	3.15	79.621	1.64	565.729	0.20
0.032	0.00	0.233	0.00	1.715	1.71	12.619	3.86	92.832	1.30	682.910	0.09
0.037	0.00	0.272	0.00	2.000	2.00	14.713	4.28	108.234	1.03	796.214	0.09
0.043	0.00	0.317	0.09	2.332	2.29	17.154	4.66	126.191	0.82	928.318	0.00
0.050	0.00	0.370	0.35	2.719	2.55	20.000	4.91	147.128	0.65	1082.339	0.00
0.059	0.00	0.431	0.58	3.170	2.87	23.318	4.96	171.539	0.52	1261.915	0.00
0.068	0.00	0.502	0.79	3.696	2.91	27.187	4.78	200.000	0.42	1471.285	0.00
0.080	0.00	0.586	1.05	4.309	2.85	31.698	4.39	233.183	0.34	1715.392	0.00
0.093	0.00	0.683	1.13	5.024	2.81	36.957	3.84	271.871	0.29	2000.000	0.00
0.108	0.00	0.796	1.10	5.857	2.81	43.089	3.22	316.979	0.29		
0.126	0.00	0.928	1.13	6.829	2.81	50.238		359.570	0.29		
0.147	0.00	1.082	1.13	7.962	2.81	58.573		430.887	0.29		

Particle Size Distribution



Result : Analysis Report

Attached page 33

Sample Details

Sample ID : MAWD-3C2X_3

Measured : Wednesday, April 26, 2023 14:43:44

Sample File : D:\Data Mastersizer2000\Technical
serial\TS 66\MTEC0950 66 51sam_Tetrattech 1.mea

Analysed : Wednesday, April 26, 2023 14:43:46

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

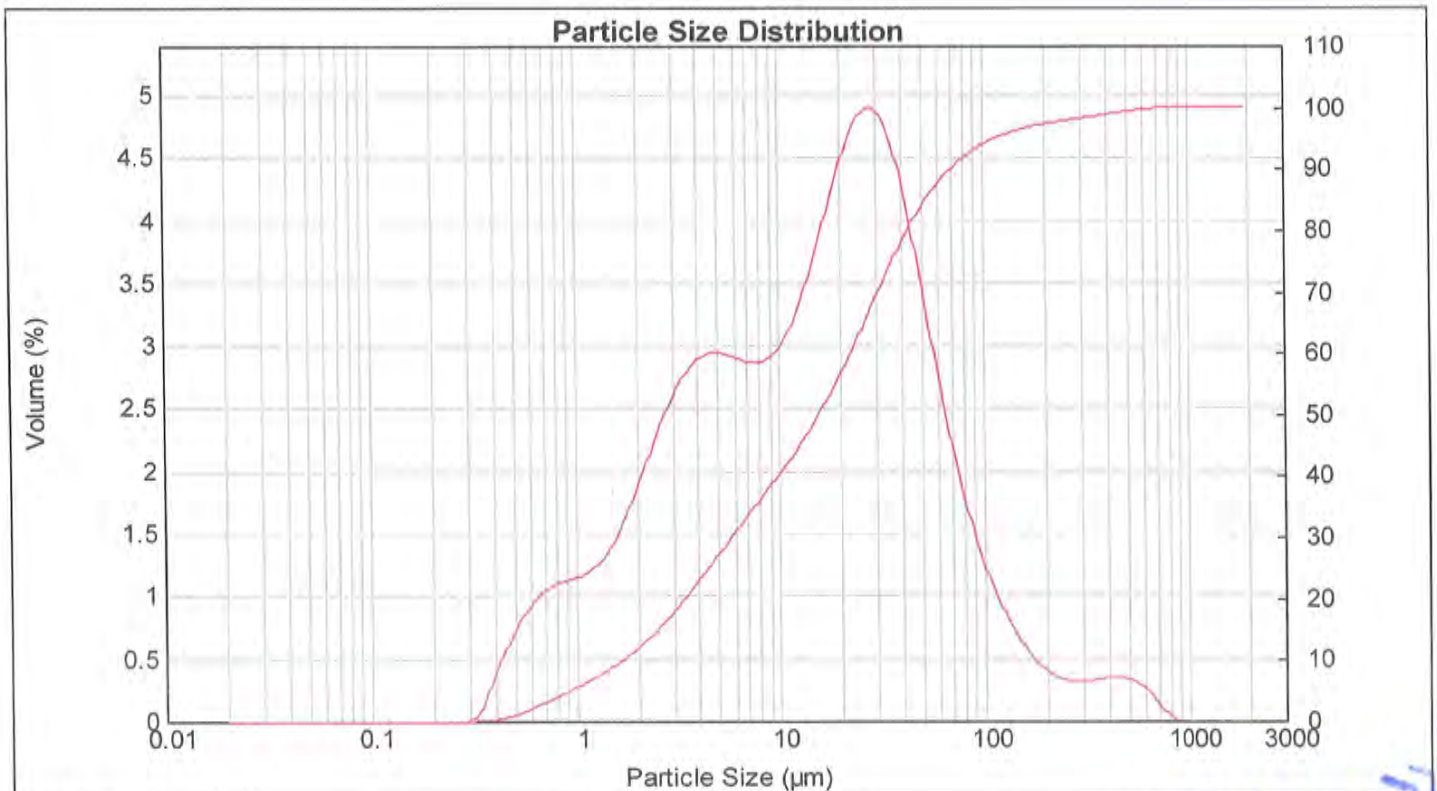
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.02 Residual (%) : 0.769
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0148 %Vol Specific Surface Area : 1.33 m²/g
Mean Diameters : D (0.1) : 1.7 um D (0.5) : 15.57 um D (0.9) : 69.74 um
D [4,3] : 34.69 um D [3,2] : 4.51 um Span : 4.370 Uniformity : 1.87

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.20	7.962	2.89	58.573	2.57	430.887	0.35
0.023	0.00	0.172	0.00	1.262	1.30	9.283	2.99	68.291	2.04	502.377	0.31
0.027	0.00	0.200	0.00	1.471	1.30	10.823	3.20	79.621	1.60	585.729	0.23
0.032	0.00	0.233	0.00	1.715	1.72	12.619	3.50	92.832	1.25	682.910	0.11
0.037	0.00	0.272	0.00	2.000	2.00	14.713	3.88	108.234	0.97	795.214	0.00
0.043	0.00	0.317	0.00	2.332	2.30	17.154	4.28	126.191	0.75	928.318	0.00
0.050	0.00	0.370	0.09	2.719	2.56	20.000	4.64	147.128	0.57	1082.339	0.00
0.059	0.00	0.431	0.36	3.170	2.77	23.318	4.86	171.539	0.45	1261.915	0.00
0.068	0.00	0.502	0.59	3.696	2.90	27.187	4.90	200.000	0.37	1471.285	0.00
0.080	0.00	0.585	0.81	4.309	2.95	31.698	4.71	233.183	0.32	1715.392	0.00
0.093	0.00	0.683	0.96	5.024	2.94	36.957	4.31	271.871	0.33	2000.000	0.00
0.108	0.00	0.796	1.06	5.857	2.90	43.089	3.77	316.979	0.33		
0.126	0.00	0.928	1.12	6.829	2.87	50.238	3.16	369.570	0.34		
0.147	0.00	1.082	1.15	7.962		58.573		430.887			



Result : Analysis Report

Attached page 34

Sample Details

Sample ID : MAWD-4B2X_1

Measured : Wednesday, April 26, 2023 14:51:37

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTEC\0850 66 51nm Tetra Tech 1.mcs

Analysed : Wednesday, April 26, 2023 14:51:38

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

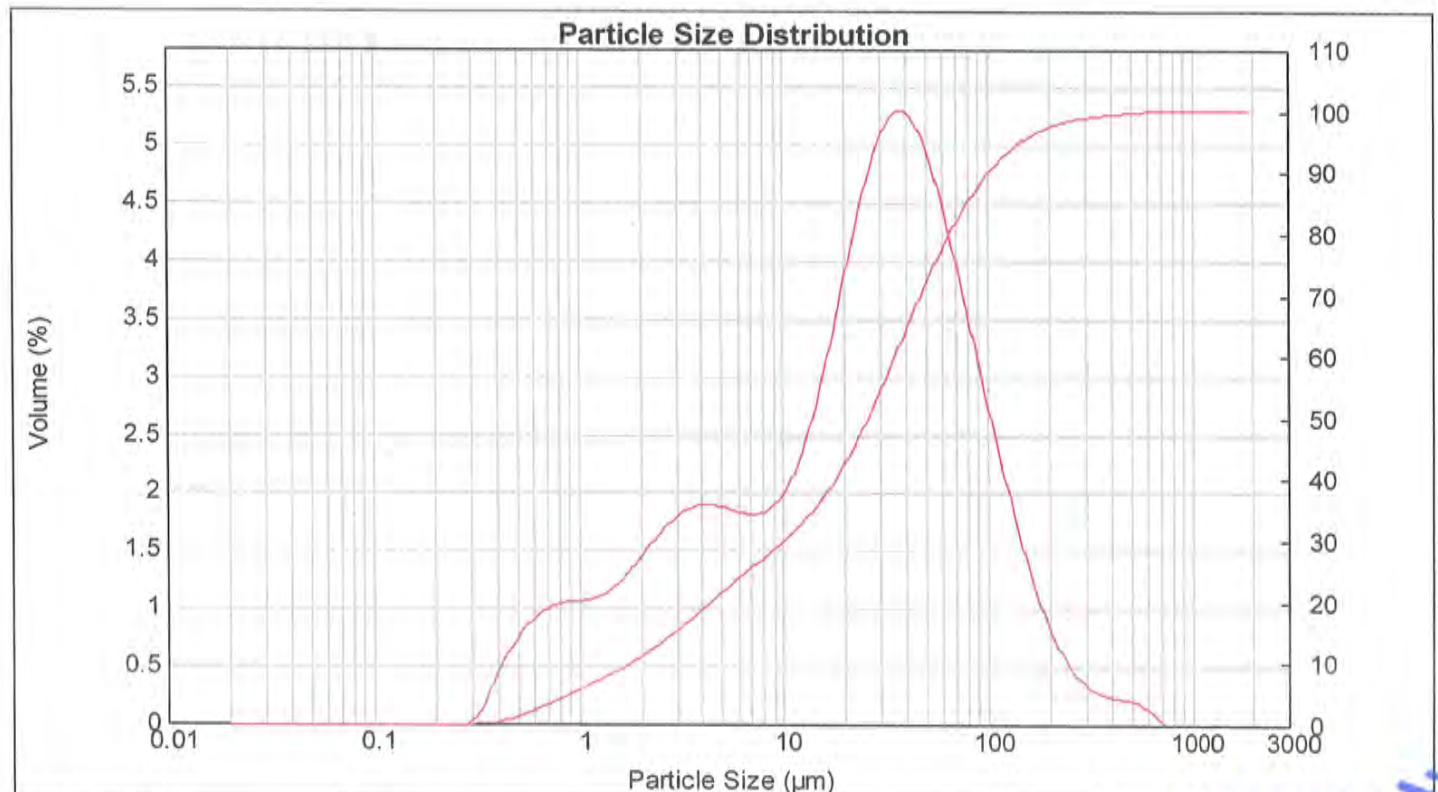
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.15 Residual (%) : 0.335
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0187 %Vol Specific Surface Area : 1.18 m²/g
Mean Diameters : D (0.1) : 1.8 um D (0.5) : 26.16 um D (0.9) : 102.06 um
D [4,3] : 44.11 um D [3,2] : 5.1 um Span : 3.833 Uniformity : 1.33

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.09	7.952	1.87	58.573	4.34	430.887	0.21
0.023	0.00	0.172	0.00	1.262	1.14	9.283	1.99	68.291	3.84	502.377	0.18
0.027	0.00	0.200	0.00	1.471	1.23	10.823	2.23	79.621	3.31	585.729	0.11
0.032	0.00	0.233	0.00	1.715	1.37	12.619	2.59	92.832	2.78	682.910	0.01
0.037	0.00	0.272	0.01	2.000	1.52	14.713	3.05	108.234	2.27	796.214	0.00
0.043	0.00	0.317	0.14	2.332	1.66	17.154	3.58	126.191	1.79	928.318	0.00
0.050	0.00	0.370	0.43	2.719	1.78	20.000	4.14	147.128	1.36	1082.339	0.00
0.059	0.00	0.431	0.64	3.170	1.86	23.318	4.65	171.539	1.00	1261.915	0.00
0.068	0.00	0.502	0.82	3.696	1.90	27.187	5.05	200.000	0.71	1471.285	0.00
0.080	0.00	0.586	0.95	4.309	1.87	31.698	5.27	233.183	0.50	1715.392	0.00
0.093	0.00	0.683	1.02	5.024	1.83	36.957	5.12	271.871	0.28	2000.000	0.00
0.108	0.00	0.796	1.06	5.857	1.82	43.089	4.79	316.979	0.24		
0.126	0.00	0.928	1.07	6.829		50.238		369.570			
0.147	0.00	1.082		7.952		58.573		430.887			



Result : Analysis Report

Attached page 35

Sample Details

Sample ID : MAWD-4B2X_2

Measured : Wednesday, April 26, 2023 14:53:14

Sample File : D:\Data Mastersizer2000\Technical
serial\TS 66\MTEC0859 66 51000m_Tototech 1.mex

Analysed : Wednesday, April 26, 2023 14:53:15

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

System Details

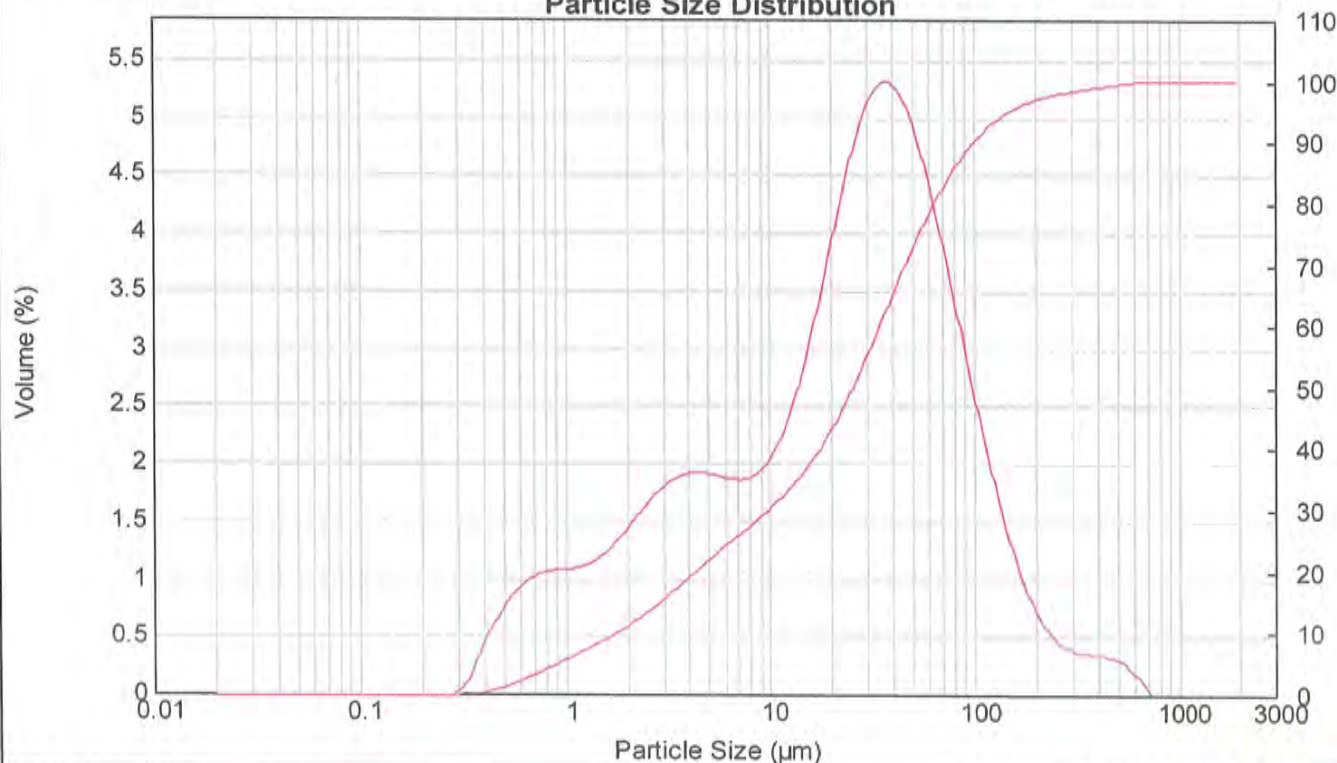
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.64 Residual (%) : 0.345
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0180 %Vol Specific Surface Area : 1.19 m²/g
Mean Diameters : D (0.1) : 1.77 um D (0.5) : 25.53 um D (0.9) : 99.48 um
D [4,3] : 44.63 um D [3,2] : 5.03 um Span : 3.827 Uniformity : 1.39

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.10	7.962	1.92	58.573	4.29	430.887	0.33
0.023	0.00	0.172	0.00	1.252	1.15	9.283	2.05	68.291	3.74	502.377	0.27
0.027	0.00	0.200	0.00	1.471	1.24	10.823	2.29	79.621	3.17	585.729	0.15
0.032	0.00	0.233	0.00	1.715	1.36	12.619	2.64	92.832	2.60	682.910	0.01
0.037	0.00	0.272	0.01	2.000	1.51	14.713	3.10	108.234	2.07	796.214	0.00
0.043	0.00	0.317	0.14	2.332	1.66	17.154	3.64	126.191	1.59	928.318	0.00
0.050	0.00	0.370	0.44	2.719	1.78	20.000	4.19	147.128	1.18	1082.339	0.00
0.059	0.00	0.431	0.65	3.170	1.87	23.318	4.70	171.539	0.85	1261.915	0.00
0.068	0.00	0.502	0.84	3.696	1.92	27.187	5.09	200.000	0.62	1471.285	0.00
0.080	0.00	0.586	0.97	4.309	1.93	31.698	5.30	233.183	0.47	1715.392	0.00
0.093	0.00	0.683	1.04	5.024	1.91	36.957	5.31	271.871	0.39	2000.000	0.00
0.108	0.00	0.796	1.08	5.857	1.88	43.089	5.12	316.979	0.36		
0.126	0.00	0.928	1.09	6.829	1.87	50.238	4.76	369.570	0.35		
0.147	0.00	1.082		7.962		58.573		430.887			

Particle Size Distribution



Result : Analysis Report

Attached page 36

Sample Details

Sample ID : MAWD-4B2X_3

Measured : Wednesday, April 26, 2023 14:54:32

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS SEMTEC0850 SS 51um Tetra Tech 1.mes

Analysed : Wednesday, April 26, 2023 14:54:34

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

System Details

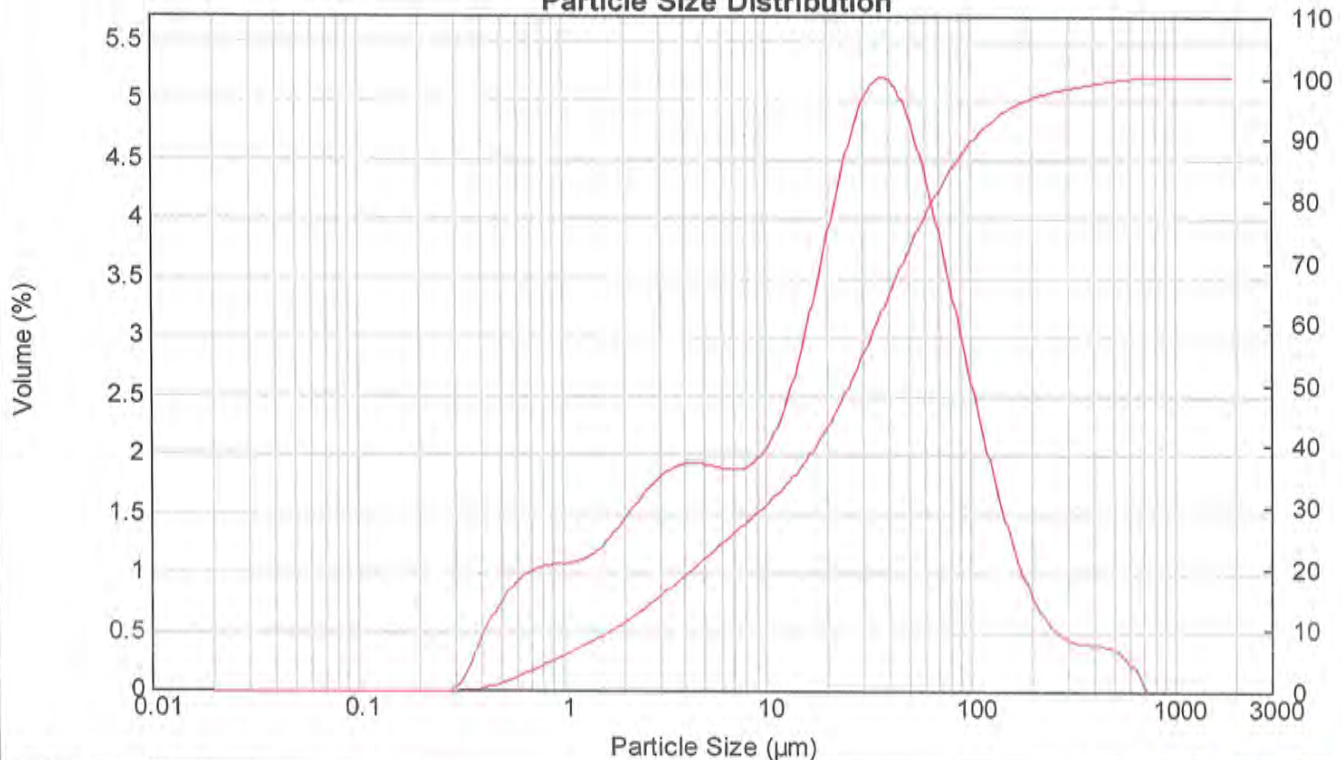
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.47 Residual (%) : 0.347
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0179 %Vol Specific Surface Area : 1.18 m²/g
Mean Diameters : D (0.1) : 1.79 um D (0.5) : 25.76 um D (0.9) : 104.72 um
D [4,3] : 46.63 um D [3,2] : 5.07 um Span : 3.996 Uniformity : 1.45

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.062	1.09	7.962	1.93	58.573	4.24	430.887	0.37
0.023	0.00	0.172	0.00	1.262	1.14	9.283	2.06	68.291	3.73	502.377	0.32
0.027	0.00	0.200	0.00	1.471	1.23	10.823	2.29	79.621	3.20	585.729	0.20
0.032	0.00	0.233	0.00	1.715	1.36	12.619	2.63	92.832	2.68	682.910	0.01
0.037	0.00	0.272	0.01	2.000	1.52	14.713	3.08	108.234	2.16	796.214	0.00
0.043	0.00	0.317	0.14	2.332	1.66	17.154	3.59	126.191	1.69	928.318	0.00
0.050	0.00	0.370	0.43	2.719	1.79	20.000	4.12	147.128	1.28	1082.339	0.00
0.059	0.00	0.431	0.64	3.170	1.88	23.318	4.60	171.539	0.95	1261.915	0.00
0.068	0.00	0.502	0.83	3.696	1.93	27.187	4.97	200.000	0.70	1471.285	0.00
0.080	0.00	0.586	0.95	4.309	1.93	31.698	5.17	233.183	0.54	1715.392	0.00
0.093	0.00	0.683	1.03	5.024	1.91	36.957	5.18	271.871	0.45	2000.000	0.00
0.108	0.00	0.796	1.06	5.857	1.88	43.089	5.01	316.979	0.40		
0.126	0.00	0.928	1.08	6.829	1.88	50.238	4.68	369.570	0.39		
0.147	0.00	1.062	1.09	7.962	1.93	58.573	4.24	430.887	0.37		

Particle Size Distribution



MTEC0859/66_2

Report of Samples Analysis

Issued Date : 8 May 2023
Customer : Tetra Tech Inc.
 77 Soi Udomsuk 39/1, Sukhumvit 103 Road, Bangchak,
 Phrakhanong, Bangkok 10260
 Tel : 0 2361 3767 Fax : 0 2361 3768
Tested by : Physical Analysis Section,
 Technical Support for Material Analysis Division, MTEC
Date received : 18 April 2023
Date analyzed : 25 April 2023
Samples : Seabed Sediment No.16 – 27 of 51 samples.
Identification No. : See sample detail
Instrument : Mastersizer 2000, Malvern Instruments.
Test method : Laser diffraction technique.
Analytical conditions : Red light source : He-Ne laser source, λ : 633 nm.
 Blue light source : Solid state light source
 Beam length : 2.35 mm.
 Particle size range analysis : 0.02 – 2,000 μm .
 Dispersion unit : Hydro 2000S (A)
 Dispersing medium : De-ionized water
 Treatment : Ultrasound 10 minutes with ultrasonic bath.
 : Stir at 2000 rpm during measuring.
 Sample refractive index : 1.5300 (as default standard wet)
 Number of experiments : 3
 Laser power : 86.6

Sample preparation : 1. Prepare the instrument for wet analysis. Stirrer should be set at 2000 rpm on Hydro 2000S (A).
 2. 10 – 50 ml. of sample was dispersed and ultrasound 10 minutes with ultrasonic bath.
 3. Add the dispersed sample into Hydro 2000S (A) unit and measure the dispersed sample with Mastersizer 2000.
 4. All measurements are made three times.

Samples detail :

Sample No.	Sample Name	Sample No.	Sample Name
1	MAWA-1C2	7	MAWB-1B2X
2	MAWA-1CP2	8	MAWB-1C2X
3	MAWA-2B2X	9	MAWB-2B2X
4	MAWA-3B2	10	MAWB-3B2X
5	MAWA-3C2	11	MAWB-3C2
6	MAWA-4B2X	12	MAWB-4B2X

MTEC0859/66_2

1/11

Technical Terms :

- Obscuration :** value at particle come cover to laser beam (percent), ranging from 10 – 30%.
- Residual :** on error value of analysis. This value should be less than 5%.
- D [4, 3] :** mean diameter value by volume.
- D [3, 2] :** mean diameter value by surface area.
- D (v, 0.1) :** 10 volume percent less than or equal to a given diameter.
- D (v, 0.5) :** 50 volume percent less than or equal to a given diameter, median diameter.
- D (v, 0.9) :** 90 volume percent less than or equal to a given diameter.
- Span :** the width of the distribution, which is independent of median size (D (v, 0.5)).
- Uniformity :** a measure of the absolute deviations from the median(D (v, 0.5)).
- Specific S.A. :** specific surface area, calculated from density and D [3, 2] of a sample.

Results :

MTEC received samples from Tetra Tech Inc. Laser diffraction technique is used in order to analyze the particle size and size distribution by wet analysis.

The results of the particle size and size distribution of samples are shown in tables 1 – 24 and the attachments No.1 – 36.

Table 1 Mastersizer 2000 results of MAWA-1C2

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	23.44	1.69	13.90	52.51	3.66
	2	23.48	1.71	14.09	53.24	3.66
	3	23.80	1.72	14.09	53.17	3.65
2	1	23.85	1.72	14.13	53.34	3.65
	2	23.84	1.74	14.17	53.77	3.67
	3	23.33	1.73	13.90	53.12	3.70
3	1	23.85	1.72	13.83	53.03	3.71
	2	23.63	1.71	13.61	52.54	3.74
	3	23.74	1.71	13.54	52.59	3.76
Mean		23.66	1.72	13.92	53.03	3.69
STD		0.20	0.01	0.23	0.42	0.04
RSD%		0.85	0.72	1.63	0.79	1.07

Table 2 Mastersizer 2000 results of MAWA-1C2 (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	23.35	69.98	6.68	28.39
	2	23.09	69.99	6.92	28.37
	3	23.00	70.11	6.89	28.52
2	1	22.91	70.08	7.00	28.28
	2	22.77	70.09	7.15	28.18
	3	22.91	70.16	6.93	27.91
3	1	22.98	70.05	6.97	27.75
	2	23.16	70.09	6.75	27.88
	3	23.21	69.98	6.82	27.60
Mean		23.04	70.06	6.90	28.10
STD		0.18	0.07	0.14	0.32

Table 3 Mastersizer 2000 results of MAWA-1CP2

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	27.72	1.59	17.40	59.22	3.31
	2	29.16	1.59	17.49	60.20	3.35
	3	28.79	1.60	17.54	61.08	3.39
2	1	27.28	1.59	17.41	59.33	3.32
	2	28.00	1.59	17.42	59.37	3.32
	3	27.42	1.60	17.58	60.12	3.33
3	1	28.77	1.60	17.62	61.50	3.40
	2	27.43	1.58	17.29	59.43	3.35
	3	28.62	1.58	17.45	60.15	3.36
Mean		28.13	1.59	17.47	60.04	3.35
STD		0.71	0.01	0.10	0.81	0.03
RSD%		2.53	0.40	0.60	1.35	0.95

Table 4 Mastersizer 2000 results of MAWA-1CP2 (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	22.29	68.78	8.93	29.58
	2	22.29	68.46	9.26	29.61
	3	22.19	68.26	9.55	29.41
2	1	22.29	68.76	8.95	29.64
	2	22.26	68.76	8.98	29.56
	3	22.14	68.63	9.23	29.49
3	1	22.03	68.28	9.69	29.51
	2	22.32	68.68	8.99	29.42
	3	22.28	68.49	9.23	29.79
Mean		22.23	68.57	9.20	29.56
STD		0.09	0.21	0.27	0.12

Table 5 Mastersizer 2000 results of MAWA-2B2X

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	36.80	1.85	18.61	86.51	4.55
	2	36.64	1.87	18.91	86.65	4.48
	3	36.21	1.86	18.55	82.70	4.36
2	1	35.43	1.87	18.73	83.77	4.37
	2	35.65	1.88	18.84	85.02	4.41
	3	35.13	1.86	18.41	80.03	4.25
3	1	36.81	1.88	18.72	85.02	4.44
	2	35.01	1.86	18.37	79.98	4.25
	3	36.29	1.86	18.52	81.73	4.31
Mean		36.00	1.87	18.63	83.49	4.38
STD		0.71	0.01	0.19	2.55	0.10
RSD%		1.97	0.58	1.00	3.05	2.32

Table 6 Mastersizer 2000 results of MAWA-2B2X (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 - 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	20.75	63.63	15.63	30.66
	2	20.50	63.65	15.85	30.84
	3	20.69	64.24	15.07	30.84
2	1	20.56	64.08	15.36	31.13
	2	20.48	64.04	15.48	30.99
	3	20.74	64.68	14.58	31.14
3	1	20.48	64.18	15.35	30.93
	2	20.69	64.74	14.57	31.17
	3	20.60	64.54	14.85	31.18
Mean		20.61	64.20	15.19	30.99
STD		0.11	0.41	0.45	0.18

Table 7 Mastersizer 2000 results of MAWA-3B2

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	42.44	1.79	21.78	100.66	4.54
	2	41.12	1.79	21.68	97.69	4.42
	3	40.24	1.76	21.25	97.87	4.52
2	1	42.20	1.76	21.25	98.11	4.54
	2	40.16	1.75	21.04	95.62	4.46
	3	42.64	1.76	21.12	100.24	4.66
3	1	42.15	1.75	21.03	100.55	4.70
	2	40.02	1.74	20.80	97.18	4.59
	3	43.01	1.75	20.97	103.99	4.88
Mean		41.55	1.76	21.21	99.10	4.59
STD		1.18	0.02	0.32	2.50	0.14
RSD%		2.83	1.01	1.53	2.52	3.01

Table 8 Mastersizer 2000 results of MAWA-3B2 (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	20.37	60.60	19.03	33.48
	2	20.39	60.92	18.69	33.88
	3	20.65	61.00	18.36	33.31
2	1	20.62	60.91	18.47	33.21
	2	20.75	61.10	18.15	33.66
	3	20.67	60.47	18.86	33.08
3	1	20.78	60.56	18.66	33.00
	2	20.90	60.64	18.46	33.20
	3	20.81	59.94	19.24	32.68
Mean		20.66	60.68	18.66	33.28
STD		0.18	0.35	0.34	0.36

Table 9 Mastersizer 2000 results of MAWA-3C2

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	24.75	1.52	16.43	54.71	3.24
	2	25.38	1.53	16.37	54.97	3.27
	3	25.45	1.51	16.22	54.76	3.28
2	1	25.18	1.51	16.03	54.43	3.30
	2	25.08	1.51	16.10	54.29	3.28
	3	24.43	1.51	15.85	53.26	3.27
3	1	24.87	1.50	15.81	53.47	3.29
	2	25.40	1.51	15.87	54.28	3.33
	3	24.73	1.50	15.63	53.85	3.35
Mean		25.03	1.51	16.03	54.22	3.29
STD		0.36	0.01	0.27	0.59	0.03
RSD%		1.42	0.67	1.69	1.08	1.02

Table 10 Mastersizer 2000 results of MAWA-3C2 (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	23.49	69.25	7.26	23.49
	2	23.37	69.22	7.42	23.37
	3	23.53	69.07	7.39	23.53
2	1	23.56	69.18	7.26	23.56
	2	23.53	69.32	7.14	23.53
	3	23.66	69.57	6.77	23.66
3	1	23.73	69.38	6.89	23.73
	2	23.66	69.14	7.21	23.66
	3	23.83	69.09	7.07	23.83
Mean		23.60	69.25	7.16	23.60
STD		0.14	0.16	0.22	0.14

Table 11 Mastersizer 2000 results of MAWA-4B2X

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	34.33	1.72	18.35	79.55	4.24
	2	34.51	1.70	18.11	79.74	4.31
	3	36.13	1.71	18.14	80.93	4.37
2	1	35.76	1.69	17.89	79.78	4.37
	2	36.40	1.69	17.88	83.90	4.60
	3	35.74	1.68	17.54	81.43	4.55
3	1	35.06	1.66	17.32	80.76	4.57
	2	36.75	1.66	17.10	82.11	4.71
	3	36.45	1.64	16.85	80.05	4.65
Mean		35.68	1.68	17.69	80.92	4.48
STD		0.87	0.03	0.51	1.41	0.17
RSD%		2.44	1.53	2.91	1.74	3.69

Table 12 Mastersizer 2000 results of MAWA-4B2X (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 - 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	21.78	63.78	14.45	31.33
	2	21.93	63.60	14.47	31.07
	3	21.92	63.40	14.69	30.87
2	1	22.13	63.43	14.44	30.73
	2	22.15	62.80	15.06	30.53
	3	22.37	63.02	14.60	30.35
3	1	22.61	62.99	14.40	30.42
	2	22.75	62.73	14.52	30.16
	3	22.96	62.77	14.27	30.01
Mean		22.29	63.17	14.54	30.61
STD		0.41	0.39	0.23	0.43

Table 13 Mastersizer 2000 results of MAWB-1B2X

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	28.39	1.56	17.18	64.58	3.67
	2	28.31	1.56	17.05	65.20	3.73
	3	28.36	1.56	16.94	64.51	3.72
2	1	28.54	1.55	16.64	64.35	3.77
	2	28.01	1.54	16.54	64.69	3.82
	3	27.52	1.53	16.28	62.71	3.76
3	1	27.77	1.52	16.16	63.46	3.83
	2	27.76	1.54	16.31	64.48	3.86
	3	27.99	1.52	16.11	63.81	3.87
Mean		28.07	1.54	16.58	64.20	3.78
STD		0.35	0.02	0.40	0.75	0.07
RSD%		1.24	1.00	2.42	1.17	1.81

Table 17 Mastersizer 2000 results of MAWB-2B2X

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	46.59	1.62	24.12	113.35	4.63
	2	46.68	1.63	24.39	114.72	4.64
	3	47.16	1.64	24.46	115.17	4.64
2	1	48.35	1.65	24.54	117.81	4.73
	2	47.81	1.64	24.37	113.87	4.61
	3	48.58	1.65	24.66	114.89	4.59
3	1	48.65	1.65	24.44	113.28	4.57
	2	45.18	1.65	24.39	112.57	4.55
	3	47.52	1.66	24.76	113.87	4.53
Mean		47.39	1.64	24.46	114.39	4.61
STD		1.13	0.01	0.18	1.53	0.06
RSD%		2.38	0.84	0.75	1.34	1.32

Table 18 Mastersizer 2000 results of MAWB-2B2X (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	20.13	57.51	22.36	35.46
	2	19.92	57.51	22.57	35.75
	3	19.90	57.39	22.72	35.52
2	1	19.75	57.39	22.85	35.45
	2	19.82	57.68	22.50	35.54
	3	19.65	57.48	22.88	35.73
3	1	19.73	57.84	22.44	35.92
	2	19.74	57.85	22.41	35.48
	3	19.56	57.64	22.80	36.27
Mean		19.80	57.59	22.61	35.68
STD		0.17	0.17	0.20	0.27

Table 19 Mastersizer 2000 results of MAWB-3B2X

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	25.13	2.77	11.14	59.96	5.13
	2	25.93	2.73	10.91	60.66	5.31
	3	25.24	2.71	10.84	60.69	5.35
2	1	24.75	2.68	10.64	59.58	5.35
	2	26.14	2.68	10.63	61.32	5.52
	3	25.24	2.65	10.50	59.29	5.39
3	1	24.21	2.60	10.23	56.61	5.28
	2	24.04	2.59	10.15	56.29	5.29
	3	24.47	2.58	10.09	58.33	5.53
Mean		25.02	2.67	10.57	59.19	5.35
STD		0.72	0.07	0.36	1.79	0.12
RSD%		2.89	2.53	3.43	3.02	2.26

Table 20 Mastersizer 2000 results of MAWB-3B2X (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	14.40	76.10	9.50	9.96
	2	14.71	75.64	9.65	9.71
	3	14.81	75.53	9.66	9.63
2	1	15.09	75.48	9.44	9.44
	2	15.11	75.11	9.79	9.38
	3	15.27	75.34	9.39	9.32
3	1	15.65	75.45	8.90	9.14
	2	15.78	75.40	8.83	9.05
	3	15.86	74.89	9.25	8.97
Mean		15.19	75.44	9.38	9.40
STD		0.50	0.34	0.33	0.33

Table 21 Mastersizer 2000 results of MAWB-3C2

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	28.36	1.47	15.84	63.64	3.93
	2	29.04	1.48	15.98	64.52	3.94
	3	29.08	1.48	15.97	64.20	3.93
2	1	29.62	1.49	16.09	64.84	3.94
	2	28.33	1.46	15.64	62.29	3.89
	3	28.91	1.47	15.80	63.08	3.90
3	1	29.08	1.47	15.75	64.23	3.98
	2	29.24	1.47	15.58	64.13	4.02
	3	28.84	1.46	15.44	64.18	4.06
Mean		28.94	1.47	15.79	63.90	3.96
STD		0.41	0.01	0.21	0.78	0.06
RSD%		1.41	0.61	1.34	1.23	1.44

Table 22 Mastersizer 2000 results of MAWB-3C2 (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	24.35	65.33	10.33	28.83
	2	24.16	65.28	10.56	28.90
	3	24.13	65.40	10.47	28.81
2	1	24.00	65.36	10.64	28.82
	2	24.34	65.72	9.94	28.57
	3	24.20	65.63	10.17	28.73
3	1	24.25	65.28	10.48	28.66
	2	24.30	65.25	10.45	28.36
	3	24.42	65.13	10.45	28.28
Mean		24.24	65.37	10.39	28.66
STD		0.13	0.19	0.21	0.22

Table 23 Mastersizer 2000 results of MAWB-4B2X

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	65.42	2.03	30.43	174.22	5.66
	2	65.13	2.03	30.20	167.70	5.49
	3	66.55	2.03	30.34	169.79	5.53
2	1	65.49	2.02	29.98	169.94	5.60
	2	67.21	2.05	30.93	177.47	5.67
	3	66.03	2.03	30.39	170.48	5.54
3	1	65.73	2.04	30.88	168.31	5.39
	2	67.06	2.04	30.86	174.89	5.60
	3	67.41	2.03	30.70	176.67	5.69
Mean		66.23	2.03	30.52	172.16	5.57
STD		0.86	0.01	0.34	3.68	0.10
RSD%		1.29	0.52	1.10	2.14	1.77

Table 24 Mastersizer 2000 results of MAWB-4B2X (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	17.61	50.99	31.40	40.80
	2	17.54	51.47	30.99	40.48
	3	17.49	51.48	31.03	41.62
2	1	17.61	51.69	30.70	41.17
	2	17.33	50.94	31.73	41.69
	3	17.51	51.11	31.39	41.24
3	1	17.33	51.03	31.64	44.37
	2	17.31	50.99	31.70	42.09
	3	17.41	51.15	31.44	42.58
Mean		17.46	51.20	31.34	41.78
STD		0.12	0.27	0.36	1.16

- Note :** 1. The specific surface area is inapplicable unless the density of a sample is known.
2. The results of particle size distribution are dispersion particle only.
3. Some particle of sample are vary size and size over range of instrument.

Interpretation/Opinion : None

Attached pages :


The attachment number	Detail
1 – 3	Mastersizer 2000 results of MAWA-1C2
4 – 6	Mastersizer 2000 results of MAWA-1CP2
7 – 9	Mastersizer 2000 results of MAWA-2B2X
10 – 12	Mastersizer 2000 results of MAWA-3B2
13 – 15	Mastersizer 2000 results of MAWA-3C2
16 – 18	Mastersizer 2000 results of MAWA-4B2X
19 – 21	Mastersizer 2000 results of MAWB-1B2X
22 – 24	Mastersizer 2000 results of MAWB-1C2X
25 – 27	Mastersizer 2000 results of MAWB-2B2X
28 – 30	Mastersizer 2000 results of MAWB-3B2X
31 – 33	Mastersizer 2000 results of MAWB-3C2
34 – 36	Mastersizer 2000 results of MAWB-4B2X

Work performed by :



(Mr.Arintarached Sirinantawittaya)

Approved by :



(Ms.Suphakan Kijamnajsuk)

Remark

1. MTEC does not allow any alteration or modification of this report, or any part of this report, without prior formal written permission from MTEC.
2. MTEC will not accept liability for any damage whatsoever, resulting directly or indirectly, from using data, results, conclusions or recommendations in this report for the purpose of designing, manufacturing or for other purposes.
3. Experimental results are only valid for the specimens tested.

Result : Analysis Report

Attached page 1

Sample Details

Sample ID : MAWA-1C2_1

Measured : Tuesday, April 25, 2023 9:01:47

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS_66MTEC059_66_51sam_Tetrattech-1.me

Analysed : Tuesday, April 25, 2023 9:01:49

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement

System Details

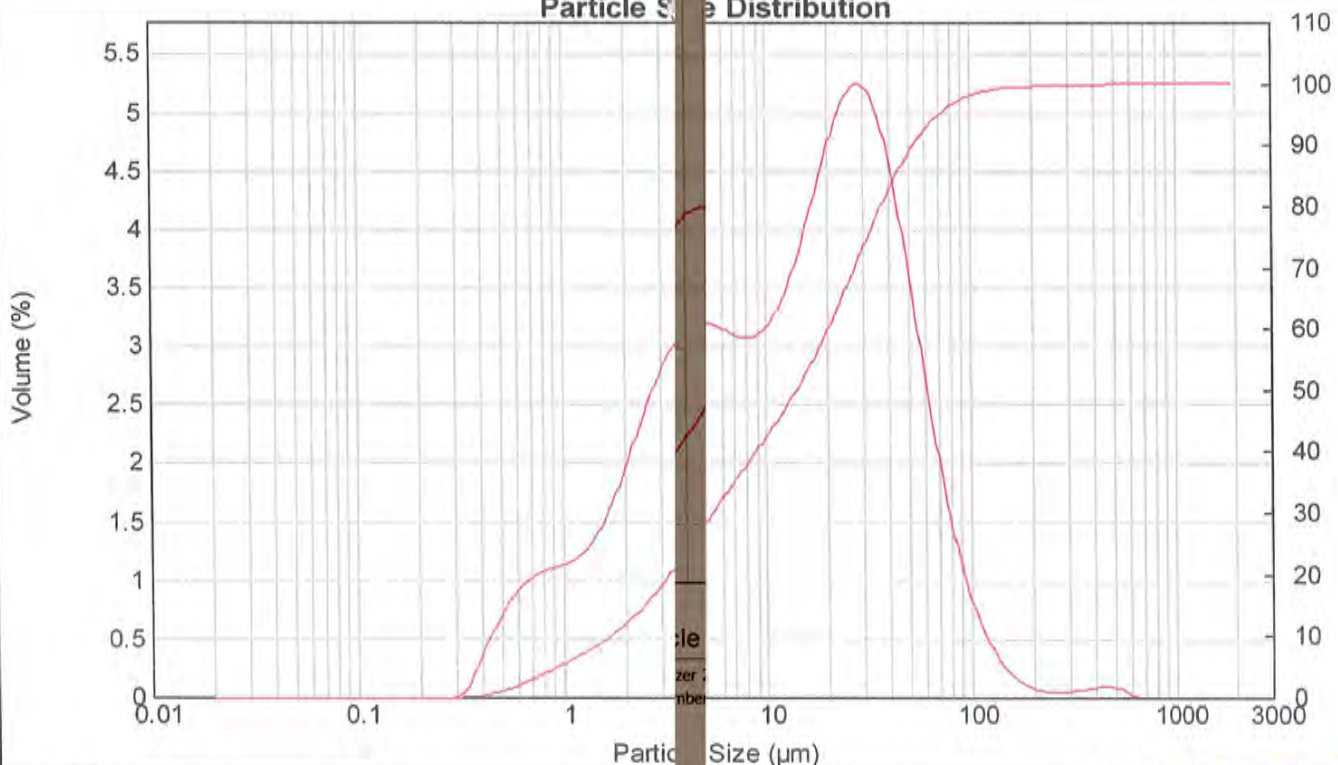
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 St Obscuration (%) : 20.57 Residual (%) : 0.723
Particle RI : 1.530 Absorption : 0.1 Dispersion Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0157 % Specific Surface Area : 1.35 m²/g
Mean Diameters : D (0.1) : 1.71 um D (0.5) : 14.09 um D (0.9) : 53.24 um
D [4,3] : 23.48 um D [3,2] : 4.43 um Span : 3.657 Uniformity : 1.29

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.2	7.962	3.09	58.573	2.51	430.887	0.09
0.023	0.00	0.172	0.00	1.262	1.3	9.283	3.17	68.291	1.84	502.377	0.07
0.027	0.00	0.200	0.00	1.471	1.3	10.823	3.17	79.621	1.84	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.4	12.619	3.36	92.832	1.28	682.910	0.00
0.037	0.00	0.272	0.00	2.000	2.1	14.713	4.07	108.234	0.54	796.214	0.00
0.043	0.00	0.317	0.00	2.332	2.1	17.154	4.07	126.191	0.54	928.318	0.00
0.050	0.00	0.370	0.08	2.719	2.1	20.000	4.51	147.128	0.32	1062.339	0.00
0.059	0.00	0.431	0.35	3.170	2.5	23.318	4.91	171.539	0.18	1261.915	0.00
0.068	0.00	0.502	0.58	3.696	2.9	27.187	5.19	200.000	0.10	1471.285	0.00
0.080	0.00	0.586	0.79	4.309	3.1	31.698	5.25	233.183	0.06	1715.392	0.00
0.093	0.00	0.683	0.95	5.024	3.1	36.957	5.06	271.871	0.04	2000.000	0.00
0.108	0.00	0.796	1.05	5.857	3.1	43.089	4.62	316.979	0.04		
0.126	0.00	0.928	1.10	6.829	3.1	50.238	3.99	369.570	0.06		
0.147	0.00	1.082	1.13	7.962	3.1	58.573	3.25	430.887	0.06		

Particle Size Distribution



Result : Analysis Report

Attached page 2

Sample Details

Sample ID : MAWA-1C2_2

Measured : Tuesday, April 25, 2023 9:03:21

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTEC0959_66_51sam_Tetrattech-1.mea

Analysed : Tuesday, April 25, 2023 9:03:23

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

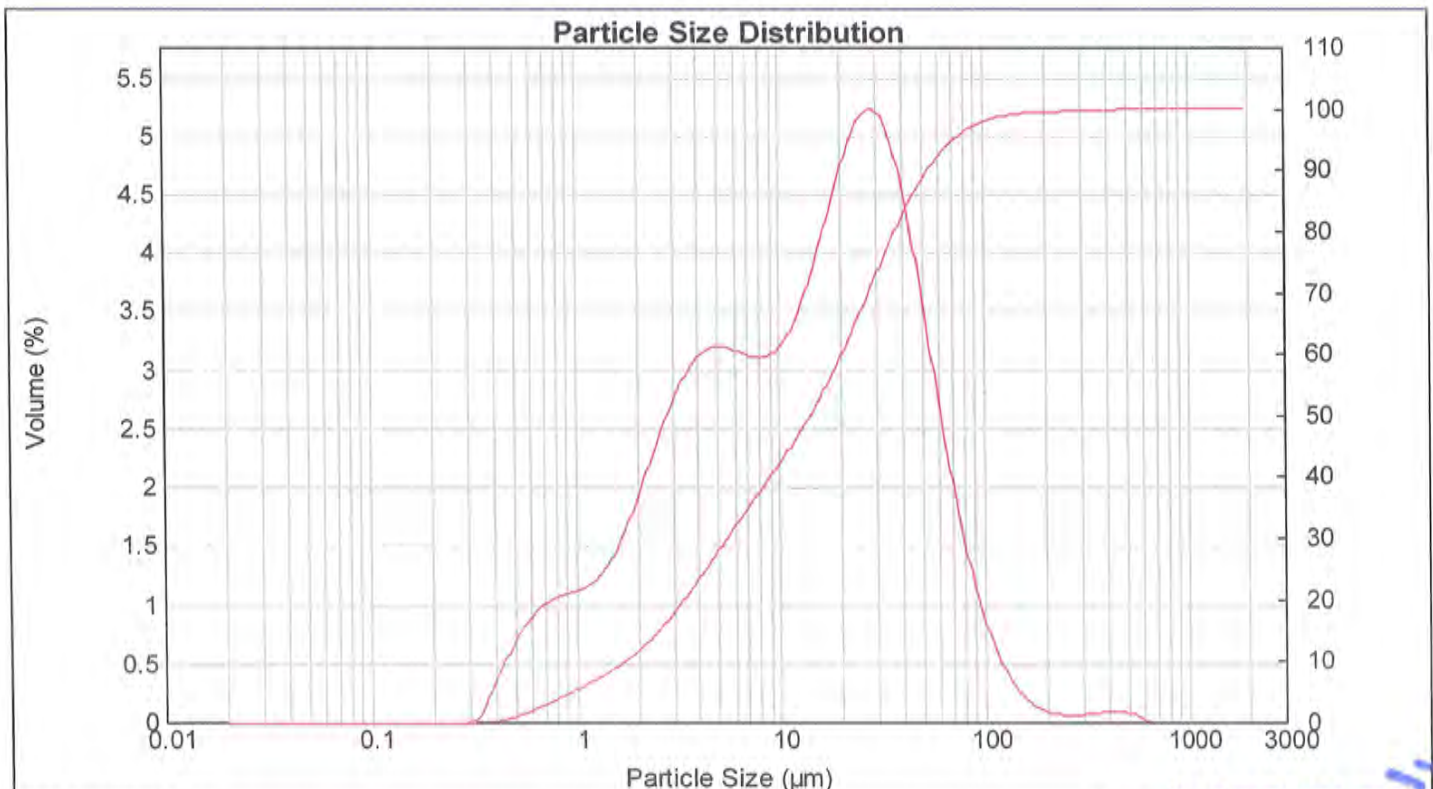
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.90 Residual (%) : 0.729
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0153 %Vol Specific Surface Area : 1.34 m²/g
Mean Diameters : D (0.1) : 1.74 um D (0.5) : 14.17 um D (0.9) : 53.77 um
D [4,3] : 23.84 um D [3,2] : 4.48 um Span : 3.672 Uniformity : 1.31

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.18	7.962	3.13	58.573	2.51	430.887	0.09
0.023	0.00	0.172	0.00	1.262	1.29	9.283	3.21	68.291	1.85	502.377	0.07
0.027	0.00	0.200	0.00	1.471	1.29	10.823	3.40	79.621	1.31	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.48	12.619	3.70	92.832	0.88	682.910	0.00
0.037	0.00	0.272	0.00	2.000	1.74	14.713	4.09	108.234	0.57	796.214	0.00
0.043	0.00	0.317	0.00	2.332	2.05	17.154	4.52	126.191	0.34	928.318	0.00
0.050	0.00	0.370	0.07	2.719	2.38	20.000	4.92	147.128	0.20	1082.339	0.00
0.059	0.00	0.431	0.34	3.170	2.69	23.318	5.18	171.539	0.11	1261.915	0.00
0.068	0.00	0.502	0.57	3.696	2.94	27.187	5.24	200.000	0.07	1471.285	0.00
0.080	0.00	0.586	0.78	4.309	3.11	31.699	5.04	233.183	0.06	1715.392	0.00
0.093	0.00	0.683	0.94	5.024	3.20	36.957	4.59	271.871	0.05	2000.000	0.00
0.108	0.00	0.796	1.03	5.857	3.21	43.089	3.96	316.979	0.08		
0.126	0.00	0.928	1.09	6.829	3.17	50.238	3.23	369.570	0.09		
0.147	0.00	1.082	1.12	7.962	3.13	58.573		430.887			



Result : Analysis Report

Attached page 3

Sample Details

Sample ID : MAWA-1C2_3

Measured : Tuesday, April 25, 2023 9:05:27

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTEC0859_66_51sam_Tetrattech-1.mea

Analysed : Tuesday, April 25, 2023 9:05:29

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

System Details

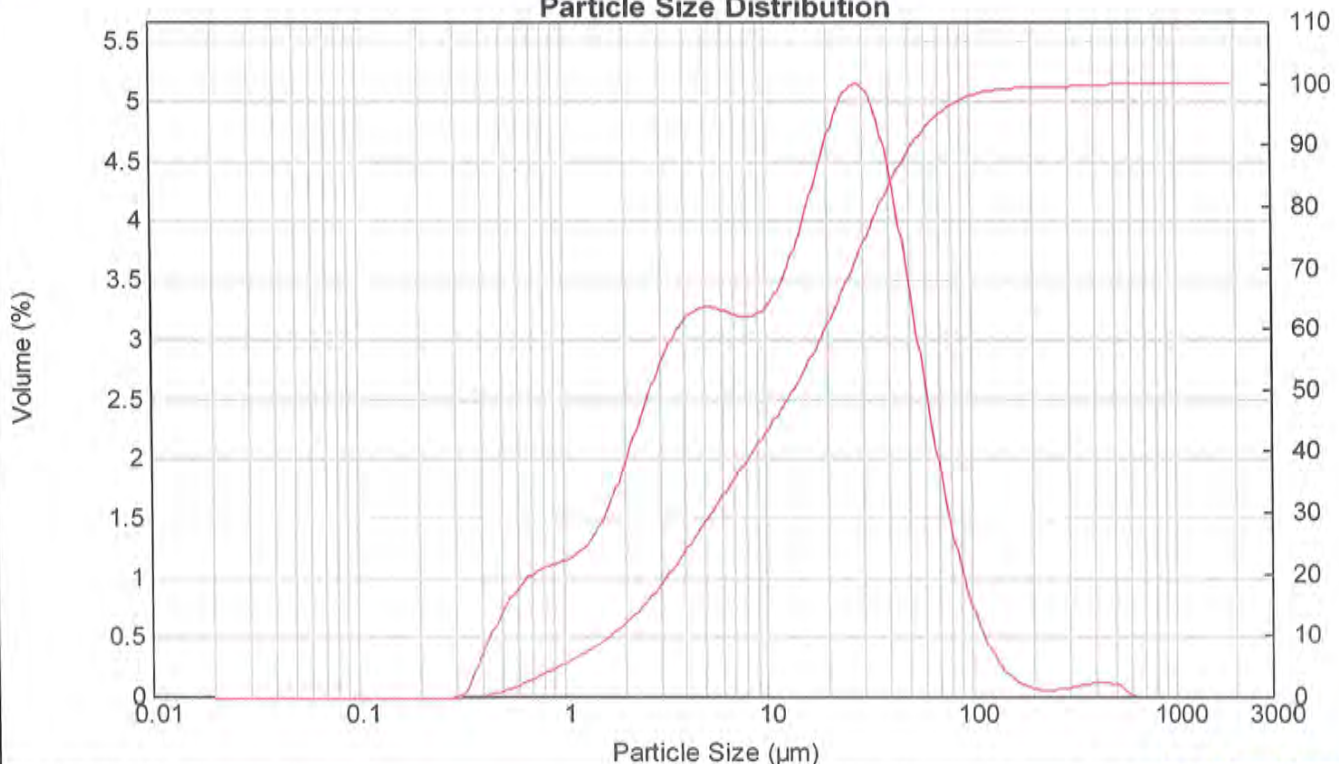
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.46 Residual (%) : 0.720
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0147 %Vol Specific Surface Area : 1.36 m²/g
Mean Diameters : D (0.1) : 1.71 um D (0.5) : 13.61 um D (0.9) : 52.54 um
D [4,3] : 23.63 um D [3,2] : 4.41 um Span : 3.736 Uniformity : 1.36

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.20	7.962	3.21	58.573	2.41	430.887	0.12
0.023	0.00	0.172	0.00	1.262	1.31	9.283	3.28	68.291	1.76	502.377	0.09
0.027	0.00	0.200	0.00	1.471	1.31	10.823	3.46	79.621	1.22	585.729	0.01
0.032	0.00	0.233	0.00	1.715	1.77	12.619	3.74	92.832	0.80	682.910	0.00
0.037	0.00	0.272	0.00	2.000	2.09	14.713	4.11	108.234	0.49	796.214	0.00
0.043	0.00	0.317	0.07	2.332	2.42	17.154	4.51	126.191	0.29	928.318	0.00
0.050	0.00	0.370	0.34	2.719	2.74	20.000	4.88	147.128	0.16	1082.339	0.00
0.059	0.00	0.431	0.58	3.170	2.99	23.318	5.12	171.539	0.09	1261.915	0.00
0.068	0.00	0.502	0.79	3.696	3.17	27.187	5.15	200.000	0.07	1471.285	0.00
0.080	0.00	0.586	0.95	4.309	3.27	31.698	4.94	233.183	0.06	1715.392	0.00
0.093	0.00	0.683	1.05	5.024	3.28	36.957	4.49	271.871	0.10	2000.000	0.00
0.108	0.00	0.796	1.11	5.857	3.25	43.089	3.86	316.979	0.12		
0.126	0.00	0.928	1.14	6.829	3.21	50.238	3.14	369.570			
0.147	0.00	1.082		7.962		58.573		430.887			

Particle Size Distribution



Result : Analysis Report

Attached page 4

Sample Details

Sample ID : MAWA-1CP2_1

Measured : Tuesday, April 25, 2023 9:26:13

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTEC0859_66_51sam_Tetrabtech-1.mea

Analysed : Tuesday, April 25, 2023 9:26:15

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

System Details

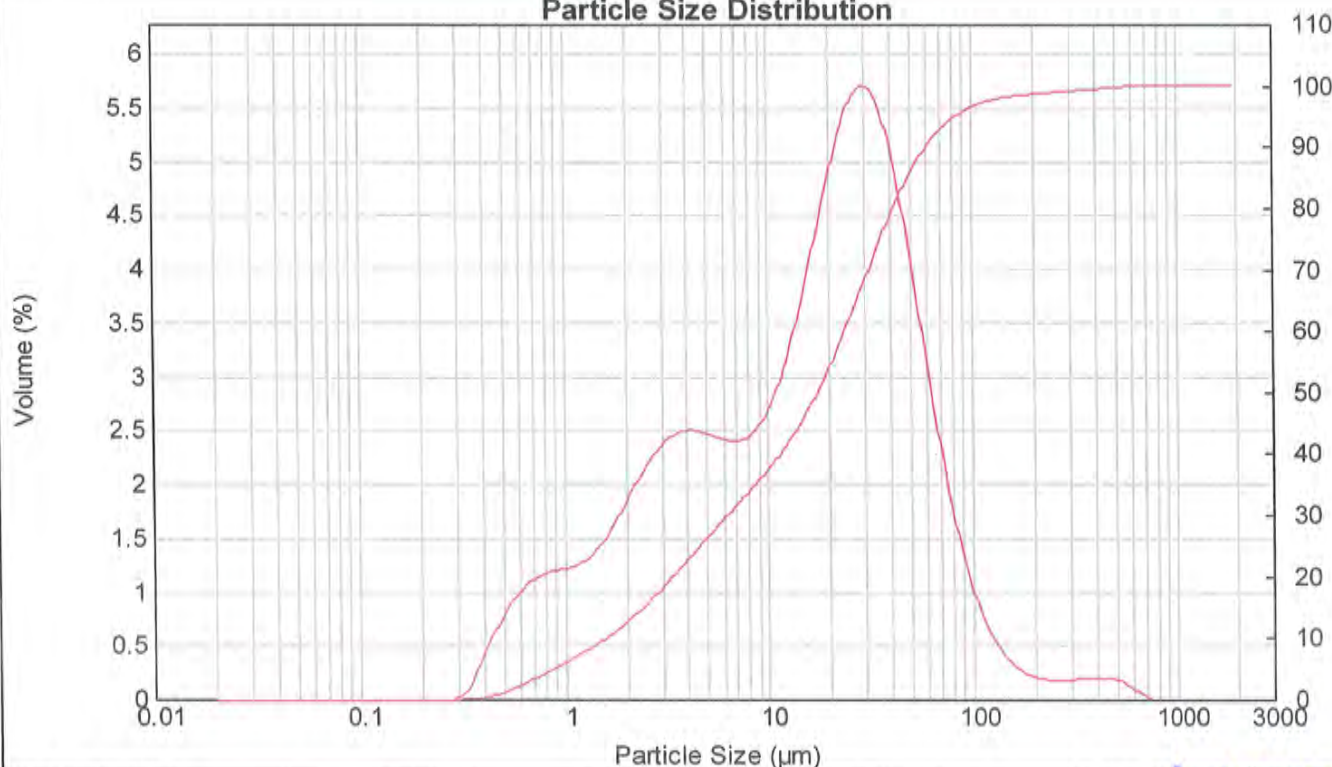
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 18.59 Residual (%) : 0.865
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0145 %Vol Specific Surface Area : 1.35 m²/g
Mean Diameters : D (0.1) : 1.59 um D (0.5) : 17.49 um D (0.9) : 60.2 um
D [4,3] : 29.16 um D [3,2] : 4.43 um Span : 3.351 Uniformity : 1.31

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.26	7.962	2.50	58.573	2.88	430.887	0.19
0.023	0.00	0.172	0.00	1.262	1.35	9.283	2.70	68.291	2.13	502.377	0.15
0.027	0.00	0.200	0.00	1.471	1.50	10.823	3.02	79.621	1.51	585.729	0.08
0.032	0.00	0.233	0.00	1.715	1.71	12.619	3.47	92.832	1.03	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.95	14.713	4.03	108.234	0.69	796.214	0.00
0.043	0.00	0.317	0.11	2.332	2.17	17.154	4.62	126.191	0.46	928.318	0.00
0.050	0.00	0.370	0.41	2.719	2.35	20.000	5.16	147.128	0.31	1082.339	0.00
0.059	0.00	0.431	0.65	3.170	2.46	23.318	5.56	171.539	0.23	1261.915	0.00
0.068	0.00	0.502	0.88	3.696	2.51	27.187	5.72	200.000	0.19	1471.285	0.00
0.080	0.00	0.586	1.04	4.309	2.50	31.698	5.58	233.183	0.17	1715.392	0.00
0.093	0.00	0.683	1.14	5.024	2.46	36.957	5.15	271.871	0.18	2000.000	0.00
0.108	0.00	0.796	1.19	5.857	2.42	43.089	4.49	316.979	0.19		
0.126	0.00	0.928	1.22	6.829	2.42	50.238	3.70	369.570	0.20		
0.147	0.00	1.082		7.962		58.573		430.887			

Particle Size Distribution



Result : Analysis Report

Attached page 5

Sample Details

Sample ID : MAWA-1CP2_2

Measured : Tuesday, April 25, 2023 9:27:17

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTEC\0859_66_51sam_Tebratech 1.mea

Analysed : Tuesday, April 25, 2023 9:27:18

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

System Details

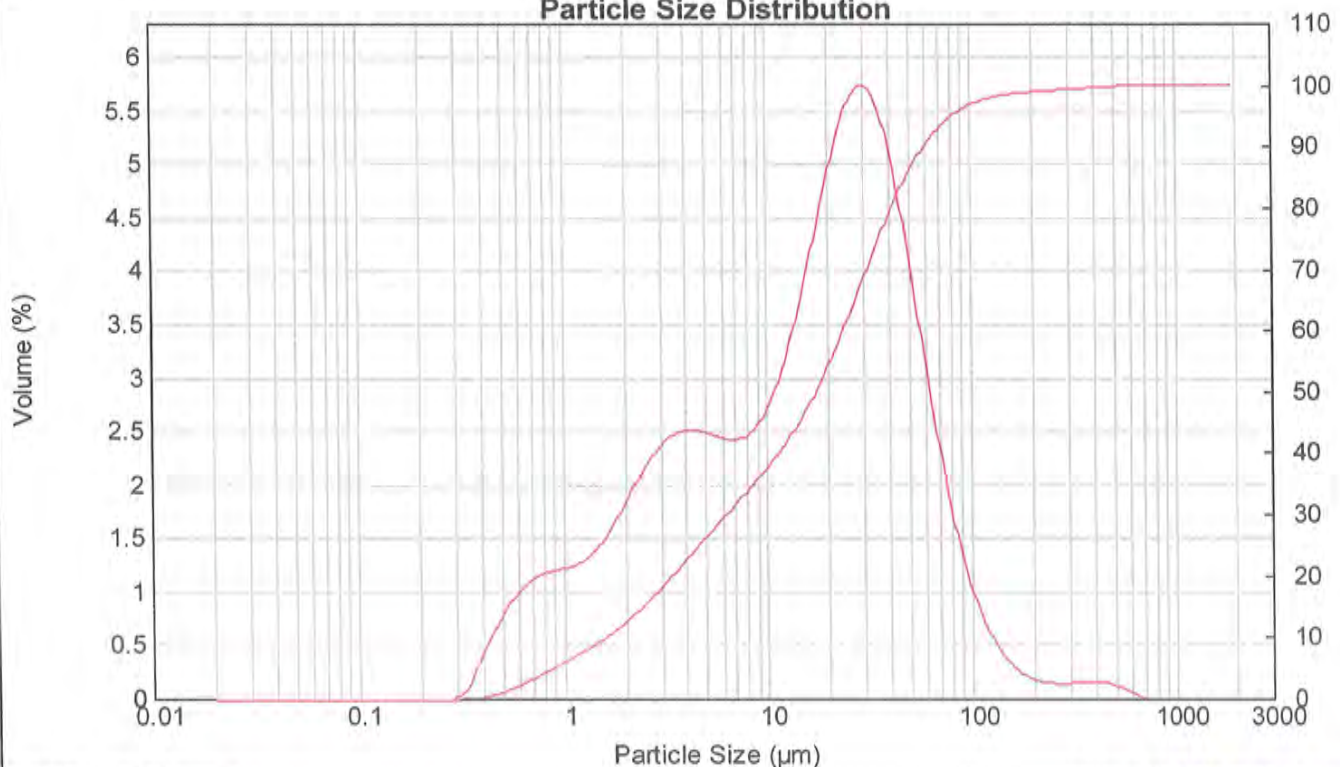
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 18.52 Residual (%) : 0.864
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0144 %Vol Specific Surface Area : 1.35 m²/g
Mean Diameters : D (0.1) : 1.59 um D (0.5) : 17.42 um D (0.9) : 59.37 um
D [4,3] : 28 um D [3,2] : 4.43 um Span : 3.318 Uniformity : 1.25

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.26	7.962	2.52	58.573	2.87	430.887	0.14
0.023	0.00	0.172	0.00	1.262	1.35	9.283	2.71	68.291	2.13	502.377	0.10
0.027	0.00	0.200	0.00	1.471	1.35	10.823	3.04	79.621	1.51	585.729	0.04
0.032	0.00	0.233	0.00	1.715	1.71	12.619	3.49	92.832	1.04	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.94	14.713	4.05	108.234	0.70	796.214	0.00
0.043	0.00	0.317	0.11	2.332	2.16	17.154	4.65	126.191	0.46	928.318	0.00
0.050	0.00	0.370	0.41	2.719	2.34	20.000	5.20	147.128	0.31	1082.339	0.00
0.059	0.00	0.431	0.65	3.170	2.46	23.318	5.60	171.539	0.21	1261.915	0.00
0.068	0.00	0.502	0.88	3.696	2.52	27.187	5.75	200.000	0.16	1471.285	0.00
0.080	0.00	0.586	1.04	4.309	2.51	31.688	5.61	233.183	0.15	1715.392	0.00
0.093	0.00	0.683	1.14	5.024	2.47	36.957	5.17	271.871	0.15	2000.000	0.00
0.108	0.00	0.796	1.19	5.857	2.43	43.089	4.49	316.979	0.15		
0.126	0.00	0.928	1.22	6.829	2.44	50.238	3.69	369.570	0.16		
0.147	0.00	1.082		7.962		58.573		430.887			

Particle Size Distribution



Result : Analysis Report

Attached page 6

Sample Details

Sample ID : MAWA-1CP2_3

Measured : Tuesday, April 25, 2023 9:29:40

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS_66\MT-C0850_66_51um_TetraTech_1.mps

Analysed : Tuesday, April 25, 2023 9:29:42

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

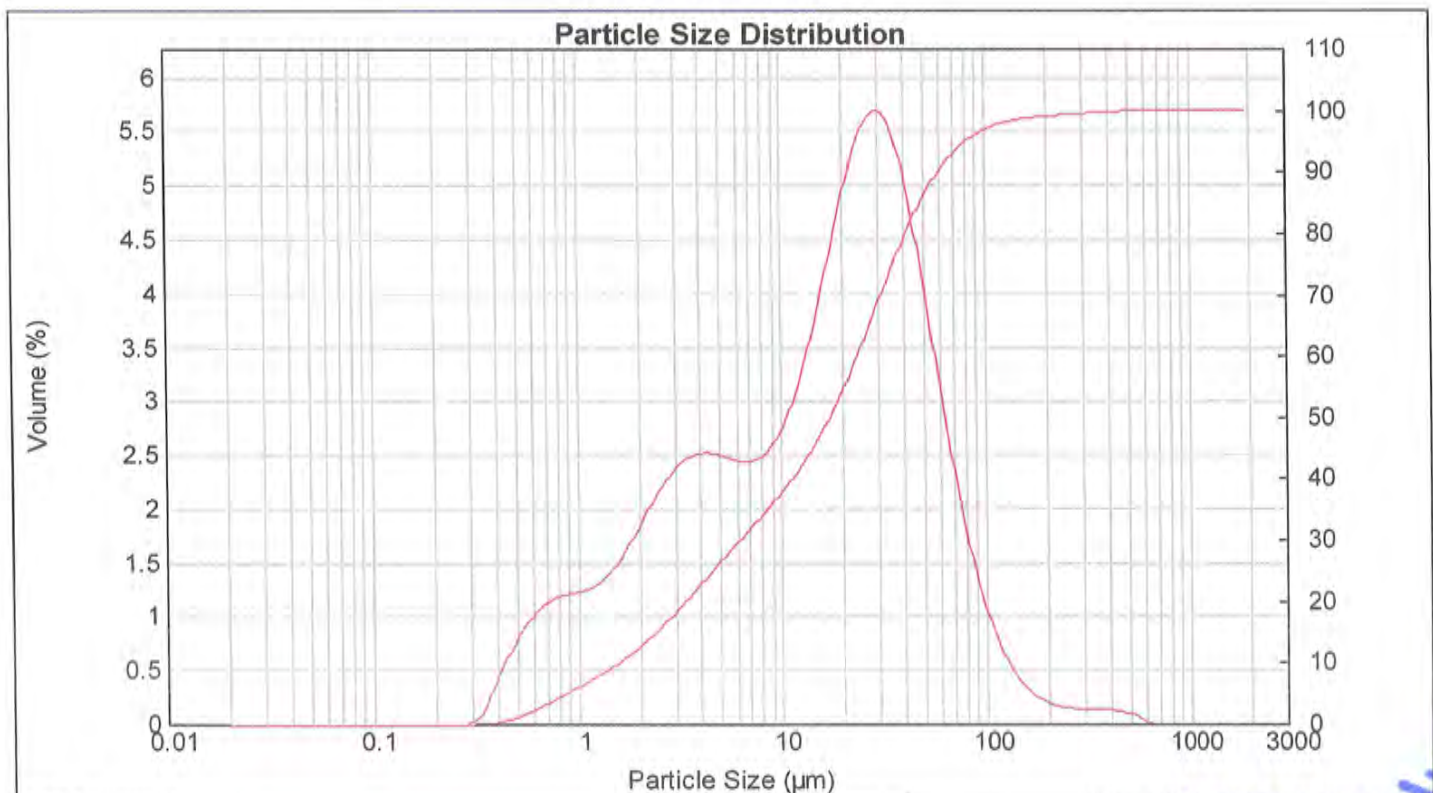
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 18.43 Residual (%) : 0.856
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0143 %Vol Specific Surface Area : 1.36 m²/g
Mean Diameters : D (0.1) : 1.58 um D (0.5) : 17.29 um D (0.9) : 59.43 um
D [4,3] : 27.43 um D [3,2] : 4.41 um Span : 3.346 Uniformity : 1.23

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.27	7.962	2.54	58.573	2.87	430.687	0.11
0.023	0.00	0.172	0.00	1.262	1.35	9.283	2.74	68.291	2.15	502.377	0.08
0.027	0.00	0.200	0.00	1.471	1.35	10.823	3.06	79.621	1.54	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.71	12.619	3.51	92.832	1.07	662.910	0.00
0.037	0.00	0.272	0.01	2.000	1.94	14.713	4.06	108.234	0.73	796.214	0.00
0.043	0.00	0.317	0.11	2.332	2.16	17.154	4.65	126.191	0.48	928.318	0.00
0.050	0.00	0.370	0.41	2.719	2.34	20.000	5.18	147.128	0.32	1082.339	0.00
0.059	0.00	0.431	0.65	3.170	2.47	23.318	5.56	171.539	0.23	1261.915	0.00
0.068	0.00	0.502	0.88	3.696	2.52	27.187	5.71	200.000	0.17	1471.285	0.00
0.080	0.00	0.586	1.05	4.309	2.52	31.698	5.56	233.183	0.15	1715.392	0.00
0.093	0.00	0.683	1.15	5.024	2.48	36.957	5.12	271.871	0.14	2000.000	0.00
0.108	0.00	0.796	1.20	5.857	2.45	43.089	4.46	316.979	0.14		
0.126	0.00	0.928	1.23	6.829	2.45	50.238	3.68	369.570	0.13		
0.147	0.00	1.082		7.962		58.573		430.687			



Result : Analysis Report

Attached page 7

Sample Details

Sample ID : MAWA-2B2X_1

Measured : Tuesday, April 25, 2023 9:43:21

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTEC\0859_56_51um_Tetratex 1.mps

Analysed : Tuesday, April 25, 2023 9:43:22

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

System Details

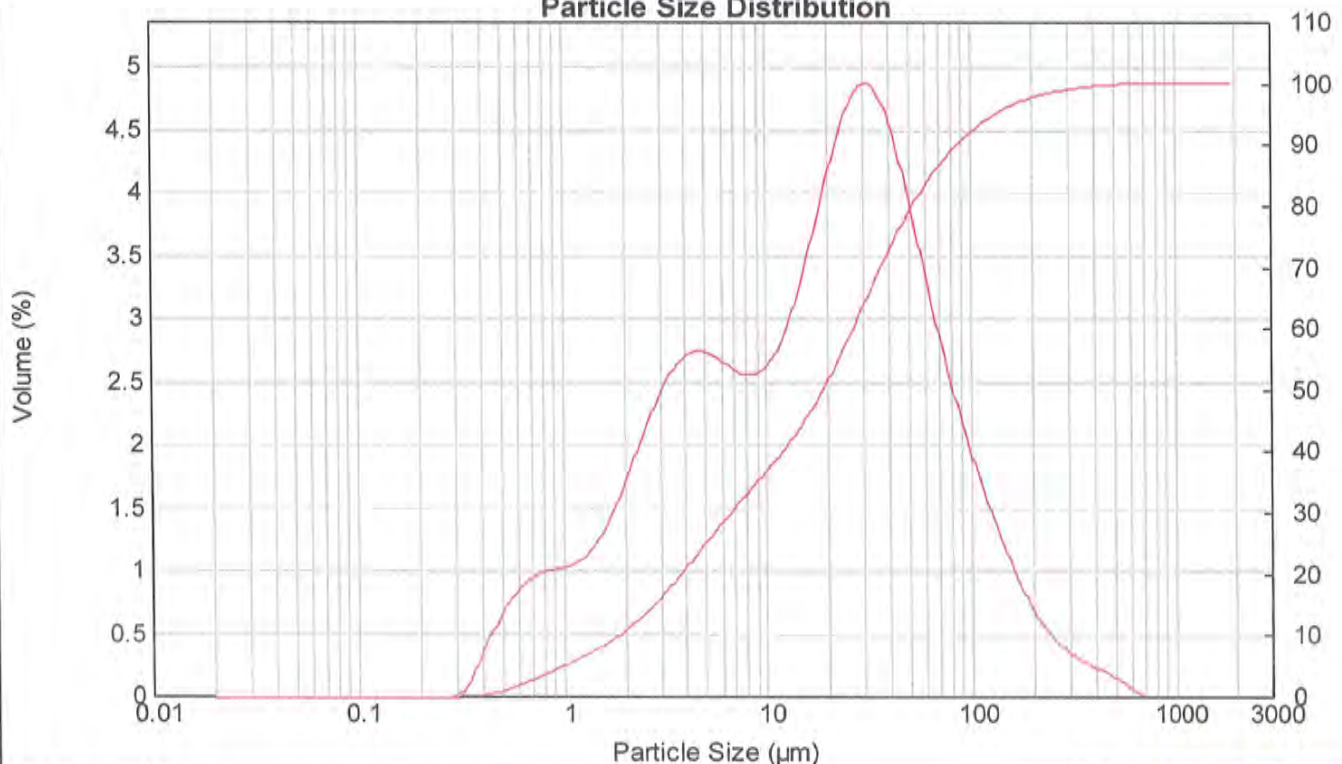
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.54 Residual (%) : 0.750
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0176 %Vol Specific Surface Area : 1.22 m²/g
Mean Diameters : D (0.1) : 1.87 um D (0.5) : 18.9 um D (0.9) : 86.65 um
D [4,3] : 36.64 um D [3,2] : 4.91 um Span : 4.484 Uniformity : 1.58

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.07	7.962	2.56	58.573	3.20	430.887	0.18
0.023	0.00	0.172	0.00	1.262	1.16	9.283	2.63	68.291	2.73	502.377	0.12
0.027	0.00	0.200	0.00	1.471	1.32	10.823	2.80	79.621	2.32	585.729	0.04
0.032	0.00	0.233	0.00	1.715	1.54	12.619	3.10	92.832	1.95	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.82	14.713	3.49	108.234	1.61	796.214	0.00
0.043	0.00	0.317	0.08	2.332	2.11	17.154	3.93	126.191	1.31	928.318	0.00
0.050	0.00	0.370	0.33	2.719	2.37	20.000	4.36	147.128	1.03	1082.339	0.00
0.059	0.00	0.431	0.55	3.170	2.58	23.318	4.70	171.539	0.80	1261.915	0.00
0.068	0.00	0.502	0.74	3.696	2.71	27.187	4.87	200.000	0.61	1471.285	0.00
0.080	0.00	0.586	0.88	4.309	2.75	31.698	4.83	233.183	0.47	1715.392	0.00
0.093	0.00	0.683	0.97	5.024	2.65	36.957	4.59	271.871	0.29	2000.000	0.00
0.108	0.00	0.796	1.01	5.857	2.58	43.089	4.19	316.979	0.24		
0.126	0.00	0.928	1.03	6.829		50.238		369.570			
0.147	0.00	1.082		7.962		58.573		430.887			

Particle Size Distribution



Result : Analysis Report

Attached page 8

Sample Details

Sample ID : MAWA-2B2X_2

Measured : Tuesday, April 25, 2023 9:45:43

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTEC0950_66_51sam_Tetrattech-1.mea

Analysed : Tuesday, April 25, 2023 9:45:45

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

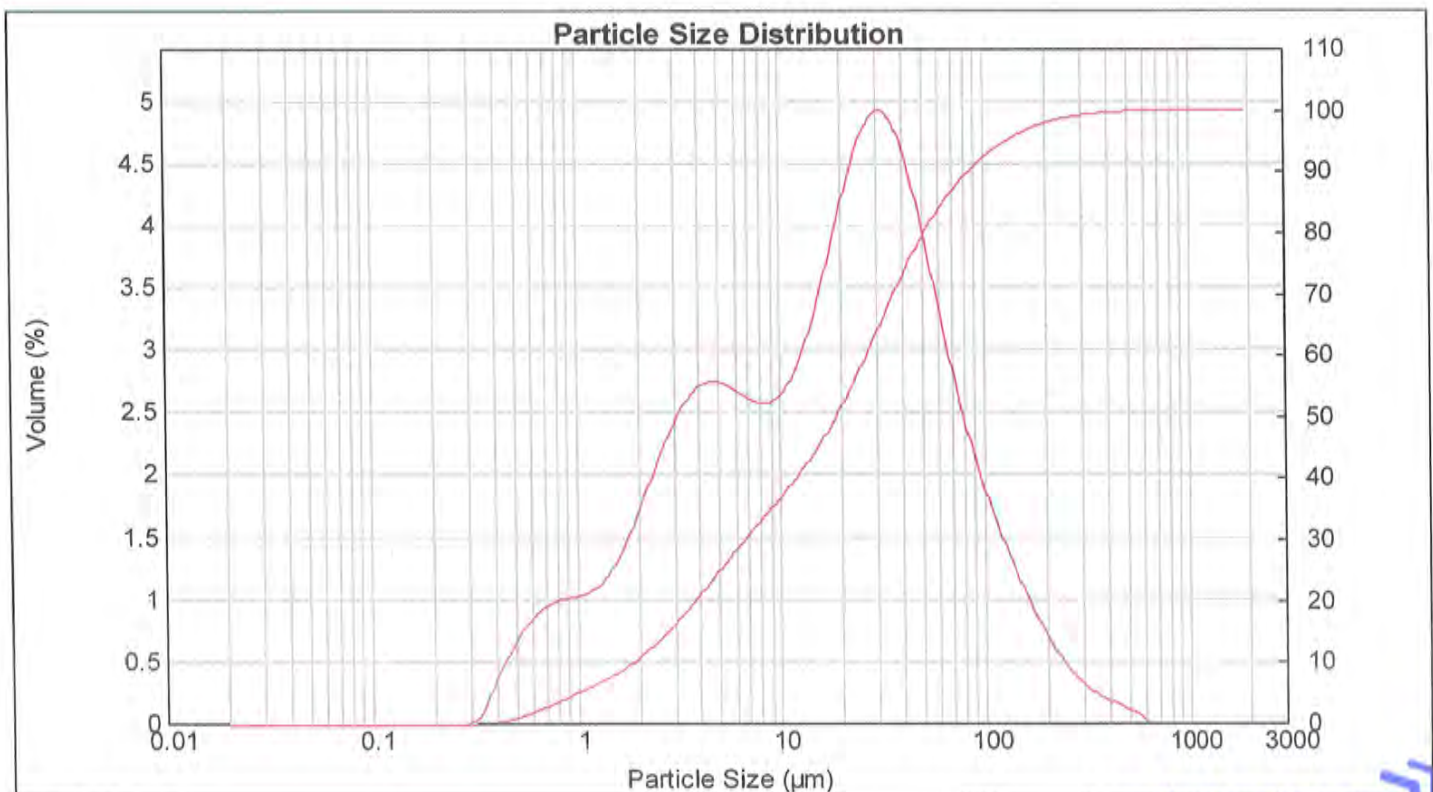
System Details

Accessory Name : Hydro 2000S (A)	Beam Length (mm) : 2.35	Obscuration (%) : 20.15	Residual (%) : 0.753
Particle RI : 1.530	Absorption : 0.1	Dispersant Name : Water	Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume	Concentration : 0.0172 %Vol	Specific Surface Area : 1.22 m ² /g
Mean Diameters :	D (0.1) : 1.88 um	D (0.5) : 18.84 um
D [4,3] : 35.65 um	D [3,2] : 4.92 um	Span : 4.413
		Uniformity : 1.54

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.07	7.962	2.58	58.573	3.18	430.887	0.14
0.023	0.00	0.172	0.00	1.262	1.16	9.283	2.64	68.291	2.69	502.377	0.09
0.027	0.00	0.200	0.00	1.471	1.32	10.823	2.82	79.621	2.27	585.729	0.01
0.032	0.00	0.233	0.00	1.715	1.55	12.619	3.11	92.832	1.90	682.910	0.00
0.037	0.00	0.272	0.00	2.000	1.82	14.713	3.50	108.234	1.59	796.214	0.00
0.043	0.00	0.317	0.09	2.332	2.11	17.154	3.95	126.191	1.30	928.318	0.00
0.050	0.00	0.370	0.33	2.719	2.37	20.000	4.39	147.128	1.05	1082.339	0.00
0.059	0.00	0.431	0.54	3.170	2.58	23.318	4.74	171.539	0.82	1261.915	0.00
0.068	0.00	0.502	0.74	3.696	2.71	27.187	4.92	200.000	0.62	1471.285	0.00
0.080	0.00	0.586	0.88	4.309	2.75	31.698	4.89	233.183	0.46	1715.392	0.00
0.093	0.00	0.683	0.96	5.024	2.73	36.957	4.64	271.871	0.34	2000.000	0.00
0.108	0.00	0.796	1.00	5.857	2.67	43.089	4.22	316.979	0.25		
0.126	0.00	0.928	1.03	6.829	2.60	50.238	3.71	369.570	0.19		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 9

Sample Details

Sample ID : MAWA-2B2X_3

Measured : Tuesday, April 25, 2023 9:47:19

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTEC0950_66_51sam_Tetratexh 1.mea

Analysed : Tuesday, April 25, 2023 9:47:20

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

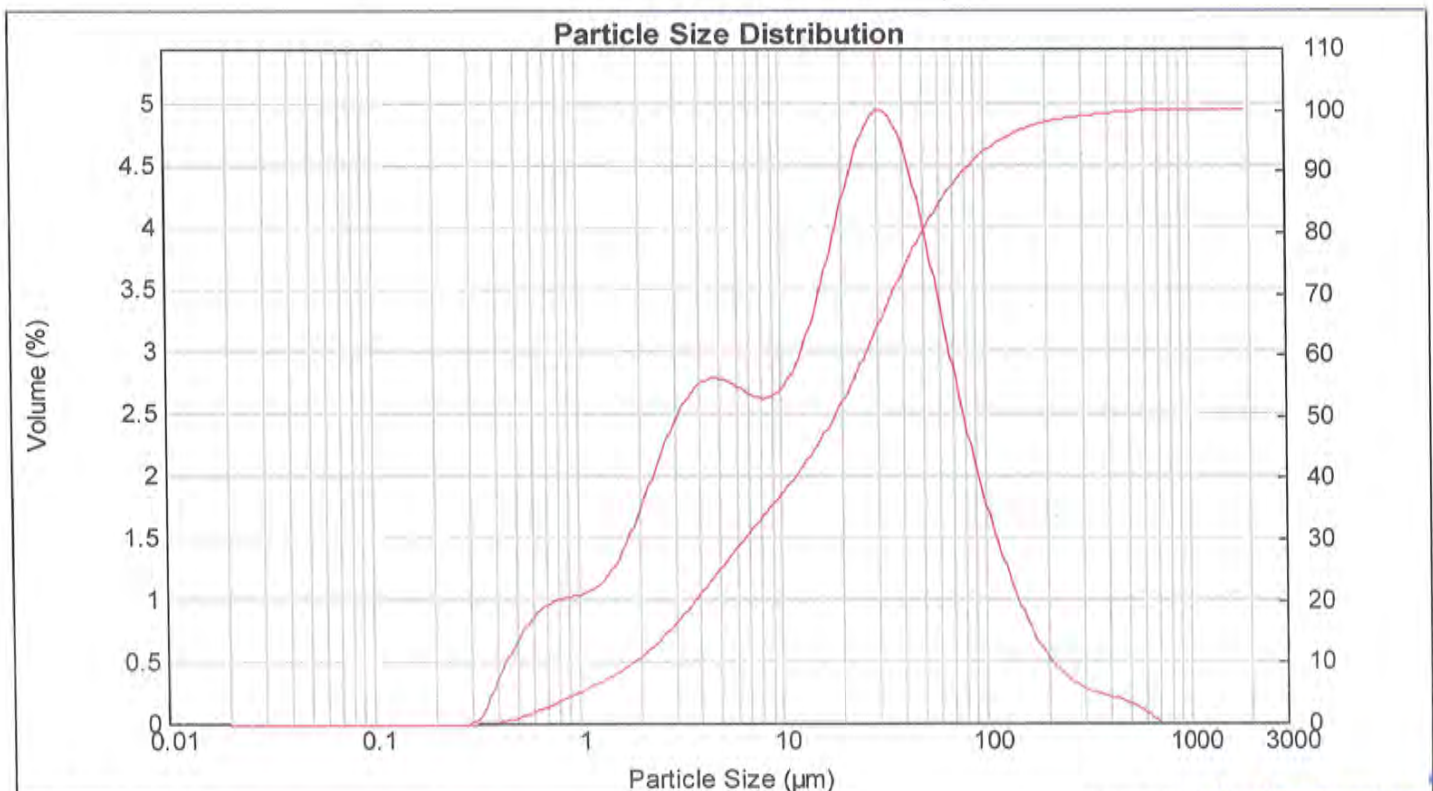
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.98 Residual (%) : 0.762
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0169 %Vol Specific Surface Area : 1.23 m²/g
Mean Diameters : D (0.1) : 1.86 um D (0.5) : 18.37 um D (0.9) : 79.98 um
D [4,3] : 35.01 um D [3,2] : 4.86 um Span : 4.254 Uniformity : 1.55

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.08	7.962	2.63	58.573	3.23	430.887	0.19
0.023	0.00	0.172	0.00	1.262	1.17	9.283	2.70	68.291	2.70	502.377	0.14
0.027	0.00	0.200	0.00	1.471	1.33	10.823	2.87	79.621	2.23	585.729	0.07
0.032	0.00	0.233	0.00	1.715	1.56	12.619	3.15	92.832	1.81	682.910	0.00
0.037	0.00	0.272	0.00	2.000	1.84	14.713	3.54	108.234	1.43	796.214	0.00
0.043	0.00	0.317	0.09	2.332	2.13	17.154	3.98	126.191	1.11	928.318	0.00
0.050	0.00	0.370	0.34	2.719	2.39	20.000	4.41	147.128	0.84	1062.339	0.00
0.059	0.00	0.431	0.55	3.170	2.60	23.318	4.75	171.539	0.63	1261.915	0.00
0.068	0.00	0.502	0.75	3.696	2.74	27.187	4.94	200.000	0.47	1471.285	0.00
0.080	0.00	0.586	0.89	4.309	2.79	31.698	4.91	233.183	0.37	1715.392	0.00
0.093	0.00	0.683	0.98	5.024	2.77	36.957	4.68	271.871	0.29	2000.000	0.00
0.108	0.00	0.796	1.02	5.857	2.71	43.089	4.28	316.979	0.25		
0.126	0.00	0.928	1.04	6.829	2.65	50.238	3.77	369.570	0.22		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 10

Sample Details

Sample ID : MAWA-3B2_1

Measured : Tuesday, April 25, 2023 10:01:19

Sample File : D:\Data Mastersizer2000\Technical
MTEC0859_66_51sam_Tetrattech_1.mea

Analysed : Tuesday, April 25, 2023 10:01:21

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

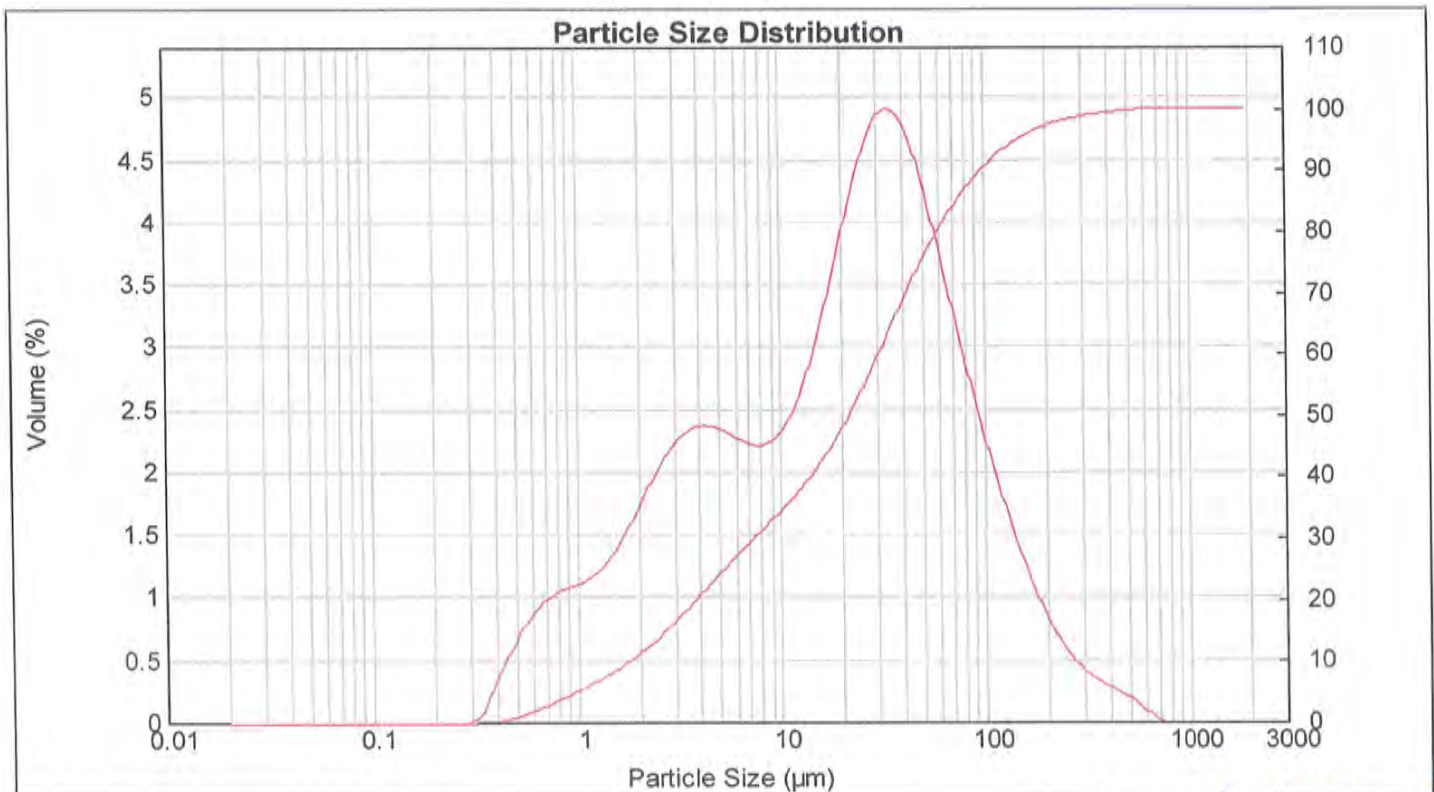
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.72 Residual (%) : 0.788
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0170 %Vol Specific Surface Area : 1.21 m²/g
Mean Diameters : D (0.1) : 1.79 um D (0.5) : 21.68 um D (0.9) : 97.69 um
D [4,3] : 41.12 um D [3,2] : 4.97 um Span : 4.423 Uniformity : 1.55

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.16	7.962	2.23	58.573	3.63	430.887	0.23
0.023	0.00	0.172	0.00	1.262	1.25	9.283	2.32	68.291	3.15	502.377	0.17
0.027	0.00	0.200	0.00	1.471	1.40	10.823	2.51	79.621	2.70	585.729	0.08
0.032	0.00	0.233	0.00	1.715	1.60	12.619	2.81	92.832	2.29	682.910	0.00
0.037	0.00	0.272	0.00	2.000	1.82	14.713	3.21	108.234	1.91	796.214	0.00
0.043	0.00	0.317	0.08	2.332	2.03	17.154	3.67	126.191	1.55	928.318	0.00
0.050	0.00	0.370	0.33	2.719	2.20	20.000	4.14	147.128	1.24	1082.339	0.00
0.059	0.00	0.431	0.54	3.170	2.32	23.318	4.55	171.539	0.96	1261.915	0.00
0.068	0.00	0.502	0.75	3.696	2.37	27.187	4.83	200.000	0.74	1471.285	0.00
0.080	0.00	0.586	0.90	4.309	2.37	31.698	4.91	233.183	0.56	1715.362	0.00
0.093	0.00	0.683	1.00	5.024	2.32	36.957	4.80	271.871	0.44	2000.000	0.00
0.108	0.00	0.796	1.07	5.857	2.26	43.089	4.51	316.979	0.35		
0.126	0.00	0.928	1.11	6.829	2.22	50.238	4.10	369.570	0.29		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 11

Sample Details

Sample ID : MAWA-3B2_2

Measured : Tuesday, April 25, 2023 10:02:23

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 62MTEC0859 66 51sam TetraTech 1.mea

Analysed : Tuesday, April 25, 2023 10:02:24

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

System Details

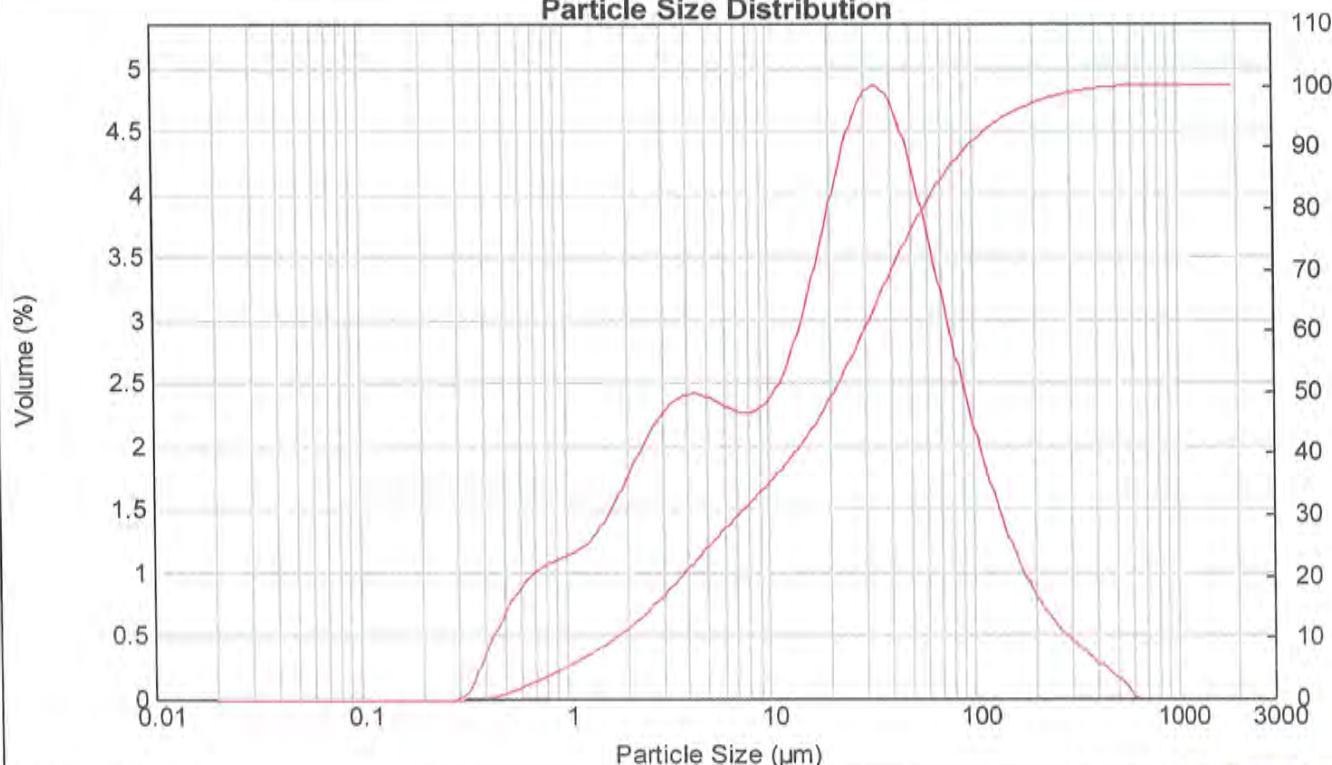
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.51 Residual (%) : 0.773
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0165 %Vol Specific Surface Area : 1.23 m²/g
Mean Diameters : D (0.1) : 1.75 um D (0.5) : 21.04 um D (0.9) : 95.62 um
D [4,3] : 40.16 um D [3,2] : 4.88 um Span : 4.461 Uniformity : 1.57

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.19	7.962	2.28	58.573	3.57	430.887	0.22
0.023	0.00	0.172	0.00	1.262	1.28	9.283	2.37	68.291	3.08	502.377	0.13
0.027	0.00	0.200	0.00	1.471	1.28	10.823	2.37	79.621	3.08	585.729	0.01
0.032	0.00	0.233	0.00	1.715	1.43	12.619	2.55	92.832	2.62	682.910	0.00
0.037	0.00	0.272	0.00	2.000	1.63	14.713	2.85	108.234	2.19	795.214	0.00
0.043	0.00	0.317	0.00	2.332	1.85	17.154	3.23	126.191	1.80	928.318	0.00
0.050	0.00	0.370	0.08	2.719	2.06	20.000	3.68	147.128	1.46	1082.339	0.00
0.059	0.00	0.431	0.33	3.170	2.23	23.318	4.14	171.539	1.17	1261.915	0.00
0.068	0.00	0.502	0.55	3.695	2.35	27.187	4.54	200.000	0.94	1471.285	0.00
0.080	0.00	0.586	0.76	4.309	2.41	31.698	4.80	233.183	0.75	1715.392	0.00
0.093	0.00	0.683	0.92	5.024	2.42	36.957	4.87	271.871	0.60	2000.000	0.00
0.108	0.00	0.796	1.03	5.857	2.37	43.089	4.75	316.979	0.48		
0.126	0.00	0.928	1.09	6.829	2.32	50.238	4.46	369.570	0.39		
0.147	0.00	1.082	1.13	7.962	2.27	58.573	4.04	430.887	0.30		

Particle Size Distribution



Result : Analysis Report

Attached page 12

Sample Details

Sample ID : MAWA-3B2_3

Measured : Tuesday, April 25, 2023 10:03:25

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MAWA-3B2_3_51nm_Telratech 1.mea

Analysed : Tuesday, April 25, 2023 10:03:27

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

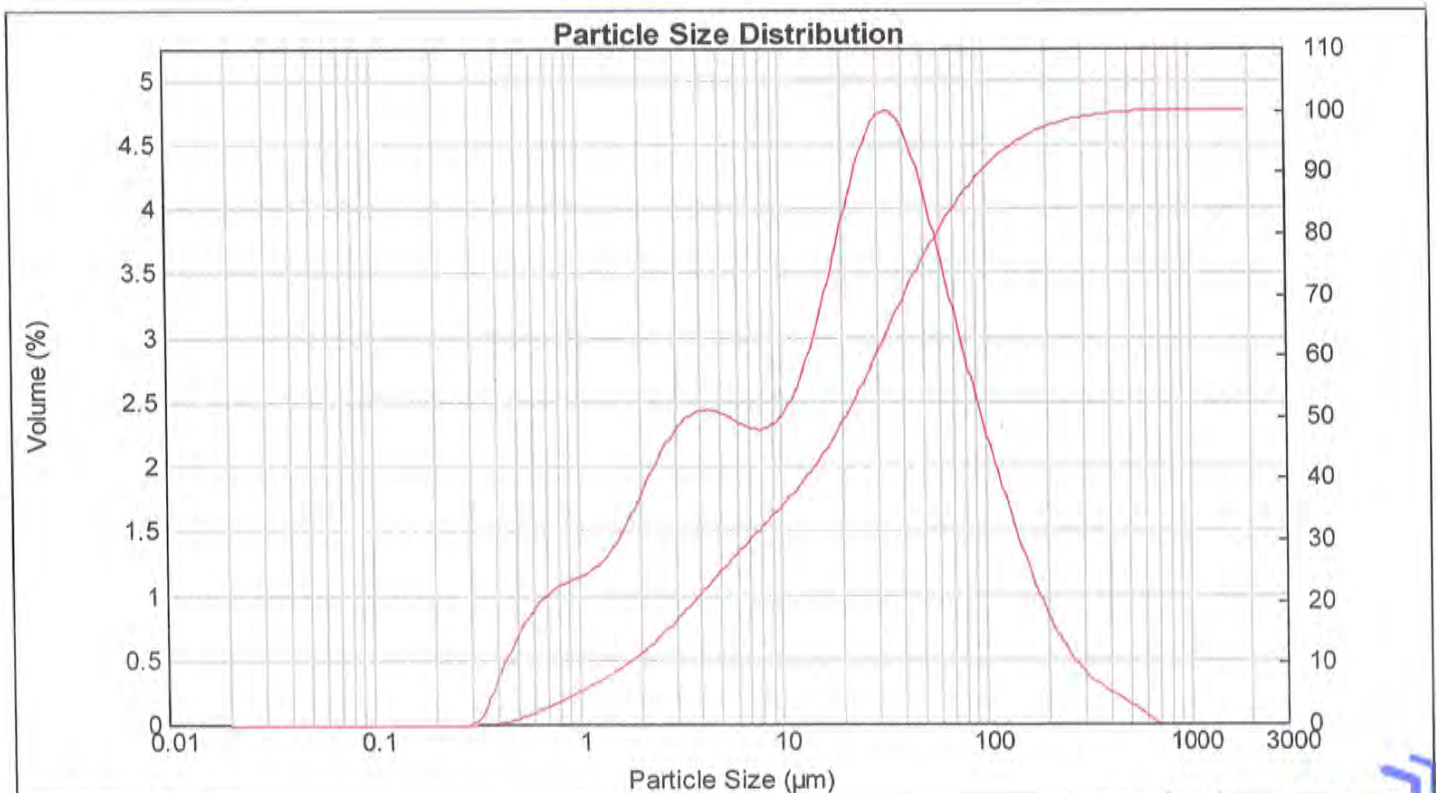
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.38 Residual (%) : 0.755
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0163 %Vol Specific Surface Area : 1.24 m²/g
Mean Diameters : D (0.1) : 1.74 um D (0.5) : 20.8 um D (0.9) : 97.18 um
D [4,3] : 40.02 um D [3,2] : 4.85 um Span : 4.588 Uniformity : 1.58

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.19	7.962	2.30	58.573	3.52	430.887	0.20
0.023	0.00	0.172	0.00	1.262	1.29	9.283	2.39	66.291	3.09	502.377	0.12
0.027	0.00	0.200	0.00	1.471	1.29	10.823	2.39	79.621	2.67	585.729	0.04
0.032	0.00	0.233	0.00	1.715	1.64	12.619	2.57	92.832	2.29	682.910	0.00
0.037	0.00	0.272	0.00	2.000	1.86	14.713	3.24	108.234	1.92	796.214	0.00
0.043	0.00	0.317	0.08	2.332	2.07	17.154	3.67	126.191	1.58	928.318	0.00
0.050	0.00	0.370	0.33	2.719	2.25	20.000	4.11	147.128	1.26	1082.339	0.00
0.059	0.00	0.431	0.56	3.170	2.37	23.318	4.47	171.639	0.98	1261.915	0.00
0.068	0.00	0.502	0.77	3.696	2.43	27.187	4.71	200.000	0.75	1471.285	0.00
0.080	0.00	0.586	0.92	4.309	2.44	31.696	4.77	233.183	0.57	1715.392	0.00
0.093	0.00	0.683	1.03	5.024	2.34	36.957	4.64	271.871	0.33	2000.000	0.00
0.108	0.00	0.796	1.10	5.857	2.30	43.089	3.96	316.979	0.26		
0.126	0.00	0.928	1.14	6.829		50.238		369.570			
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 13

Sample Details

Sample ID : MAWA-3C2_1

Measured : Tuesday, April 25, 2023 10:12:29

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTEC\0950_66_51um_Tetrattech-1.mea

Analysed : Tuesday, April 25, 2023 10:12:30

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

System Details

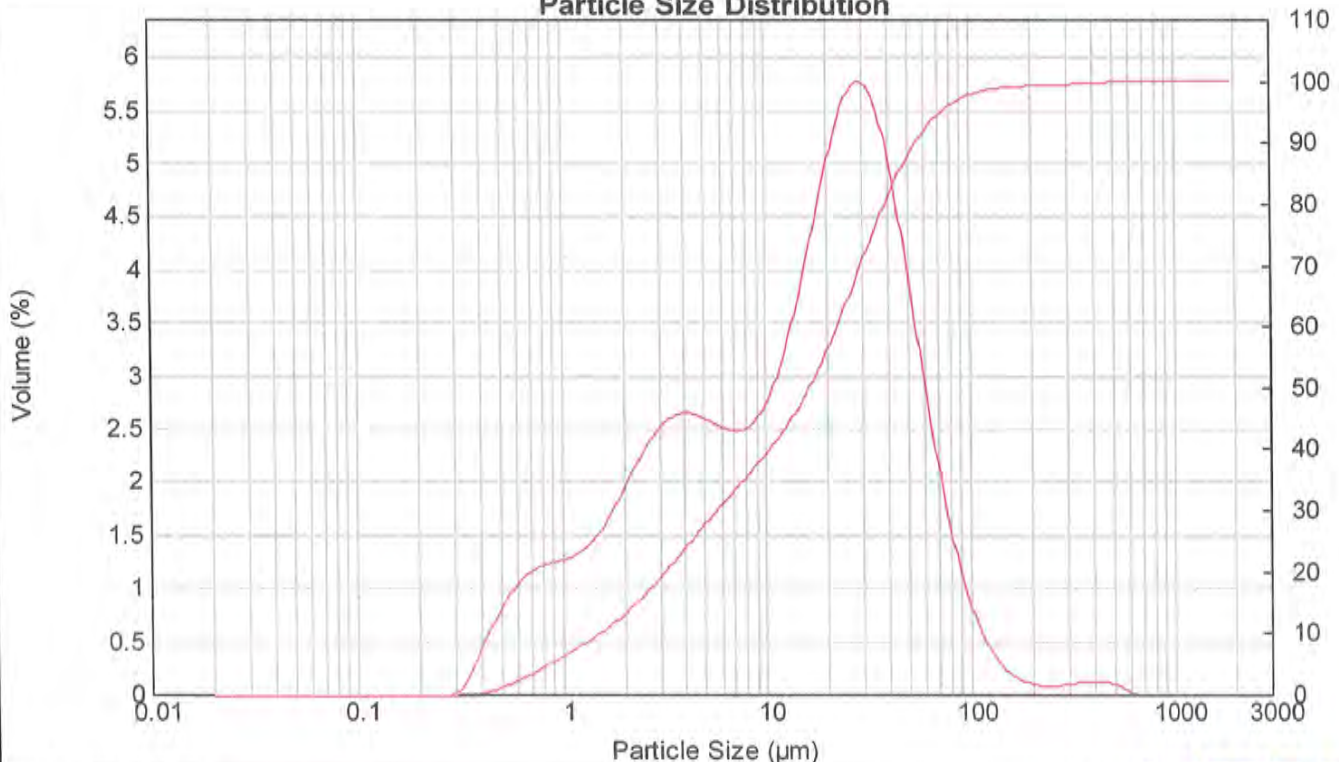
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.28 Residual (%) : 0.833
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0153 %Vol Specific Surface Area : 1.41 m²/g
Mean Diameters : D (0.1) : 1.53 um D (0.5) : 16.37 um D (0.9) : 54.97 um
D [4,3] : 25.38 um D [3,2] : 4.26 um Span : 3.265 Uniformity : 1.2

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.32	7.962	2.55	58.573	2.68	430.887	0.11
0.023	0.00	0.172	0.00	1.262	1.41	9.283	2.74	68.291	1.93	502.377	0.08
0.027	0.00	0.200	0.00	1.471	1.58	10.823	3.07	79.621	1.31	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.80	12.619	3.54	92.832	0.86	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.05	14.713	4.11	108.234	0.53	796.214	0.00
0.043	0.00	0.317	0.12	2.332	2.29	17.154	4.72	126.191	0.32	928.318	0.00
0.050	0.00	0.370	0.42	2.719	2.48	20.000	5.28	147.128	0.19	1082.339	0.00
0.059	0.00	0.431	0.67	3.170	2.61	23.318	5.66	171.539	0.12	1261.915	0.00
0.068	0.00	0.502	0.91	3.696	2.66	27.187	5.79	200.000	0.09	1471.285	0.00
0.080	0.00	0.586	1.07	4.309	2.64	31.898	5.59	233.183	0.09	1715.392	0.00
0.093	0.00	0.683	1.18	5.024	2.57	36.957	5.10	271.871	0.10	2000.000	0.00
0.108	0.00	0.796	1.24	5.857	2.51	43.089	4.37	316.979	0.11		
0.126	0.00	0.928	1.27	6.829	2.49	50.238	3.53	369.570	0.12		
0.147	0.00	1.082		7.962		58.573		430.887			

Particle Size Distribution



Result : Analysis Report

Attached page 14

Sample Details

Sample ID : MAWA-3C2_2

Measured : Tuesday, April 25, 2023 10:14:19

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTCC0859_66_51sam_Tetrattech-1.mea

Analysed : Tuesday, April 25, 2023 10:14:21

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

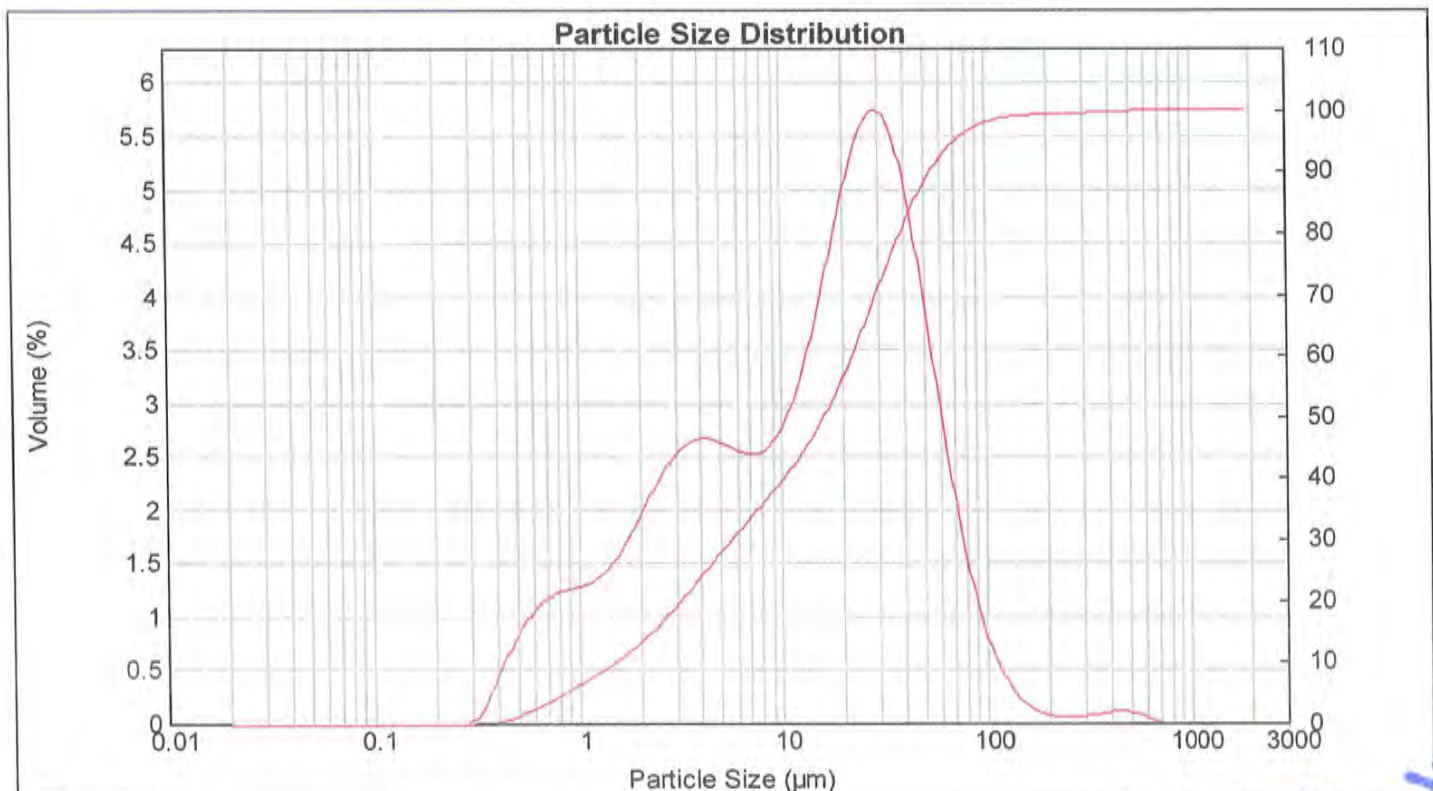
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.89 Residual (%) : 0.827
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0149 %Vol Specific Surface Area : 1.42 m²/g
Mean Diameters : D (0.1) : 1.51 um D (0.5) : 16.1 um D (0.9) : 54.29 um
D [4,3] : 25.08 um D [3,2] : 4.23 um Span : 3.277 Uniformity : 1.2

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.33	7.962	2.60	58.573	2.66	430.887	0.11
0.023	0.00	0.172	0.00	1.262	1.42	9.283	2.78	68.291	1.90	502.377	0.09
0.027	0.00	0.200	0.00	1.471	1.58	10.823	3.10	79.621	1.29	585.729	0.04
0.032	0.00	0.233	0.00	1.715	1.81	12.619	3.55	92.832	0.82	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.06	14.713	4.10	108.234	0.50	796.214	0.00
0.043	0.00	0.317	0.12	2.332	2.30	17.154	4.70	126.191	0.29	928.318	0.00
0.050	0.00	0.370	0.43	2.719	2.49	20.000	5.25	147.128	0.16	1082.339	0.00
0.059	0.00	0.431	0.68	3.170	2.62	23.318	5.63	171.539	0.10	1261.915	0.00
0.068	0.00	0.502	0.92	3.696	2.68	27.187	5.76	200.000	0.07	1471.285	0.00
0.080	0.00	0.586	1.09	4.309	2.66	31.698	5.57	233.183	0.06	1715.382	0.00
0.093	0.00	0.683	1.20	5.024	2.61	36.957	5.09	271.871	0.07	2000.000	0.00
0.108	0.00	0.796	1.25	5.857	2.55	43.089	4.36	316.979	0.09		
0.126	0.00	0.928	1.28	6.829	2.53	50.238	3.52	369.570	0.11		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 15

Sample Details

Sample ID : MAWA-3C2_3

Measured : Tuesday, April 25, 2023 10:15:23

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTEC0959 66_51sam_Tetratex-1.mea

Analysed : Tuesday, April 25, 2023 10:15:24

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

System Details

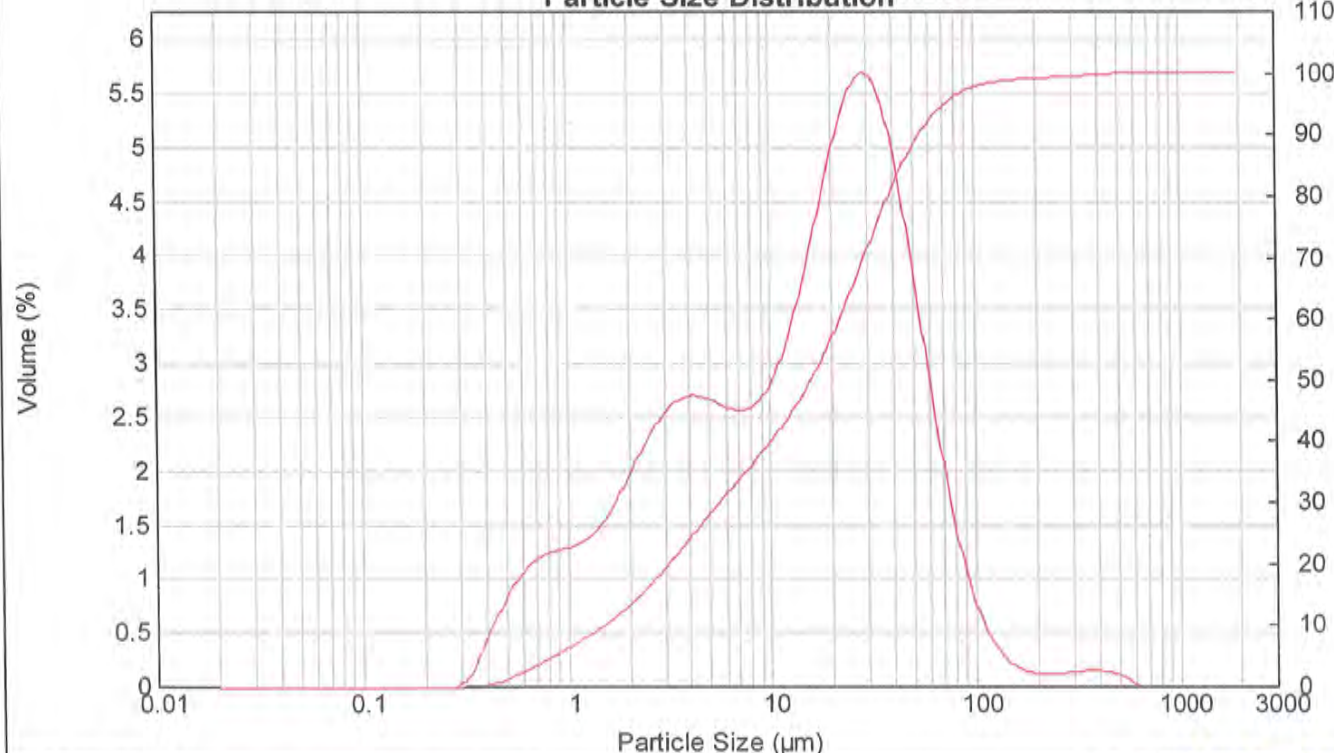
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.73 Residual (%) : 0.821
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0147 %Vol Specific Surface Area : 1.43 m²/g
Mean Diameters : D (0.1) : 1.5 um D (0.5) : 15.87 um D (0.9) : 54.28 um
D [4,3] : 25.4 um D [3,2] : 4.21 um Span : 3.325 Uniformity : 1.25

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.34	7.962	2.63	58.573	2.59	430.887	0.13
0.023	0.00	0.172	0.00	1.262	1.43	9.283	2.81	68.291	1.84	502.377	0.08
0.027	0.00	0.200	0.00	1.471	1.59	10.823	3.13	79.621	1.23	585.729	0.01
0.032	0.00	0.233	0.00	1.715	1.81	12.619	3.57	92.832	0.79	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.07	14.713	4.11	108.234	0.48	796.214	0.00
0.043	0.00	0.317	0.12	2.332	2.31	17.154	4.70	126.191	0.29	928.318	0.00
0.050	0.00	0.370	0.43	2.719	2.51	20.000	5.22	147.128	0.18	1082.339	0.00
0.059	0.00	0.431	0.69	3.170	2.64	23.318	5.59	171.539	0.13	1261.915	0.00
0.068	0.00	0.502	0.92	3.696	2.70	27.187	5.70	200.000	0.11	1471.285	0.00
0.080	0.00	0.586	1.09	4.309	2.69	31.698	5.50	233.183	0.12	1715.392	0.00
0.093	0.00	0.683	1.20	5.024	2.64	36.957	5.01	271.871	0.13	2000.000	0.00
0.108	0.00	0.796	1.26	5.857	2.59	43.089	4.29	316.979	0.14		
0.126	0.00	0.928	1.29	6.829	2.57	50.238	3.44	369.570	0.15		
0.147	0.00	1.082		7.962		58.573		430.887			

Particle Size Distribution



Result : Analysis Report

Attached page 16

Sample Details

Sample ID : MAWA-4B2X_1

Measured : Tuesday, April 25, 2023 10:42:49

Sample File : D:\Data Mastersizer2000\Technical
sample\TS 66\MTEC00950_66_51sam_Tetratex 1.mea

Analysed : Tuesday, April 25, 2023 10:42:50

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

System Details

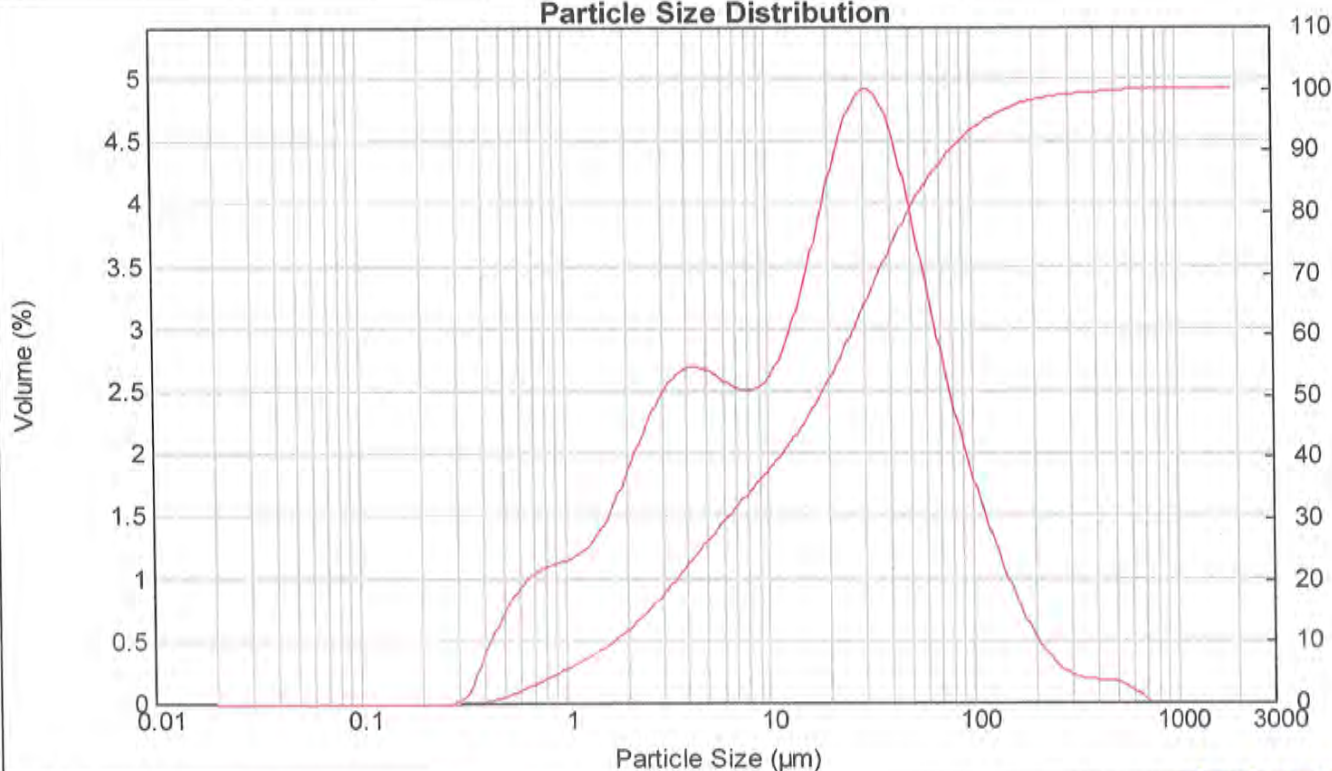
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.03 Residual (%) : 0.751
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0153 %Vol Specific Surface Area : 1.3 m²/g
Mean Diameters : D (0.1) : 1.7 um D (0.5) : 18.11 um D (0.9) : 79.74 um
D [4,3] : 34.51 um D [3,2] : 4.62 um Span : 4.308 Uniformity : 1.56

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.19	7.962	2.52	58.573	3.18	430.887	0.18
0.023	0.00	0.172	0.00	1.262	1.29	9.283	2.60	68.291	2.67	502.377	0.15
0.027	0.00	0.200	0.00	1.471	1.46	10.823	2.80	79.621	2.22	585.729	0.09
0.032	0.00	0.233	0.00	1.715	1.69	12.619	3.11	92.832	1.82	682.910	0.01
0.037	0.00	0.272	0.01	2.000	1.96	14.713	3.51	108.234	1.47	796.214	0.00
0.043	0.00	0.317	0.10	2.332	2.22	17.154	3.96	126.191	1.16	928.318	0.00
0.050	0.00	0.370	0.37	2.719	2.44	20.000	4.39	147.128	0.88	1082.339	0.00
0.059	0.00	0.431	0.59	3.170	2.60	23.318	4.73	171.539	0.64	1261.915	0.00
0.068	0.00	0.502	0.80	3.696	2.69	27.187	4.91	200.000	0.46	1471.285	0.00
0.080	0.00	0.586	0.96	4.309	2.65	31.698	4.64	233.183	0.32	1715.392	0.00
0.093	0.00	0.683	1.05	5.024	2.57	36.957	4.23	271.871	0.20	2000.000	0.00
0.108	0.00	0.796	1.14	5.857	2.52	43.089	3.72	316.979	0.19		
0.126	0.00	0.928		6.829		50.238		369.570			
0.147	0.00	1.082		7.962		58.573		430.887			

Particle Size Distribution



Result : Analysis Report

Attached page 17

Sample Details

Sample ID : MAWA-4B2X_2

Measured : Tuesday, April 25, 2023 10:44:25

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS_66\MTEC\00950_66_51sam_Telratech_1.mps

Analysed : Tuesday, April 25, 2023 10:44:26

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

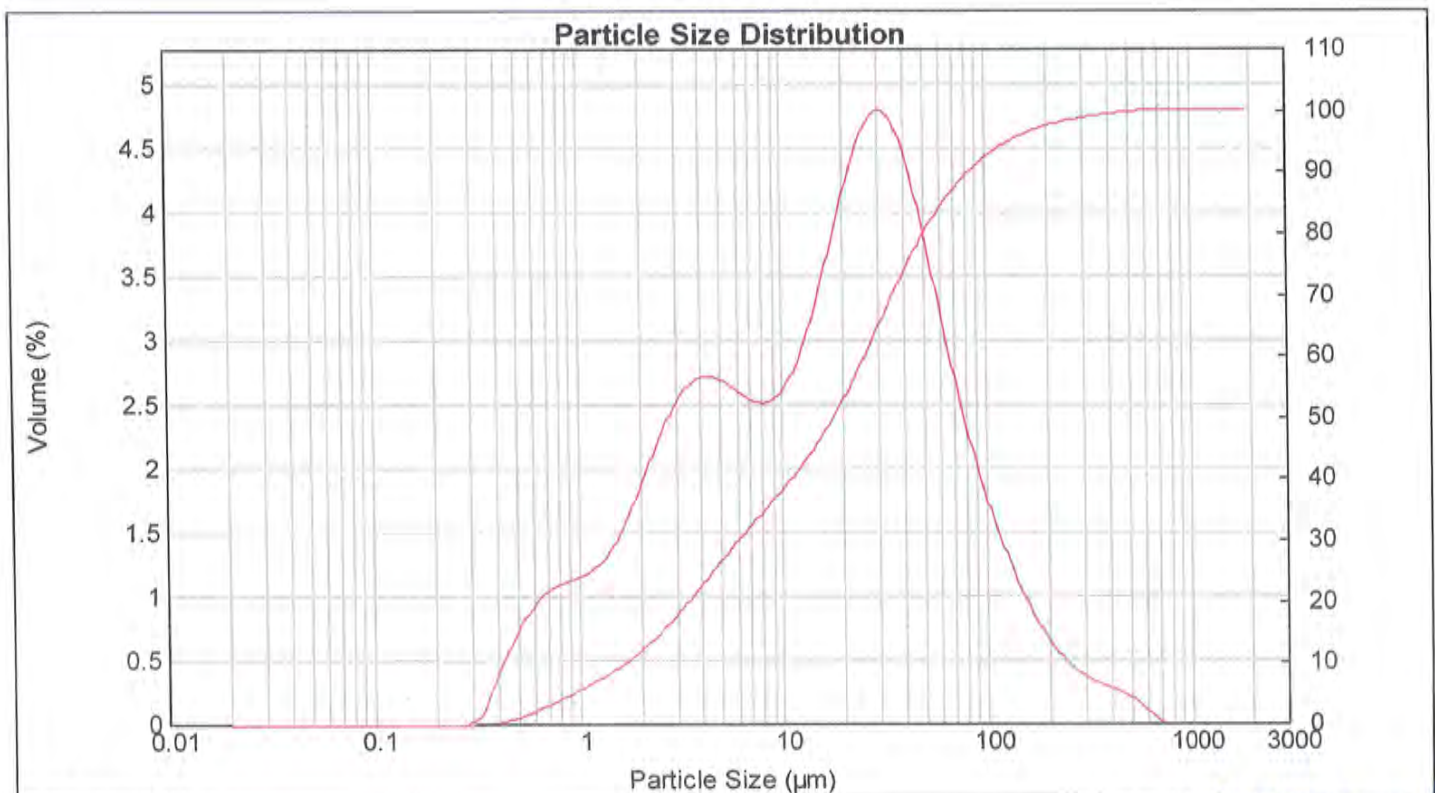
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 18.94 Residual (%) : 0.737
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0151 %Vol Specific Surface Area : 1.3 m²/g
Mean Diameters : D (0.1) : 1.69 um D (0.5) : 17.88 um D (0.9) : 83.9 um
D [4,3] : 36.4 um D [3,2] : 4.6 um Span : 4.597 Uniformity : 1.69

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.20	7.962	2.53	58.573	3.08	430.887	0.23
0.023	0.00	0.172	0.00	1.262	1.30	9.283	2.61	68.291	2.57	502.377	0.17
0.027	0.00	0.200	0.00	1.471	1.30	10.823	2.80	79.621	2.15	585.729	0.08
0.032	0.00	0.233	0.00	1.715	1.71	12.619	3.11	92.832	1.78	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.98	14.713	3.49	108.234	1.46	795.214	0.00
0.043	0.00	0.317	0.10	2.332	2.25	17.154	3.93	126.191	1.18	928.318	0.00
0.050	0.00	0.370	0.37	2.719	2.48	20.000	4.33	147.128	0.94	1082.339	0.00
0.059	0.00	0.431	0.60	3.170	2.64	23.318	4.65	171.539	0.74	1261.915	0.00
0.068	0.00	0.502	0.81	3.696	2.72	27.187	4.80	200.000	0.59	1471.285	0.00
0.080	0.00	0.586	0.96	4.309	2.72	31.698	4.49	233.183	0.32	1715.362	0.00
0.093	0.00	0.683	1.06	5.024	2.59	36.957	3.58	271.871	0.28	2000.000	0.00
0.108	0.00	0.796	1.11	5.857	2.53	43.099		316.979			
0.126	0.00	0.928	1.15	6.829		50.238		369.570			
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 18

Sample Details

Sample ID : MAWA-4B2X_3

Measured : Tuesday, April 25, 2023 10:46:31

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTEC\0950_66_51um_Tetratex 1.mea

Analysed : Tuesday, April 25, 2023 10:46:32

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

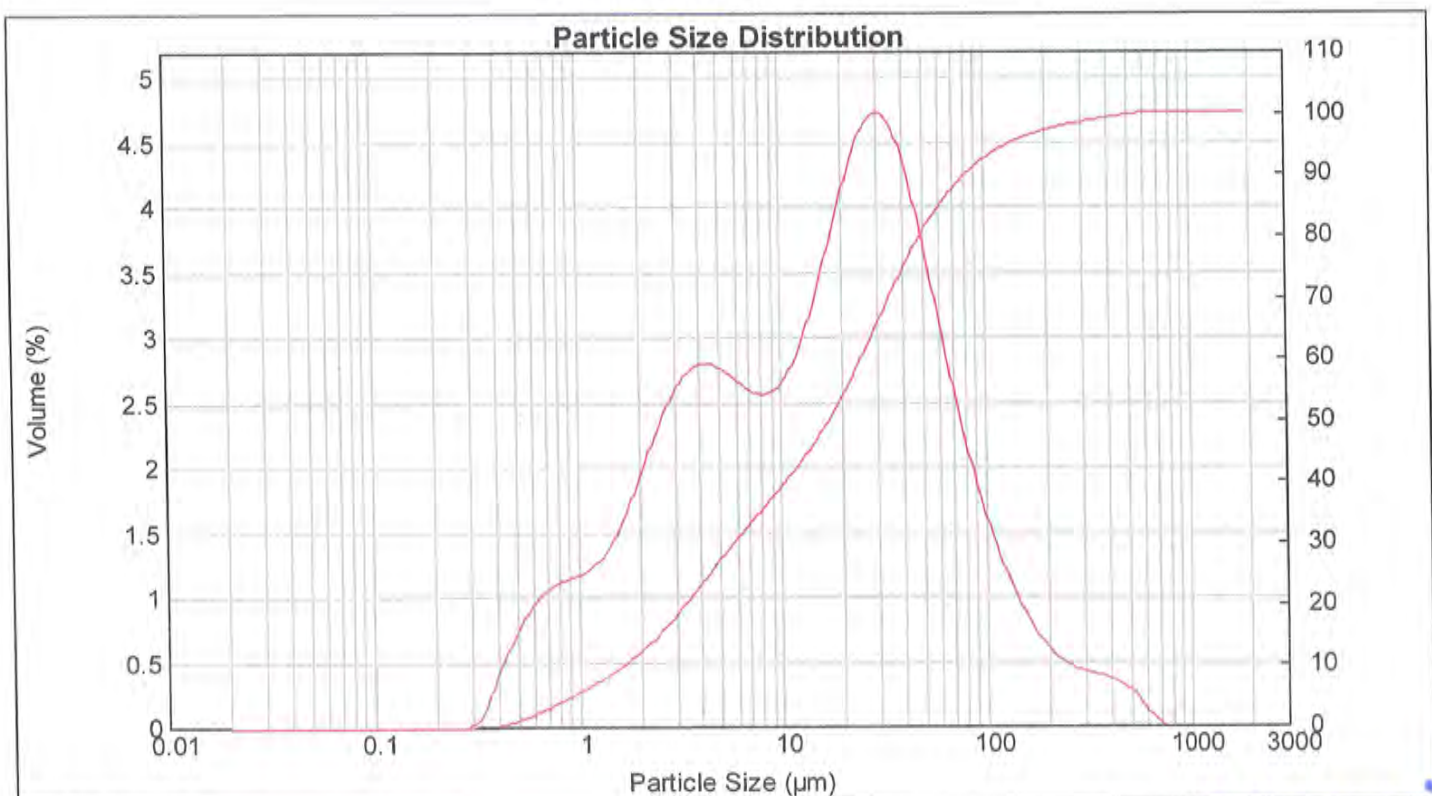
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 18.78 Residual (%) : 0.720
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0146 %Vol Specific Surface Area : 1.33 m²/g
Mean Diameters : D (0.1) : 1.66 um D (0.5) : 17.1 um D (0.9) : 82.11 um
D [4,3] : 36.75 um D [3,2] : 4.5 um Span : 4.706 Uniformity : 1.8

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.23	7.962	2.58	58.573	2.95	430.887	0.32
0.023	0.00	0.172	0.00	1.262	1.34	9.283	2.66	68.291	2.45	502.377	0.23
0.027	0.00	0.200	0.00	1.471	1.34	10.823	2.84	79.621	2.01	585.729	0.10
0.032	0.00	0.233	0.00	1.715	1.76	12.619	3.13	92.832	1.64	682.910	0.01
0.037	0.00	0.272	0.01	2.000	2.05	14.713	3.51	108.234	1.33	796.214	0.00
0.043	0.00	0.317	0.10	2.332	2.32	17.154	3.92	126.191	1.06	928.318	0.00
0.050	0.00	0.370	0.38	2.719	2.56	20.000	4.31	147.128	0.84	1082.339	0.00
0.059	0.00	0.431	0.61	3.170	2.72	23.318	4.60	171.539	0.68	1261.915	0.00
0.068	0.00	0.502	0.82	3.696	2.80	27.187	4.73	200.000	0.55	1471.285	0.00
0.080	0.00	0.586	0.98	4.309	2.80	31.698	4.67	233.183	0.48	1715.392	0.00
0.093	0.00	0.683	1.08	5.024	2.74	36.957	4.40	271.871	0.43	2000.000	0.00
0.108	0.00	0.796	1.13	5.857	2.66	43.089	3.98	316.979	0.40		
0.126	0.00	0.928	1.17	6.829	2.59	50.238	3.47	369.570	0.37		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 19

Sample Details

Sample ID : MAWB-1B2X_1

Measured : Tuesday, April 25, 2023 11:51:59

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTEC0859_66_51nm_Tetrastark 1.mps

Analysed : Tuesday, April 25, 2023 11:52:01

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

System Details

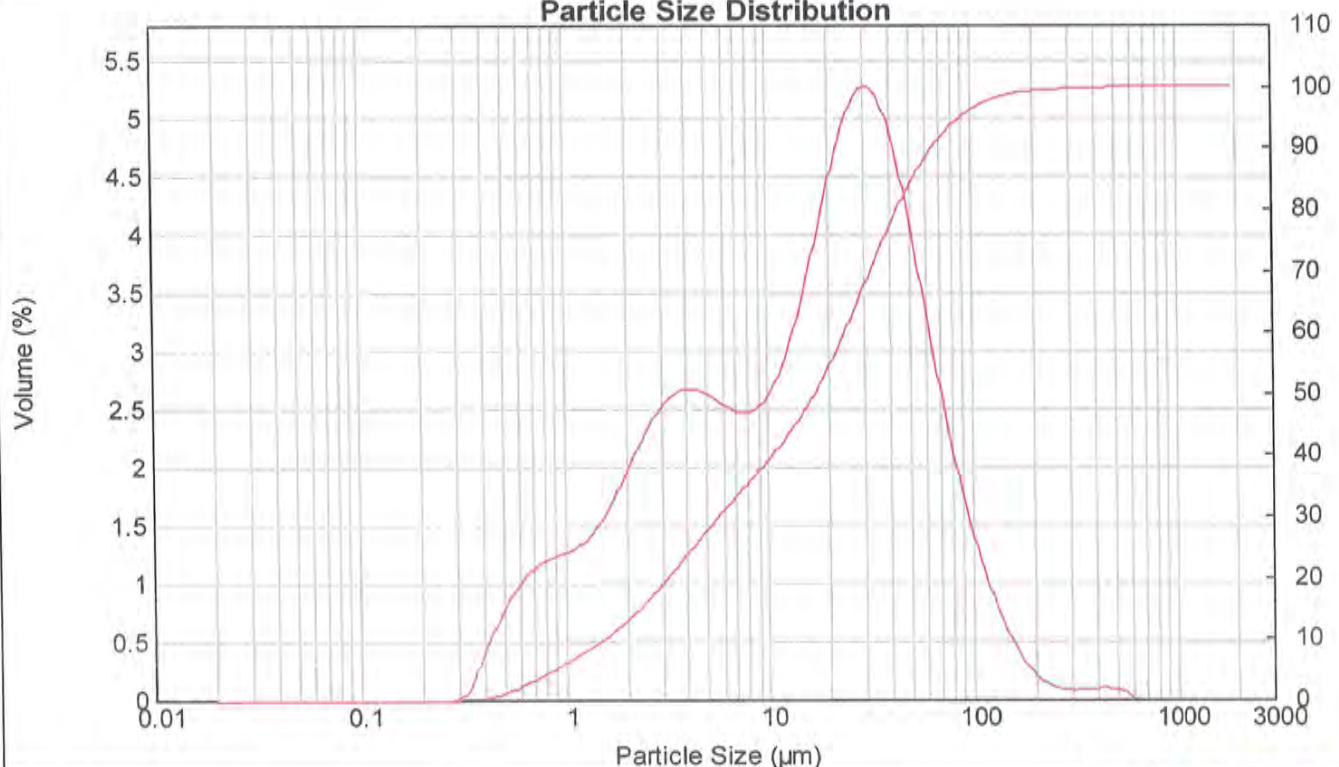
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.86 Residual (%) : 0.769
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0152 %Vol Specific Surface Area : 1.37 m²/g
Mean Diameters : D (0.1) : 1.56 um D (0.5) : 17.05 um D (0.9) : 65.2 um
D [4,3] : 28.31 um D [3,2] : 4.37 um Span : 3.732 Uniformity : 1.32

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.32	7.962	2.50	58.573	3.13	430.887	0.10
0.023	0.00	0.172	0.00	1.262	1.43	9.283	2.61	68.291	2.49	502.377	0.08
0.027	0.00	0.200	0.00	1.471	1.59	10.823	2.85	79.621	1.93	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.81	12.619	3.21	92.832	1.45	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.05	14.713	3.68	108.234	1.05	796.214	0.00
0.043	0.00	0.317	0.09	2.332	2.30	17.154	4.19	126.191	0.72	928.318	0.00
0.050	0.00	0.370	0.38	2.719	2.50	20.000	4.69	147.128	0.29	1082.339	0.00
0.059	0.00	0.431	0.63	3.170	2.63	23.318	5.08	171.539	0.17	1261.915	0.00
0.068	0.00	0.502	0.87	3.696	2.67	27.187	5.27	200.000	0.11	1471.285	0.00
0.080	0.00	0.586	1.04	4.309	2.61	31.698	4.92	233.183	0.09	1715.392	0.00
0.093	0.00	0.683	1.16	5.024	2.54	36.957	4.42	271.871	0.10	2000.000	0.00
0.108	0.00	0.796	1.22	5.857	2.48	43.089	3.79	316.979			
0.126	0.00	0.928	1.27	6.829		50.238		369.570			
0.147	0.00	1.082		7.962		58.573		430.887			

Particle Size Distribution



Result : Analysis Report

Attached page 20

Sample Details

Sample ID : MAWB-1B2X_2

Measured : Tuesday, April 25, 2023 11:53:34

Sample File : D:\Data Mastersizer2000\Technical
MTEC0859_66_51sam_TetraTech-1.mea

Analysed : Tuesday, April 25, 2023 11:53:36

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

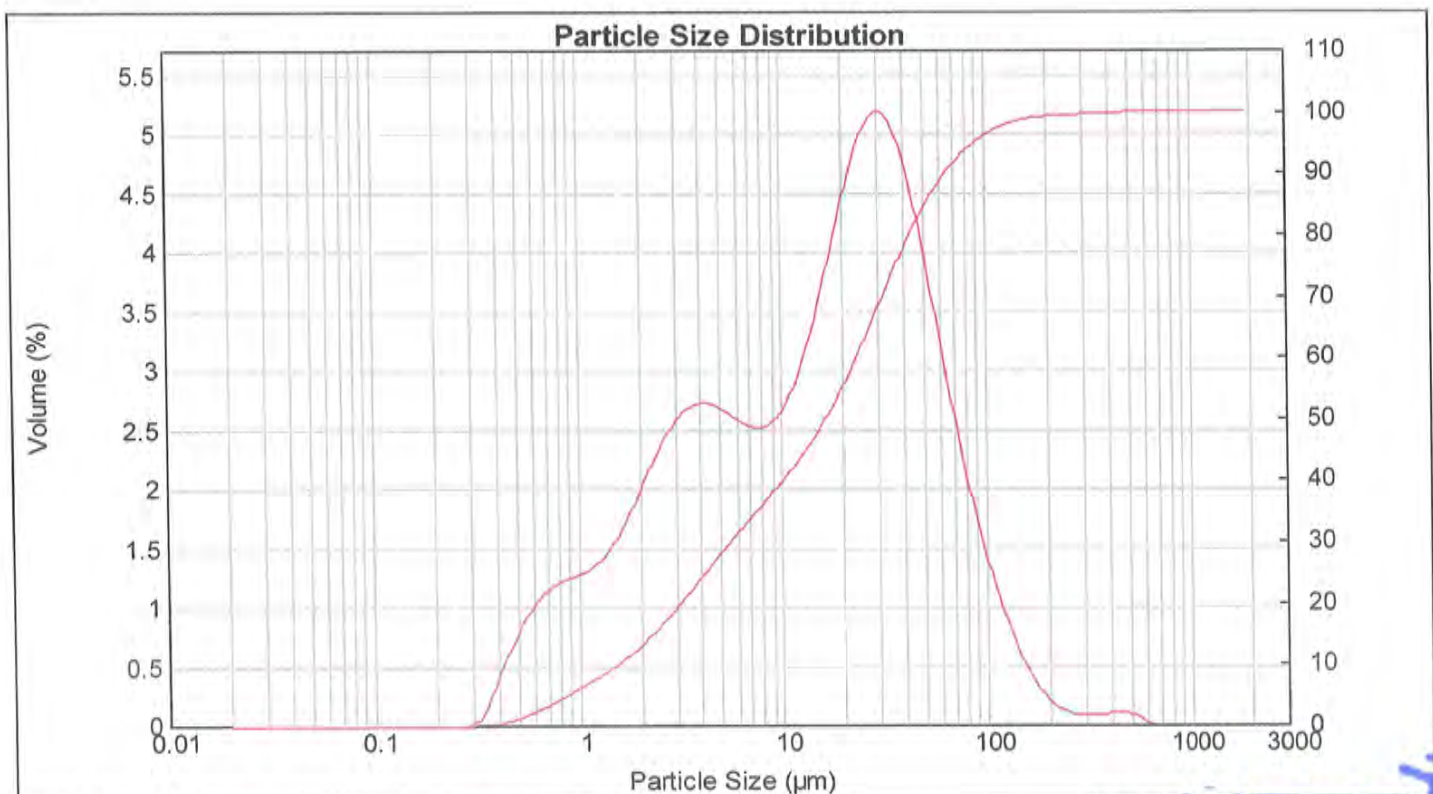
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.58 Residual (%) : 0.754
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0148 %Vol Specific Surface Area : 1.39 m²/g
Mean Diameters : D (0.1) : 1.54 um D (0.5) : 16.54 um D (0.9) : 64.69 um
D [4,3] : 28.01 um D [3,2] : 4.32 um Span : 3.817 Uniformity : 1.35

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.34	7.962	2.55	58.573	3.04	430.887	0.10
0.023	0.00	0.172	0.00	1.262	1.44	9.283	2.66	68.291	2.43	502.377	0.08
0.027	0.00	0.200	0.00	1.471	1.61	10.823	2.90	79.621	1.90	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.84	12.619	3.26	92.832	1.43	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.10	14.713	3.71	108.234	1.04	795.214	0.00
0.043	0.00	0.317	0.09	2.332	2.34	17.154	4.21	126.191	0.72	928.318	0.00
0.050	0.00	0.370	0.39	2.719	2.54	20.000	4.68	147.128	0.46	1062.339	0.00
0.059	0.00	0.431	0.64	3.170	2.68	23.318	5.03	171.539	0.28	1261.915	0.00
0.068	0.00	0.502	0.88	3.696	2.73	27.187	5.20	200.000	0.16	1471.285	0.00
0.080	0.00	0.585	1.05	4.309	2.72	31.698	5.12	233.183	0.10	1715.392	0.00
0.093	0.00	0.683	1.17	5.024	2.65	36.957	4.81	271.871	0.08	2000.000	0.00
0.108	0.00	0.796	1.23	5.857	2.58	43.089	4.31	316.979	0.09		
0.126	0.00	0.928	1.28	6.829	2.53	50.238	3.69	369.570	0.10		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 21

Sample Details

Sample ID : MAWB-1B2X_3

Measured : Tuesday, April 25, 2023 11:54:56

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS_66\MTEC0859_66_51sam_Technical_1.mea

Analysed : Tuesday, April 25, 2023 11:54:58

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

System Details

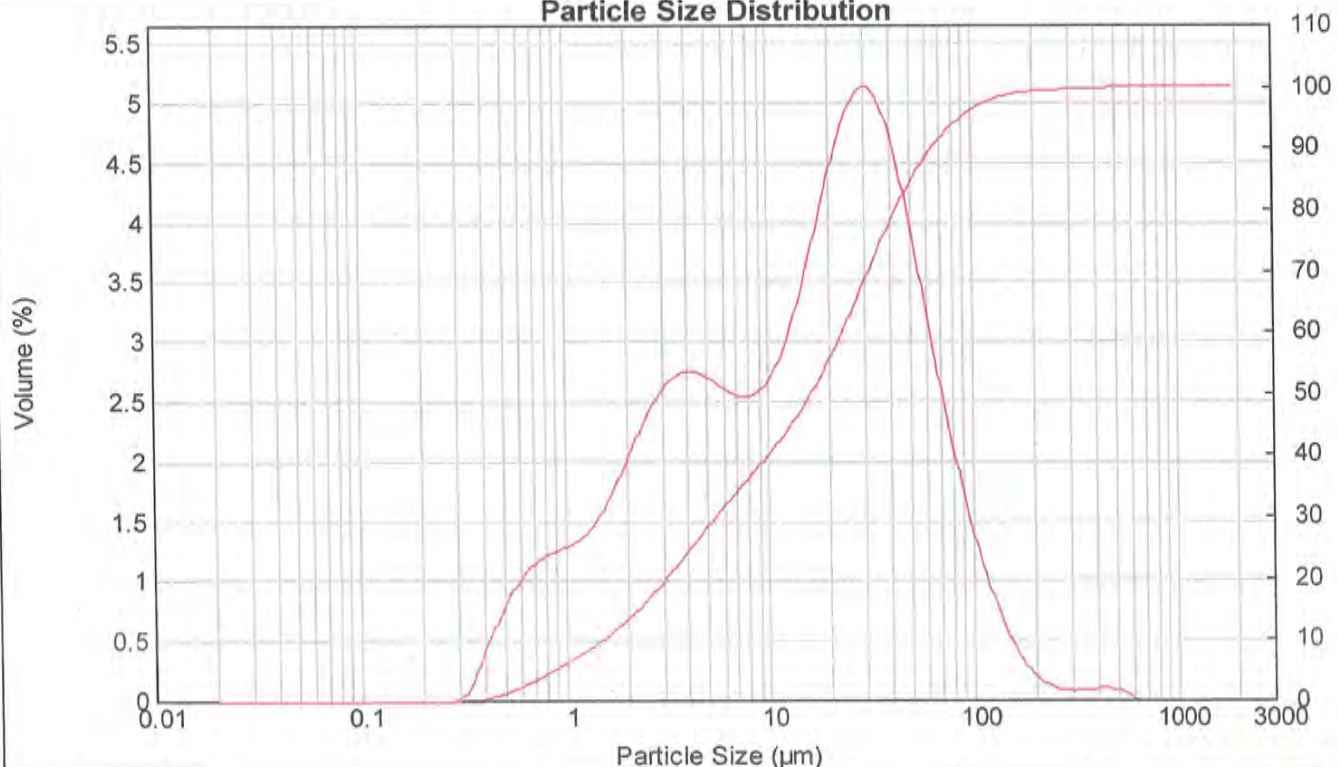
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.39 Residual (%) : 0.744
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0145 %Vol Specific Surface Area : 1.4 m²/g
Mean Diameters : D (0.1) : 1.54 um D (0.5) : 16.31 um D (0.9) : 64.48 um
D [4,3] : 27.76 um D [3,2] : 4.29 um Span : 3.860 Uniformity : 1.36

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.35	7.962	2.56	56.573	3.04	430.887	0.10
0.023	0.00	0.172	0.00	1.262	1.46	9.283	2.68	68.291	2.44	502.377	0.07
0.027	0.00	0.200	0.00	1.471	1.63	10.823	2.91	79.621	1.90	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.86	12.619	3.26	92.832	1.43	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.12	14.713	3.70	108.234	1.03	796.214	0.00
0.043	0.00	0.317	0.09	2.332	2.37	17.154	4.19	126.191	0.71	928.318	0.00
0.050	0.00	0.370	0.39	2.719	2.57	20.000	4.64	147.128	0.45	1082.339	0.00
0.059	0.00	0.431	0.64	3.170	2.76	23.318	4.99	171.539	0.27	1261.915	0.00
0.068	0.00	0.502	0.88	3.696	2.74	27.187	5.14	200.000	0.16	1471.285	0.00
0.080	0.00	0.585	1.05	4.309	2.68	31.698	5.07	233.183	0.10	1715.392	0.00
0.093	0.00	0.683	1.17	5.024	2.60	36.957	4.77	271.871	0.09	2000.000	0.00
0.108	0.00	0.796	1.24	5.857	2.55	43.089	4.28	316.979	0.10		
0.126	0.00	0.928	1.29	6.829		50.238	3.68	369.570			
0.147	0.00	1.082		7.962		56.573		430.887			

Particle Size Distribution



Result : Analysis Report

Attached page 22

Sample Details

Sample ID : MAWB-1C2X_1

Measured : Tuesday, April 25, 2023 12:03:07

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 65MTEC0859_65_51um_Tetratex-1.mea

Analysed : Tuesday, April 25, 2023 12:03:09

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

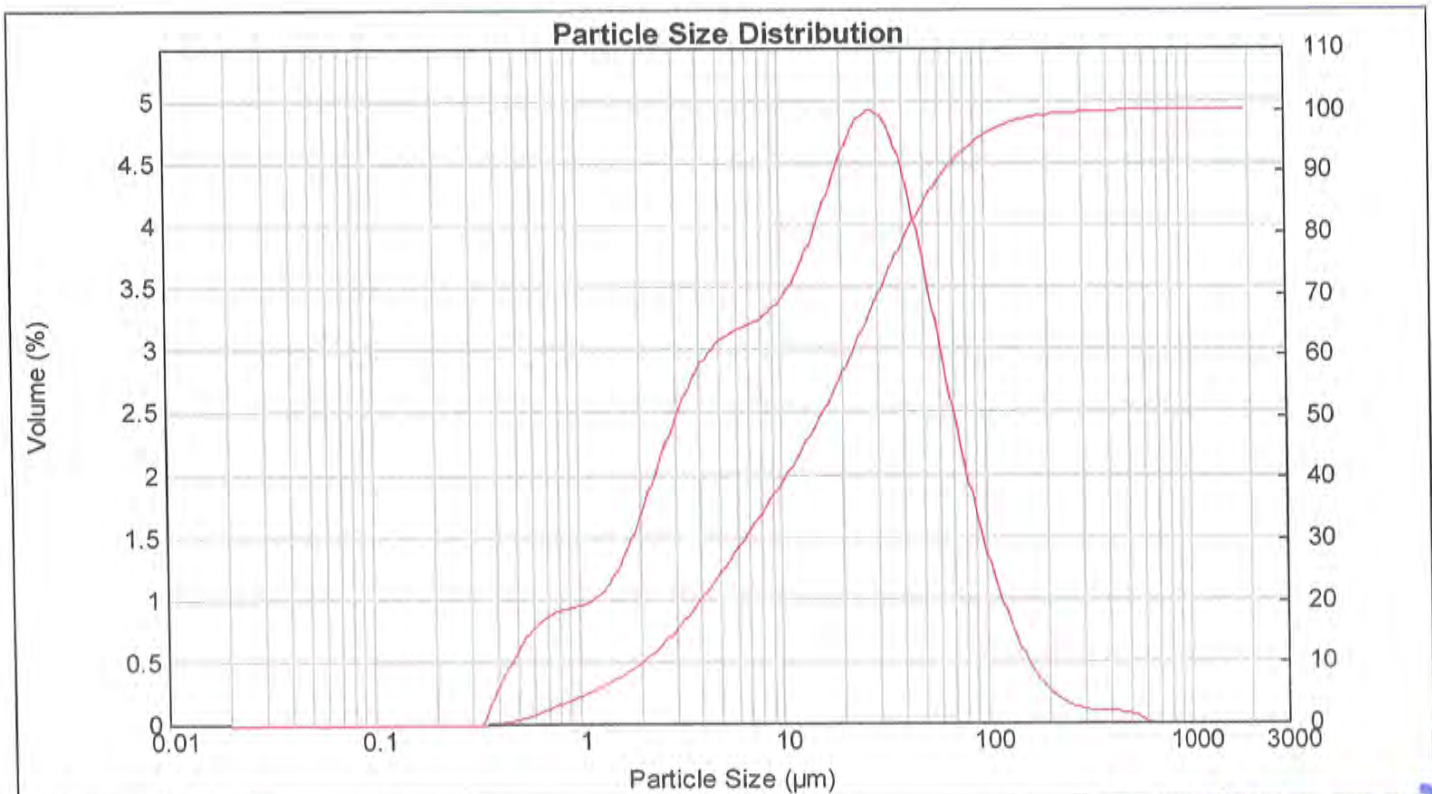
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.97 Residual (%) : 0.755
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0171 %Vol Specific Surface Area : 1.19 m²/g
Mean Diameters : D (0.1) : 2.03 um D (0.5) : 15.7 um D (0.9) : 64.74 um
D [4,3] : 28.06 um D [3,2] : 5.05 um Span : 3.995 Uniformity : 1.4

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.00	7.962	3.29	58.573	2.87	430.887	0.09
0.023	0.00	0.172	0.00	1.262	1.09	9.283	3.41	68.291	2.33	502.377	0.07
0.027	0.00	0.200	0.00	1.471	1.09	10.823	3.58	79.621	1.84	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.26	12.619	3.82	92.832	1.41	682.910	0.00
0.037	0.00	0.272	0.00	2.000	1.79	14.713	4.12	108.234	1.04	796.214	0.00
0.043	0.00	0.317	0.02	2.332	2.09	17.154	4.43	126.191	0.74	928.318	0.00
0.050	0.00	0.370	0.02	2.719	2.39	20.000	4.71	147.128	0.51	1082.339	0.00
0.059	0.00	0.431	0.28	3.170	2.66	23.318	4.89	171.539	0.34	1261.915	0.00
0.068	0.00	0.502	0.46	3.696	2.87	27.187	4.93	200.000	0.23	1471.285	0.00
0.080	0.00	0.586	0.67	4.309	3.02	31.698	4.79	233.183	0.16	1715.392	0.00
0.093	0.00	0.683	0.89	5.024	3.12	36.957	4.46	271.871	0.10	2000.000	0.00
0.108	0.00	0.796	0.93	5.857	3.18	43.089	3.99	316.979	0.10		
0.126	0.00	0.928	0.95	6.829	3.23	50.238	3.44	369.570	0.10		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 23

Sample Details

Sample ID : MAWB-1C2X_2

Measured : Tuesday, April 25, 2023 12:05:14

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTCC0850_66_51sam_TetraTech_1.mcs

Analysed : Tuesday, April 25, 2023 12:05:16

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

System Details

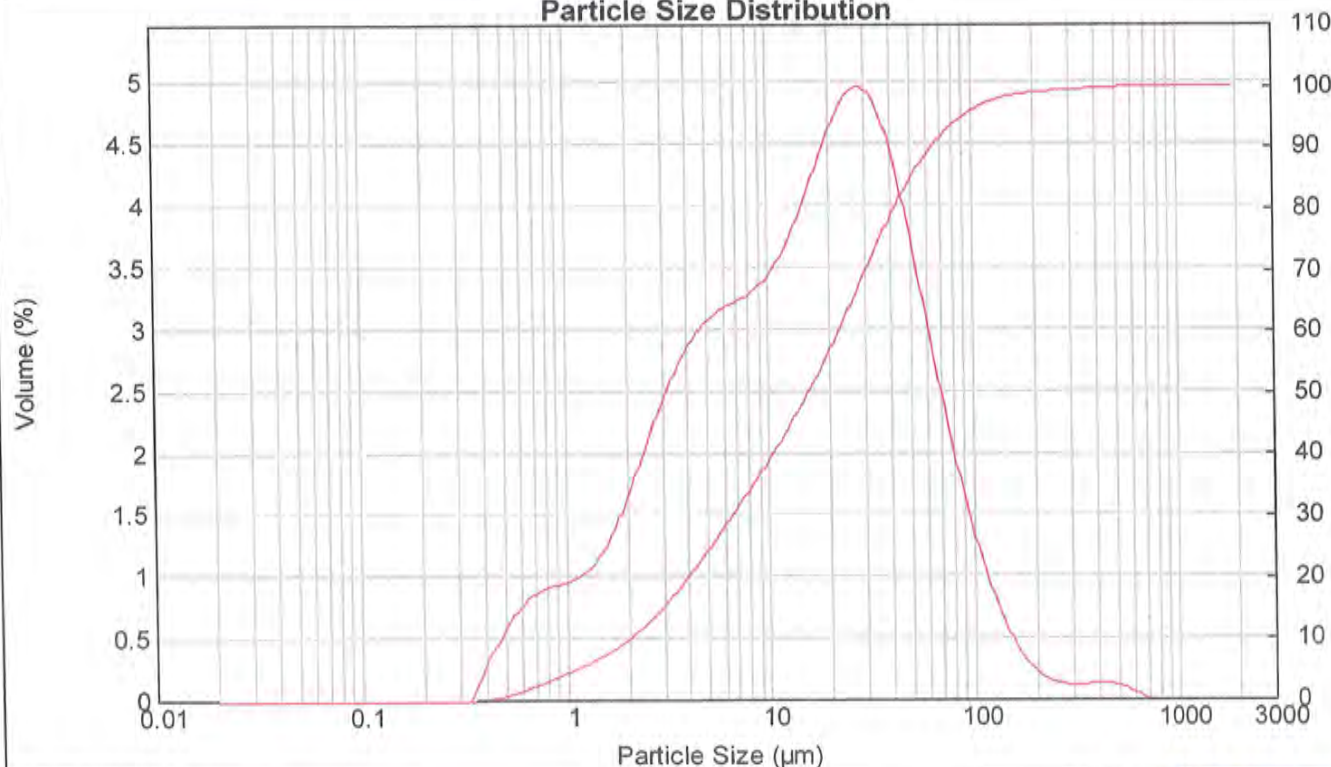
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.46 Residual (%) : 0.764
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0167 %Vol Specific Surface Area : 1.18 m²/g
Mean Diameters : D (0.1) : 2.04 um D (0.5) : 15.7 um D (0.9) : 63.95 um
D [4,3] : 28.41 um D [3,2] : 5.07 um Span : 3.944 Uniformity : 1.42

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.00	7.962	3.32	58.573	2.86	430.887	0.13
0.023	0.00	0.172	0.00	1.262	1.09	9.283	3.44	68.291	2.30	502.377	0.10
0.027	0.00	0.200	0.00	1.471	1.26	10.823	3.61	79.621	1.80	585.729	0.04
0.032	0.00	0.233	0.00	1.715	1.49	12.619	3.85	92.832	1.36	682.910	0.00
0.037	0.00	0.272	0.00	2.000	1.77	14.713	4.15	108.234	0.99	795.214	0.00
0.043	0.00	0.317	0.02	2.332	2.07	17.154	4.46	126.191	0.68	928.318	0.00
0.050	0.00	0.370	0.02	2.719	2.36	20.000	4.74	147.128	0.45	1082.339	0.00
0.059	0.00	0.431	0.07	3.170	2.63	23.318	4.93	171.539	0.29	1261.915	0.00
0.068	0.00	0.502	0.06	3.696	2.85	27.187	4.97	200.000	0.19	1471.285	0.00
0.080	0.00	0.585	0.09	4.309	3.01	31.698	4.82	233.183	0.14	1715.392	0.00
0.093	0.00	0.683	0.08	5.024	3.12	36.957	4.49	271.871	0.12	2000.000	0.00
0.106	0.00	0.796	0.03	5.857	3.19	43.089	4.01	316.979	0.12		
0.126	0.00	0.928	0.06	6.829	3.25	50.238	3.44	369.570	0.13		
0.147	0.00	1.082	0.96	7.962		58.573		430.887			

Particle Size Distribution



Result : Analysis Report

Attached page 24

Sample Details

Sample ID : MAWB-1C2X_3

Measured : Tuesday, April 25, 2023 12:06:17

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTEC0859_66_51um_Tetratex 1.mea

Analysed : Tuesday, April 25, 2023 12:06:19

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

System Details

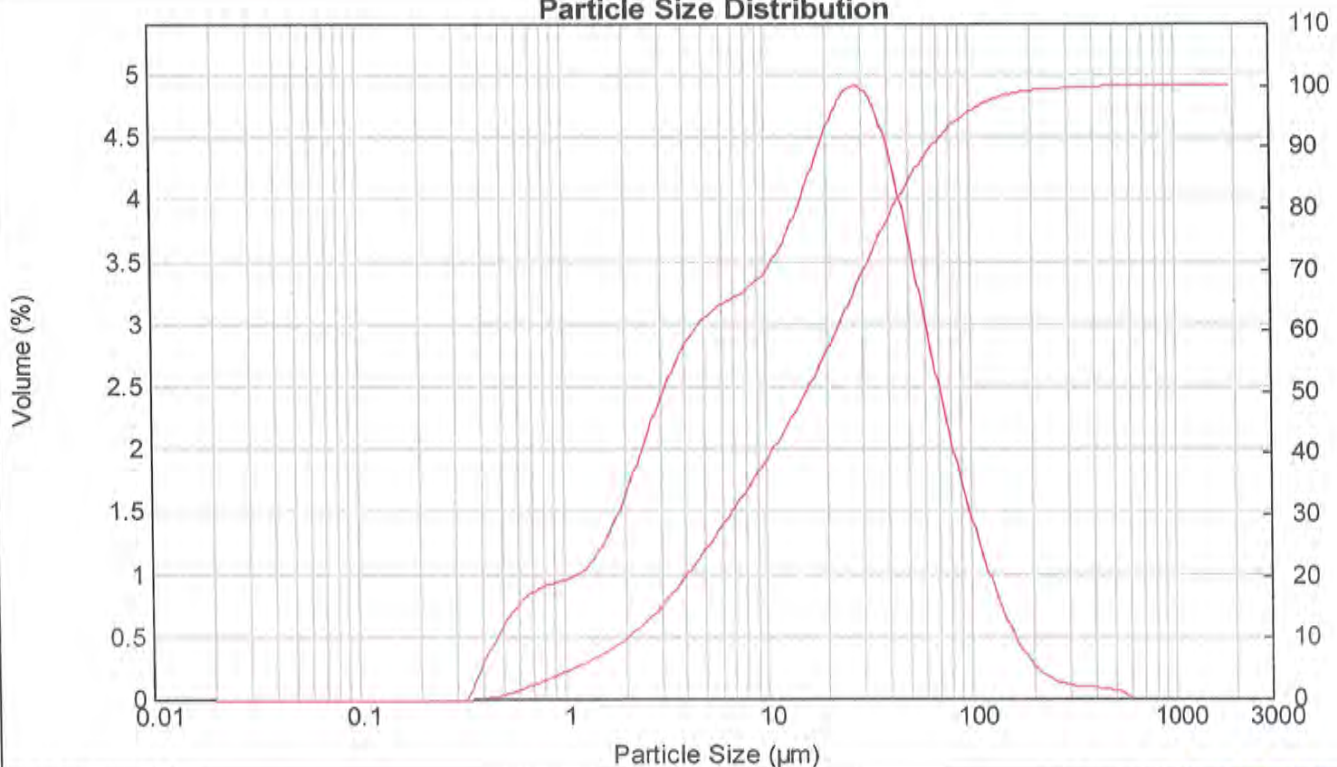
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.34 Residual (%) : 0.757
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0166 %Vol Specific Surface Area : 1.18 m²/g
Mean Diameters : D (0.1) : 2.04 um D (0.5) : 15.83 um D (0.9) : 65.88 um
D [4,3] : 28.3 um D [3,2] : 5.1 um Span : 4.033 Uniformity : 1.4

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.00	7.962	3.32	58.573	2.88	430.887	0.08
0.023	0.00	0.172	0.00	1.262	1.09	9.283	3.43	68.291	2.36	502.377	0.06
0.027	0.00	0.200	0.00	1.471	1.09	10.823	3.61	79.621	1.89	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.48	12.619	3.84	92.832	1.48	682.910	0.00
0.037	0.00	0.272	0.00	2.000	1.75	14.713	4.13	108.234	1.11	796.214	0.00
0.043	0.00	0.317	0.02	2.332	2.06	17.154	4.44	126.191	0.80	928.318	0.00
0.050	0.00	0.370	0.27	2.719	2.34	20.000	4.71	147.128	0.55	1082.339	0.00
0.059	0.00	0.431	0.46	3.170	2.61	23.318	4.89	171.539	0.36	1261.915	0.00
0.088	0.00	0.502	0.65	3.696	2.83	27.187	4.92	200.000	0.23	1471.285	0.00
0.080	0.00	0.586	0.79	4.309	3.00	31.698	4.76	233.183	0.15	1715.362	0.00
0.093	0.00	0.683	0.88	5.024	3.11	36.957	4.43	271.871	0.10	2000.000	0.00
0.108	0.00	0.796	0.93	5.857	3.18	43.099	3.97	316.979	0.10		
0.126	0.00	0.928	0.96	6.829	3.24	50.238	3.43	369.570	0.10		
0.147	0.00	1.082		7.962		58.573		430.887			

Particle Size Distribution



Result : Analysis Report

Attached page 25

Sample Details

Sample ID : MAWB-2B2X_1

Measured : Tuesday, April 25, 2023 12:14:06

Sample File : D:\Data Mastersizer2000\Technical
analysis\MTEC0859_66_51sam_Tetratex-1.mea

Analysed : Tuesday, April 25, 2023 12:14:07

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

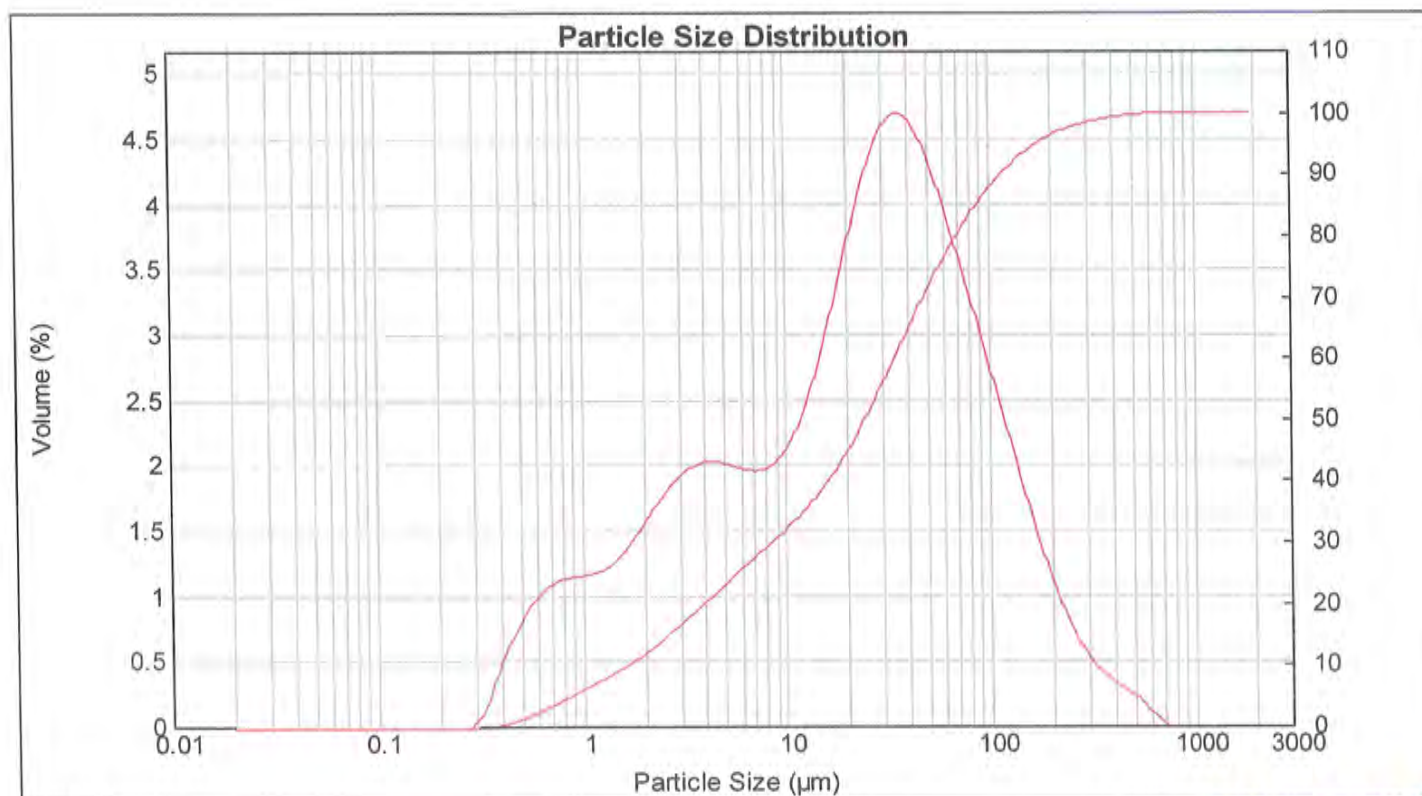
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.18 Residual (%) : 0.364
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0176 %Vol Specific Surface Area : 1.26 m²/g
Mean Diameters : D (0.1) : 1.63 um D (0.5) : 24.39 um D (0.9) : 114.72 um
D [4,3] : 46.68 um D [3,2] : 4.76 um Span : 4.636 Uniformity : 1.57

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.18	7.962	2.01	58.573	3.88	430.887	0.28
0.023	0.00	0.172	0.00	1.262	1.24	9.283	2.13	68.291	3.52	502.377	0.20
0.027	0.00	0.200	0.00	1.471	1.24	10.823	2.34	79.621	3.14	585.729	0.09
0.032	0.00	0.233	0.00	1.715	1.47	12.619	2.65	92.832	2.76	682.910	0.00
0.037	0.00	0.272	0.02	2.000	1.63	14.713	3.04	108.234	2.38	796.214	0.00
0.043	0.00	0.317	0.17	2.332	1.78	17.154	3.48	126.191	1.99	926.318	0.00
0.050	0.00	0.370	0.48	2.719	1.90	20.000	3.92	147.128	1.62	1082.339	0.00
0.059	0.00	0.431	0.70	3.170	1.99	23.318	4.30	171.539	1.29	1261.915	0.00
0.068	0.00	0.502	0.89	3.696	2.03	27.187	4.58	200.000	0.99	1471.285	0.00
0.080	0.00	0.585	1.03	4.309	2.03	31.698	4.71	233.183	0.75	1715.392	0.00
0.093	0.00	0.683	1.11	5.024	2.00	36.957	4.67	271.871	0.57	2000.000	0.00
0.108	0.00	0.796	1.14	5.857	1.97	43.089	4.50	316.979	0.44		
0.126	0.00	0.928	1.16	6.829	1.97	50.238	4.22	369.570	0.35		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 26

Sample Details

Sample ID : MAWB-2B2X_2

Measured : Tuesday, April 25, 2023 12:15:09

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTEC0850_66_51sam_Tetrastech_1.mes

Analysed : Tuesday, April 25, 2023 12:15:10

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

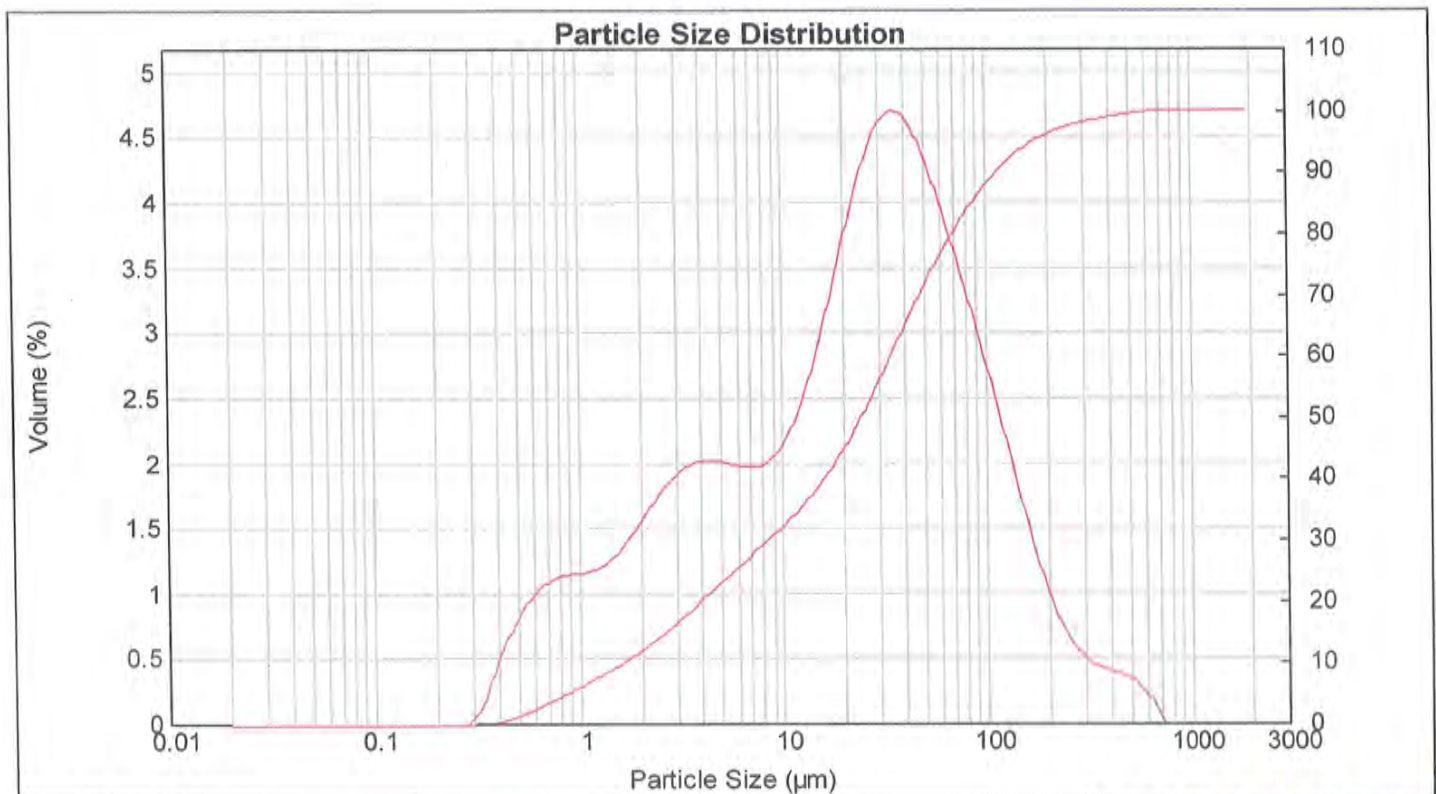
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.93 Residual (%) : 0.342
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0174 %Vol Specific Surface Area : 1.26 m²/g
Mean Diameters : D (0.1) : 1.64 um D (0.5) : 24.37 um D (0.9) : 113.87 um
D [4,3] : 47.81 um D [3,2] : 4.78 um Span : 4.605 Uniformity : 1.62

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.18	7.962	2.02	58.573	3.89	430.887	0.37
0.023	0.00	0.172	0.00	1.262	1.23	9.283	2.14	68.291	3.53	502.377	0.31
0.027	0.00	0.200	0.00	1.471	1.33	10.823	2.36	79.621	3.16	585.729	0.20
0.032	0.00	0.233	0.00	1.715	1.46	12.619	2.67	92.832	2.77	682.910	0.01
0.037	0.00	0.272	0.02	2.000	1.62	14.713	3.06	108.234	2.36	796.214	0.00
0.043	0.00	0.317	0.16	2.332	1.77	17.154	3.50	126.191	1.94	928.318	0.00
0.050	0.00	0.370	0.47	2.719	1.89	20.000	3.94	147.128	1.53	1082.339	0.00
0.059	0.00	0.431	0.69	3.170	1.98	23.318	4.32	171.539	1.17	1261.915	0.00
0.068	0.00	0.502	0.89	3.696	2.02	27.187	4.59	200.000	0.88	1471.285	0.00
0.080	0.00	0.586	1.02	4.309	2.00	31.698	4.67	233.183	0.66	1715.392	0.00
0.093	0.00	0.683	1.10	5.024	1.98	36.957	4.50	271.871	0.45	2000.000	0.00
0.108	0.00	0.796	1.14	5.857	1.97	43.089	4.22	316.979	0.41		
0.126	0.00	0.928	1.16	6.829		50.238		369.570			
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 27

Sample Details

Sample ID : MAWB-2B2X_3

Measured : Tuesday, April 25, 2023 12:16:43

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTEC0859_66_51um_Tetratex 1.mea

Analysed : Tuesday, April 25, 2023 12:16:45

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

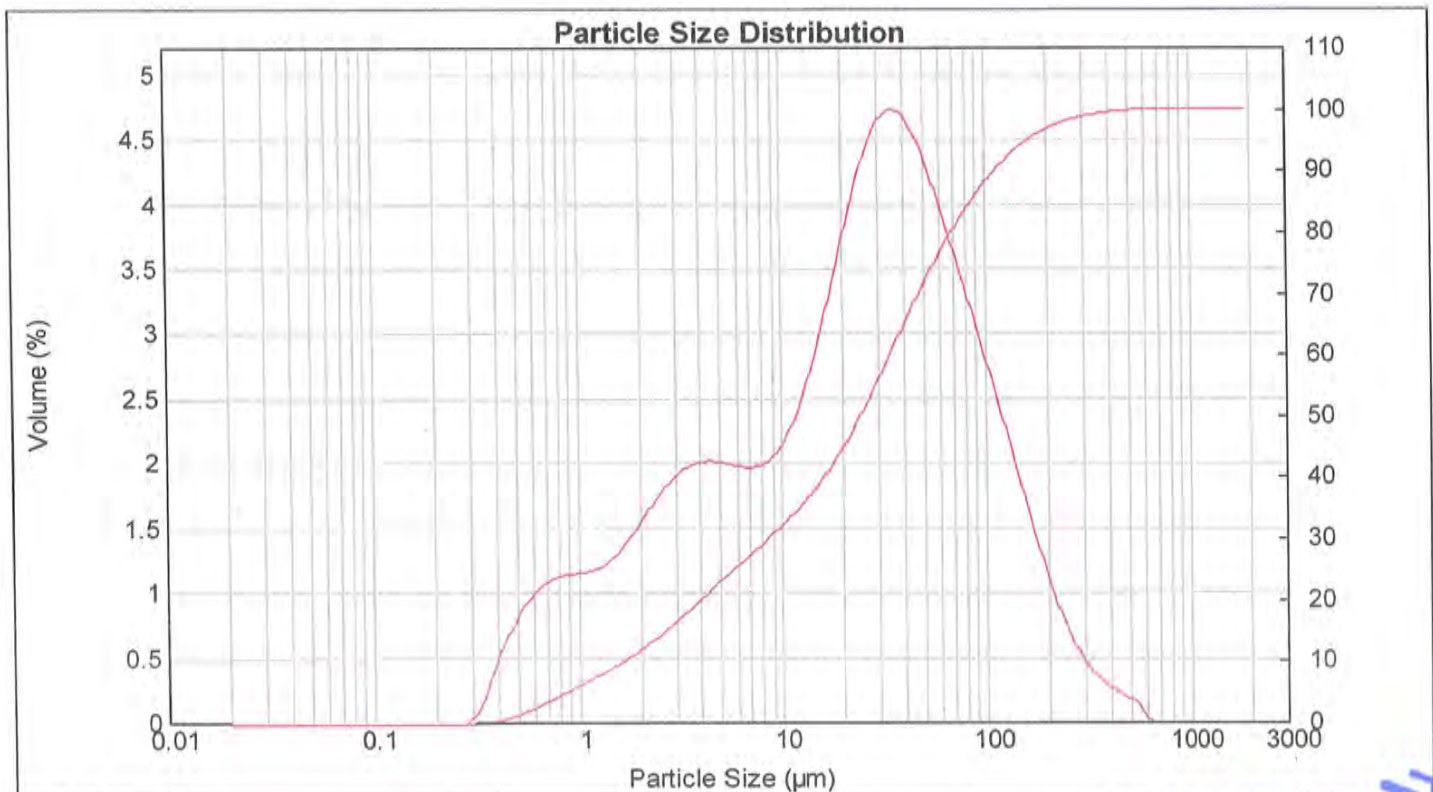
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.74 Residual (%) : 0.344
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0173 %Vol Specific Surface Area : 1.25 m²/g
Mean Diameters : D (0.1) : 1.65 um D (0.5) : 24.39 um D (0.9) : 112.57 um
D [4,3] : 45.18 um D [3,2] : 4.79 um Span : 4.548 Uniformity : 1.51

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.17	7.962	2.02	58.573	3.89	430.887	0.22
0.023	0.00	0.172	0.00	1.262	1.22	9.283	2.14	68.291	3.54	502.377	0.15
0.027	0.00	0.200	0.00	1.471	1.22	10.823	2.36	79.621	3.18	585.729	0.01
0.032	0.00	0.233	0.00	1.715	1.46	12.619	2.67	92.832	2.82	682.910	0.00
0.037	0.00	0.272	0.02	2.000	1.61	14.713	3.05	108.234	2.44	795.214	0.00
0.043	0.00	0.317	0.16	2.332	1.76	17.154	3.51	126.191	2.05	928.318	0.00
0.050	0.00	0.370	0.47	2.719	1.88	20.000	3.96	147.128	1.66	1062.339	0.00
0.059	0.00	0.431	0.69	3.170	1.97	23.318	4.34	171.539	1.30	1261.915	0.00
0.068	0.00	0.502	0.89	3.696	2.02	27.187	4.62	200.000	0.97	1471.285	0.00
0.080	0.00	0.586	1.02	4.309	2.02	31.698	4.74	233.183	0.71	1715.392	0.00
0.093	0.00	0.683	1.10	5.024	2.01	36.957	4.70	271.871	0.51	2000.000	0.00
0.108	0.00	0.796	1.14	5.857	1.98	43.089	4.51	316.979	0.37		
0.126	0.00	0.928	1.15	6.829	1.98	50.238	4.23	369.570	0.28		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 28

Sample Details

Sample ID : MAWB-3B2X_1

Measured : Tuesday, April 25, 2023 12:27:29

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS_62\MAWB-3B2X_1_1.mea

Analysed : Tuesday, April 25, 2023 12:27:30

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

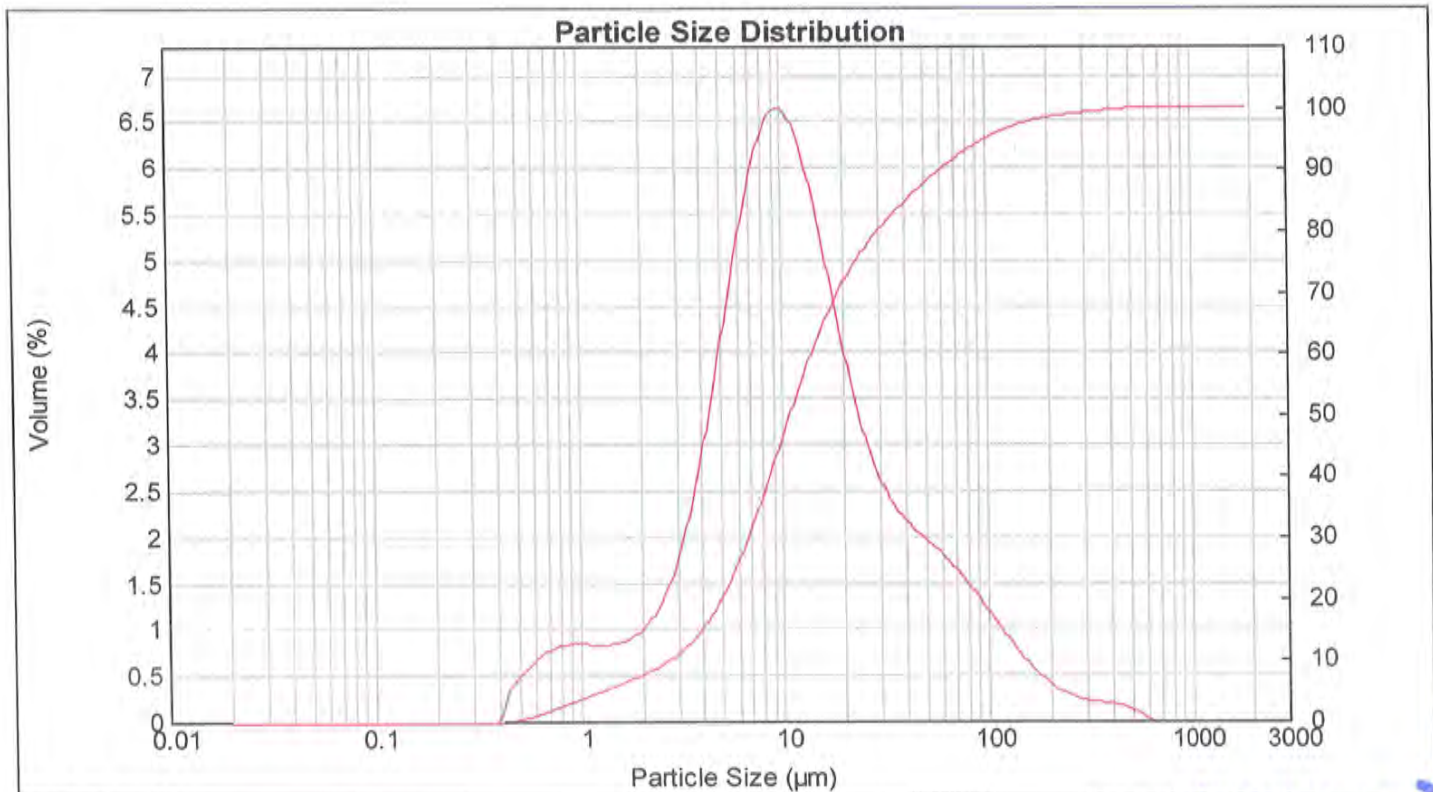
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.33 Residual (%) : 0.364
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0185 %Vol Specific Surface Area : 1.09 m²/g
Mean Diameters : D (0.1) : 2.73 um D (0.5) : 10.91 um D (0.9) : 60.65 um
D [4,3] : 25.93 um D [3,2] : 5.5 um Span : 5.308 Uniformity : 1.85

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	0.84	7.962	6.55	58.573	1.76	430.887	0.16
0.023	0.00	0.172	0.00	1.262	0.84	9.283	6.65	68.291	1.59	502.377	0.10
0.027	0.00	0.200	0.00	1.471	0.86	10.823	6.41	79.621	1.40	585.729	0.01
0.032	0.00	0.233	0.00	1.715	0.93	12.619	5.89	92.832	1.20	682.910	0.00
0.037	0.00	0.272	0.00	2.000	1.07	14.713	5.19	108.234	1.00	796.214	0.00
0.043	0.00	0.317	0.00	2.332	1.29	17.154	4.42	126.191	0.80	928.318	0.00
0.050	0.00	0.370	0.00	2.719	1.65	20.000	3.71	147.128	0.62	1082.339	0.00
0.059	0.00	0.431	0.03	3.170	2.17	23.318	3.12	171.539	0.47	1261.915	0.00
0.068	0.00	0.502	0.38	3.696	2.86	27.187	2.69	200.000	0.36	1471.285	0.00
0.080	0.00	0.586	0.70	4.309	3.68	31.698	2.39	233.183	0.29	1715.392	0.00
0.093	0.00	0.683	0.80	5.024	4.57	36.957	2.18	271.871	0.24	2000.000	0.00
0.108	0.00	0.796	0.84	5.857	5.42	43.089	2.04	316.979	0.21		
0.126	0.00	0.928	0.85	6.829	6.12	50.238	1.90	369.570	0.19		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 29

Sample Details

Sample ID : MAWB-3B2X_2

Measured : Tuesday, April 25, 2023 12:28:33

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS_66\MTEC0859_66_51sam_Tetrattech_1.me

Analysed : Tuesday, April 25, 2023 12:28:35

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

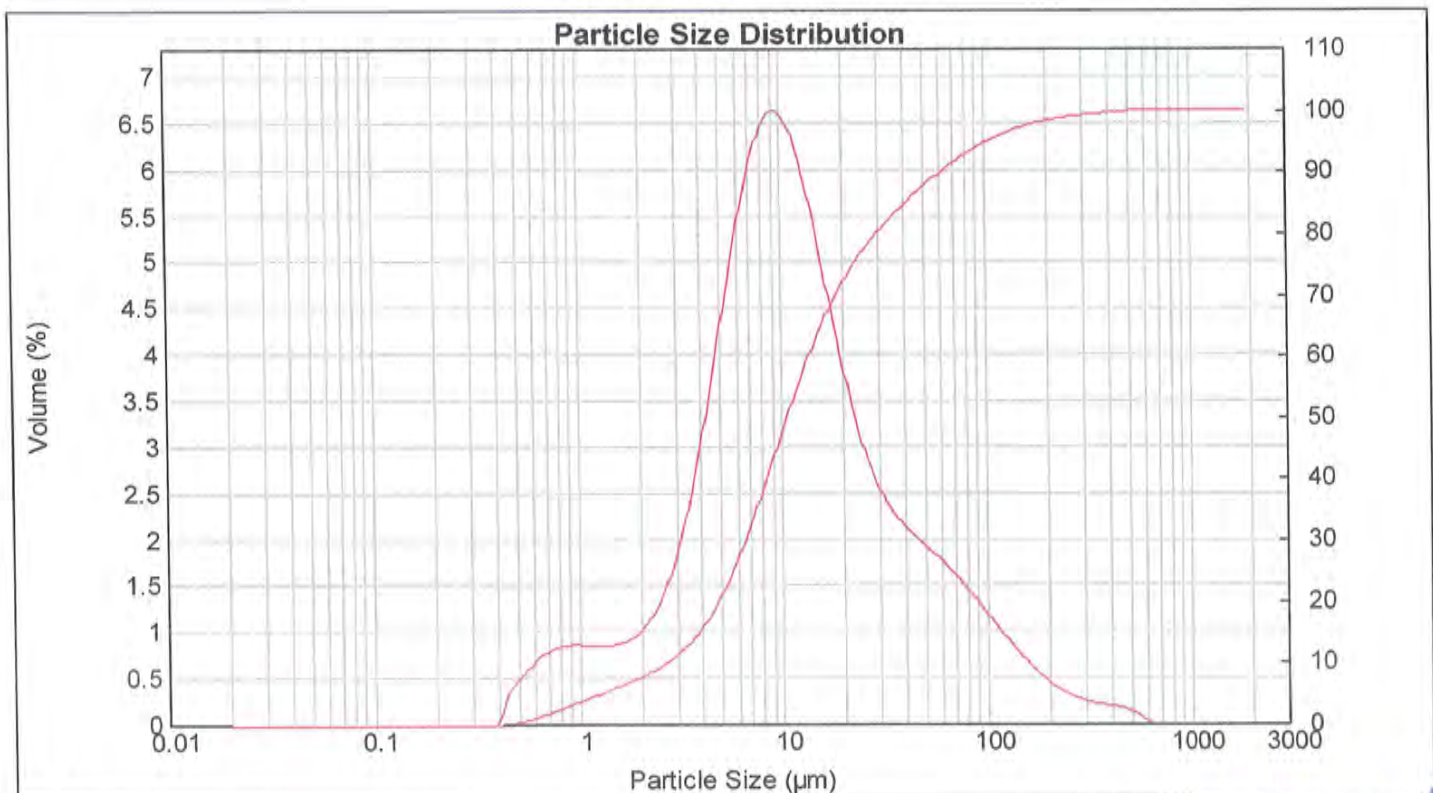
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.18 Residual (%) : 0.375
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0180 %Vol Specific Surface Area : 1.11 m²/g
Mean Diameters : D (0.1) : 2.68 um D (0.5) : 10.63 um D (0.9) : 61.32 um
D [4,3] : 26.14 um D [3,2] : 5.42 um Span : 5.515 Uniformity : 1.93

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	0.85	7.962	6.59	58.573	1.72	430.887	0.17
0.023	0.00	0.172	0.00	1.262	0.85	9.283	6.61	68.291	1.55	502.377	0.11
0.027	0.00	0.200	0.00	1.471	0.85	10.823	6.30	79.621	1.38	585.729	0.01
0.032	0.00	0.233	0.00	1.715	0.95	12.619	5.72	92.832	1.19	682.910	0.00
0.037	0.00	0.272	0.00	2.000	1.09	14.713	4.99	108.234	1.00	796.214	0.00
0.043	0.00	0.317	0.00	2.332	1.33	17.154	4.23	126.191	0.82	928.318	0.00
0.050	0.00	0.370	0.00	2.719	1.72	20.000	3.55	147.128	0.66	1082.339	0.00
0.059	0.00	0.431	0.03	3.170	2.28	23.318	3.00	171.539	0.52	1261.915	0.00
0.058	0.00	0.502	0.38	3.696	3.00	27.187	2.60	200.000	0.40	1471.285	0.00
0.080	0.00	0.586	0.71	4.309	3.85	31.698	2.33	233.183	0.32	1715.392	0.00
0.093	0.00	0.683	0.81	5.024	4.75	36.957	2.14	271.871	0.26	2000.000	0.00
0.108	0.00	0.796	0.85	5.857	5.58	43.089	2.00	316.979	0.22		
0.126	0.00	0.928	0.86	6.829	6.22	50.238	1.86	369.570	0.20		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 30

Sample Details

Sample ID : MAWB-3B2X_3

Measured : Tuesday, April 25, 2023 12:30:08

Sample File : D:\Data Mastersizer2000\Technical
MTEC080950_66_51sam_Tetratex 1.mea

Analysed : Tuesday, April 25, 2023 12:30:10

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

System Details

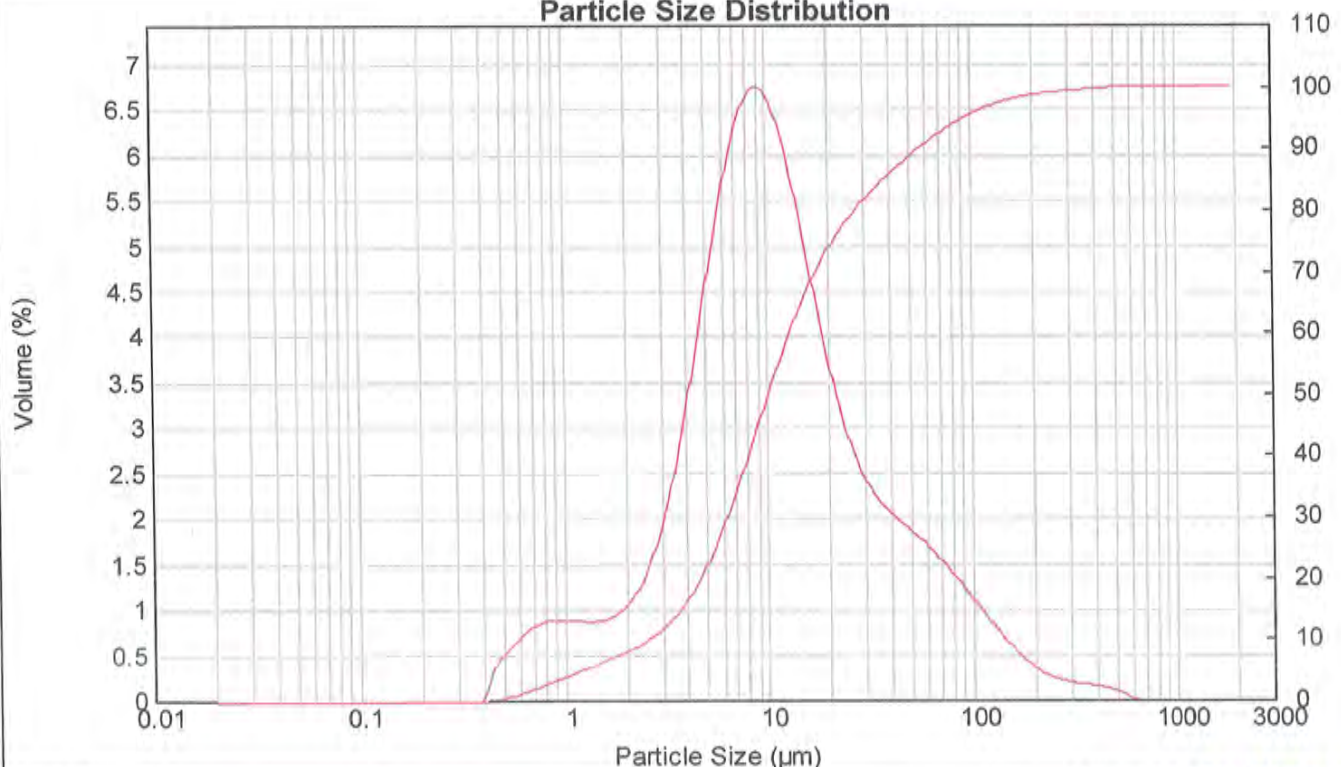
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.96 Residual (%) : 0.383
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0173 %Vol Specific Surface Area : 1.14 m²/g
Mean Diameters : D (0.1) : 2.59 um D (0.5) : 10.15 um D (0.9) : 56.29 um
D [4,3] : 24.04 um D [3,2] : 5.25 um Span : 5.293 Uniformity : 1.84

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	0.88	7.962	6.74	58.573	1.66	430.887	0.13
0.023	0.00	0.172	0.00	1.262	0.88	9.283	6.69	68.291	1.49	502.377	0.08
0.027	0.00	0.200	0.00	1.471	0.88	10.823	6.29	79.621	1.31	585.729	0.00
0.032	0.00	0.233	0.00	1.715	0.90	12.619	5.64	92.832	1.12	682.910	0.00
0.037	0.00	0.272	0.00	2.000	0.97	14.713	4.86	108.234	0.92	796.214	0.00
0.043	0.00	0.317	0.00	2.332	1.13	17.154	4.08	126.191	0.73	928.318	0.00
0.050	0.00	0.370	0.00	2.719	1.40	20.000	3.40	147.128	0.56	1082.339	0.00
0.059	0.00	0.431	0.03	3.170	1.82	23.318	2.87	171.539	0.42	1261.915	0.00
0.068	0.00	0.502	0.39	3.696	2.43	27.187	2.49	200.000	0.32	1471.285	0.00
0.080	0.00	0.586	0.57	4.309	3.21	31.698	2.24	233.183	0.25	1715.392	0.00
0.093	0.00	0.683	0.74	5.024	4.10	36.957	2.07	271.871	0.20	2000.000	0.00
0.108	0.00	0.796	0.84	5.857	5.01	43.089	1.93	316.979	0.18		
0.126	0.00	0.928	0.89	6.829	6.45	50.238	1.80	369.570	0.16		
0.147	0.00	1.082	0.89	7.962	6.45	58.573	1.80	430.887	0.16		

Particle Size Distribution



Result : Analysis Report

Attached page 31

Sample Details

Sample ID : MAWB-3C2_1

Measured : Tuesday, April 25, 2023 12:39:17

Sample File : D:\Data Mastersizer2000\Technical
sample\TS 66\MTEC0859_66_51sam_Tetrattech 1 mea

Analysed : Tuesday, April 25, 2023 12:39:19

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

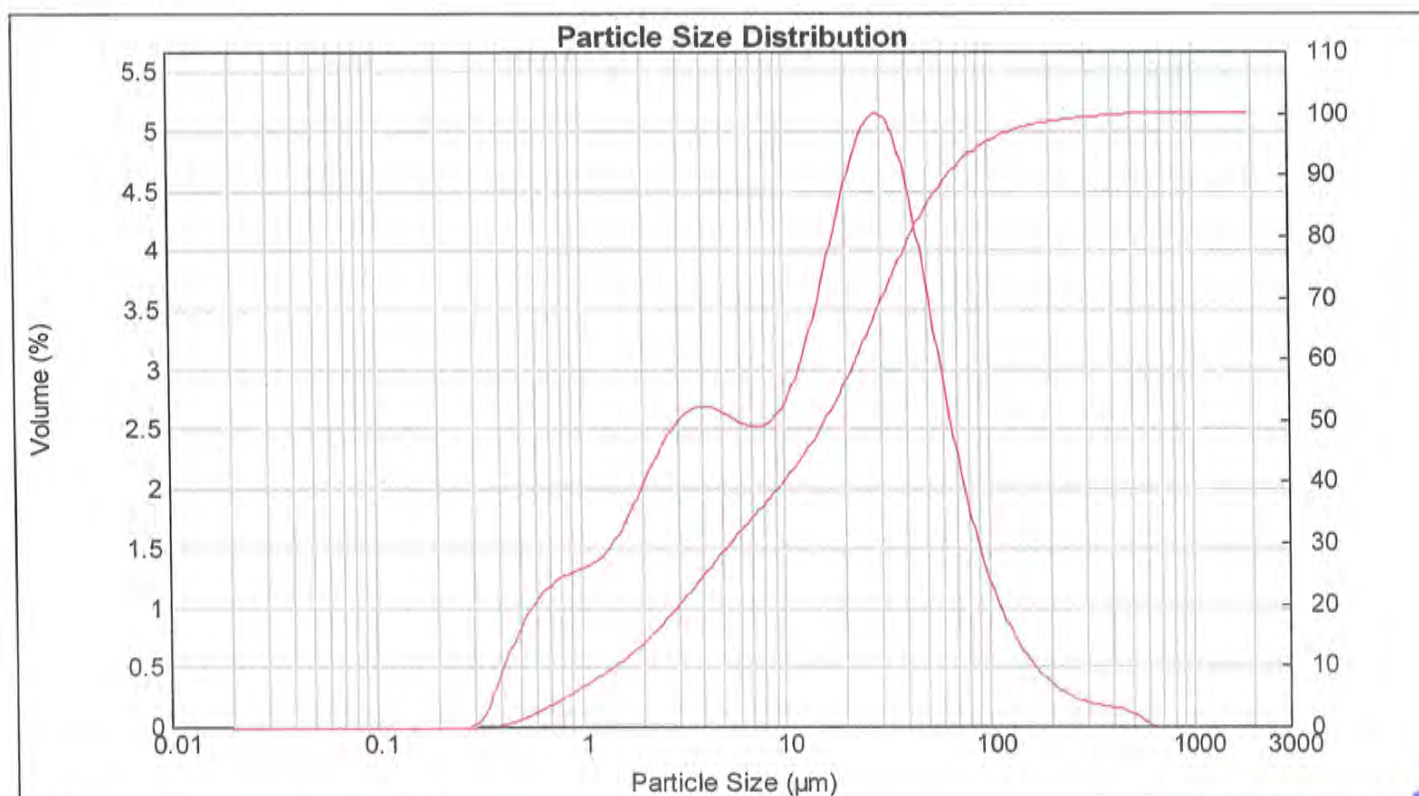
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.15 Residual (%) : 0.755
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0149 %Vol Specific Surface Area : 1.43 m²/g
Mean Diameters : D (0.1) : 1.48 um D (0.5) : 15.98 um D (0.9) : 64.52 um
D [4,3] : 29.04 um D [3,2] : 4.19 um Span : 3.944 Uniformity : 1.47

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.39	7.962	2.58	58.573	2.73	430.887	0.13
0.023	0.00	0.172	0.00	1.262	1.49	9.283	2.73	68.291	2.14	502.377	0.08
0.027	0.00	0.200	0.00	1.471	1.49	10.823	2.99	79.621	1.65	585.729	0.01
0.032	0.00	0.233	0.00	1.715	1.89	12.619	3.37	92.832	1.26	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.13	14.713	3.84	108.234	0.96	796.214	0.00
0.043	0.00	0.317	0.11	2.332	2.36	17.154	4.33	126.191	0.73	928.318	0.00
0.050	0.00	0.370	0.42	2.719	2.55	20.000	4.77	147.128	0.55	1082.339	0.00
0.059	0.00	0.431	0.68	3.170	2.66	23.318	5.07	171.539	0.42	1261.915	0.00
0.068	0.00	0.502	0.92	3.696	2.71	27.187	5.16	200.000	0.32	1471.285	0.00
0.080	0.00	0.585	1.10	4.309	2.69	31.698	5.01	233.183	0.25	1715.392	0.00
0.093	0.00	0.683	1.22	5.024	2.62	36.957	4.62	271.671	0.21	2000.000	0.00
0.108	0.00	0.796	1.29	5.857	2.56	43.089	4.06	316.979	0.18		
0.126	0.00	0.928	1.33	6.829	2.53	50.238	3.39	369.570	0.16		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 32

Sample Details

Sample ID : MAWB-3C2_2

Measured : Tuesday, April 25, 2023 12:40:05

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66\MTEC0859_66_51um_Tetratexh 1.mea

Analysed : Tuesday, April 25, 2023 12:40:06

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

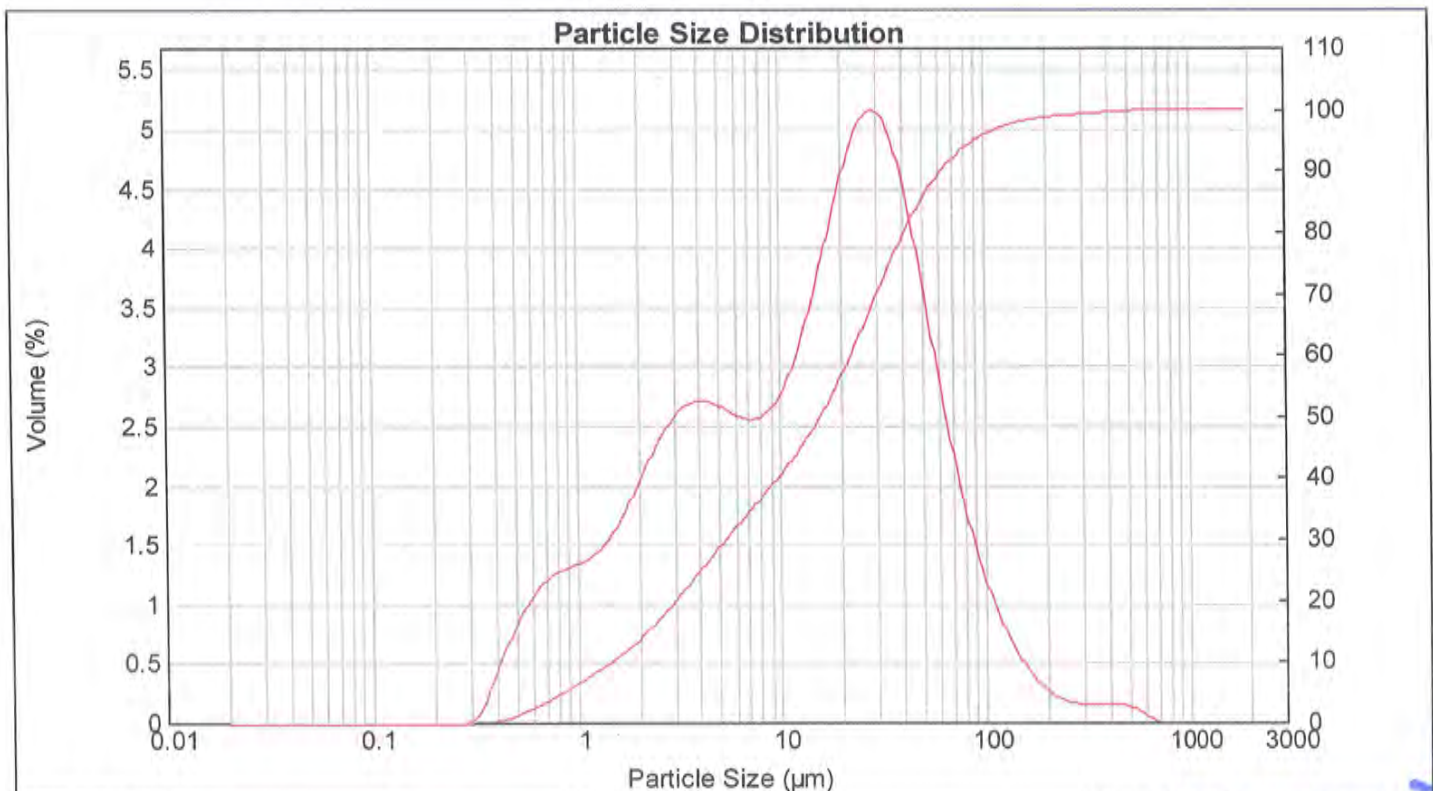
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.89 Residual (%) : 0.756
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0145 %Vol Specific Surface Area : 1.44 m²/g
Mean Diameters : D (0.1) : 1.46 um D (0.5) : 15.63 um D (0.9) : 62.29 um
D [4,3] : 28.33 um D [3,2] : 4.15 um Span : 3.891 Uniformity : 1.47

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.40	7.962	2.62	58.573	2.69	430.887	0.15
0.023	0.00	0.172	0.00	1.262	1.51	9.283	2.78	68.291	2.10	502.377	0.11
0.027	0.00	0.200	0.00	1.471	1.68	10.823	3.05	79.621	1.61	585.729	0.04
0.032	0.00	0.233	0.00	1.715	1.90	12.619	3.43	92.832	1.21	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.15	14.713	3.89	108.234	0.90	796.214	0.00
0.043	0.00	0.317	0.11	2.332	2.38	17.154	4.38	126.191	0.65	928.318	0.00
0.050	0.00	0.370	0.42	2.719	2.55	20.000	4.81	147.128	0.46	1082.339	0.00
0.059	0.00	0.431	0.68	3.170	2.68	23.318	5.10	171.539	0.32	1261.915	0.00
0.068	0.00	0.502	0.93	3.696	2.73	27.187	5.18	200.000	0.23	1471.285	0.00
0.080	0.00	0.586	1.11	4.309	2.71	31.698	5.00	233.183	0.18	1715.392	0.00
0.093	0.00	0.683	1.23	5.024	2.65	36.957	4.60	271.871	0.16	2000.000	0.00
0.108	0.00	0.796	1.30	5.857	2.59	43.089	4.02	316.979	0.16		
0.126	0.00	0.928	1.34	6.829	2.57	50.238	3.35	369.570	0.16		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 33

Sample Details

Sample ID : MAWB-3C2_3

Measured : Tuesday, April 25, 2023 12:42:11

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 66MTEC0859_66_51um_Tetratexh 1.mea

Analysed : Tuesday, April 25, 2023 12:42:12

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

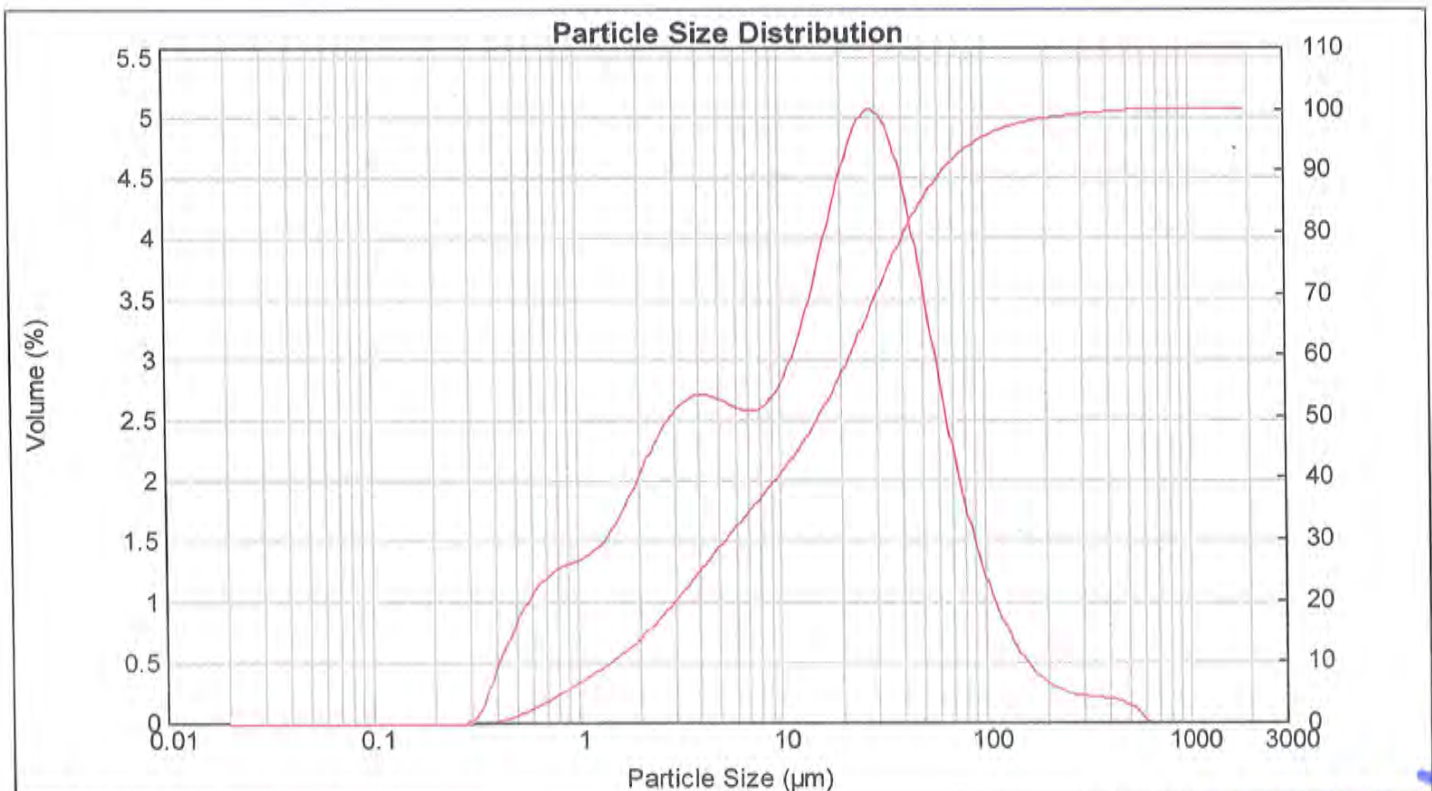
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.50 Residual (%) : 0.752
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0142 %Vol Specific Surface Area : 1.44 m²/g
Mean Diameters : D (0.1) : 1.47 um D (0.5) : 15.58 um D (0.9) : 64.13 um
D [4,3] : 29.24 um D [3,2] : 4.16 um Span : 4.022 Uniformity : 1.53

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.40	7.962	2.65	58.573	2.68	430.887	0.18
0.023	0.00	0.172	0.00	1.262	1.51	9.283	2.80	68.291	2.10	502.377	0.12
0.027	0.00	0.200	0.00	1.471	1.67	10.823	3.07	79.621	1.62	585.729	0.01
0.032	0.00	0.233	0.00	1.715	1.90	12.619	3.44	92.832	1.23	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.14	14.713	3.88	108.234	0.93	796.214	0.00
0.043	0.00	0.317	0.11	2.332	2.37	17.154	4.34	126.191	0.69	926.318	0.00
0.050	0.00	0.370	0.42	2.719	2.67	20.000	4.75	147.128	0.51	1082.339	0.00
0.059	0.00	0.431	0.68	3.170	2.55	23.318	5.02	171.539	0.38	1261.915	0.00
0.068	0.00	0.502	0.93	3.696	2.72	27.187	5.08	200.000	0.30	1471.285	0.00
0.080	0.00	0.586	1.11	4.309	2.71	31.698	4.90	233.183	0.26	1715.392	0.00
0.093	0.00	0.683	1.23	5.024	2.66	36.957	4.51	271.871	0.23	2000.000	0.00
0.108	0.00	0.796	1.30	5.857	2.61	43.089	3.95	316.979	0.22		
0.126	0.00	0.928	1.35	6.829	2.59	50.238	3.31	369.570	0.20		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 34

Sample Details

Sample ID : MAWB-4B2X_1

Measured : Tuesday, April 25, 2023 12:54:43

Sample File : D:\Data Mastersizer2000\Technical
MTEC0059_66_51sam_Tetratex-1.mea

Analysed : Tuesday, April 25, 2023 12:54:44

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

System Details

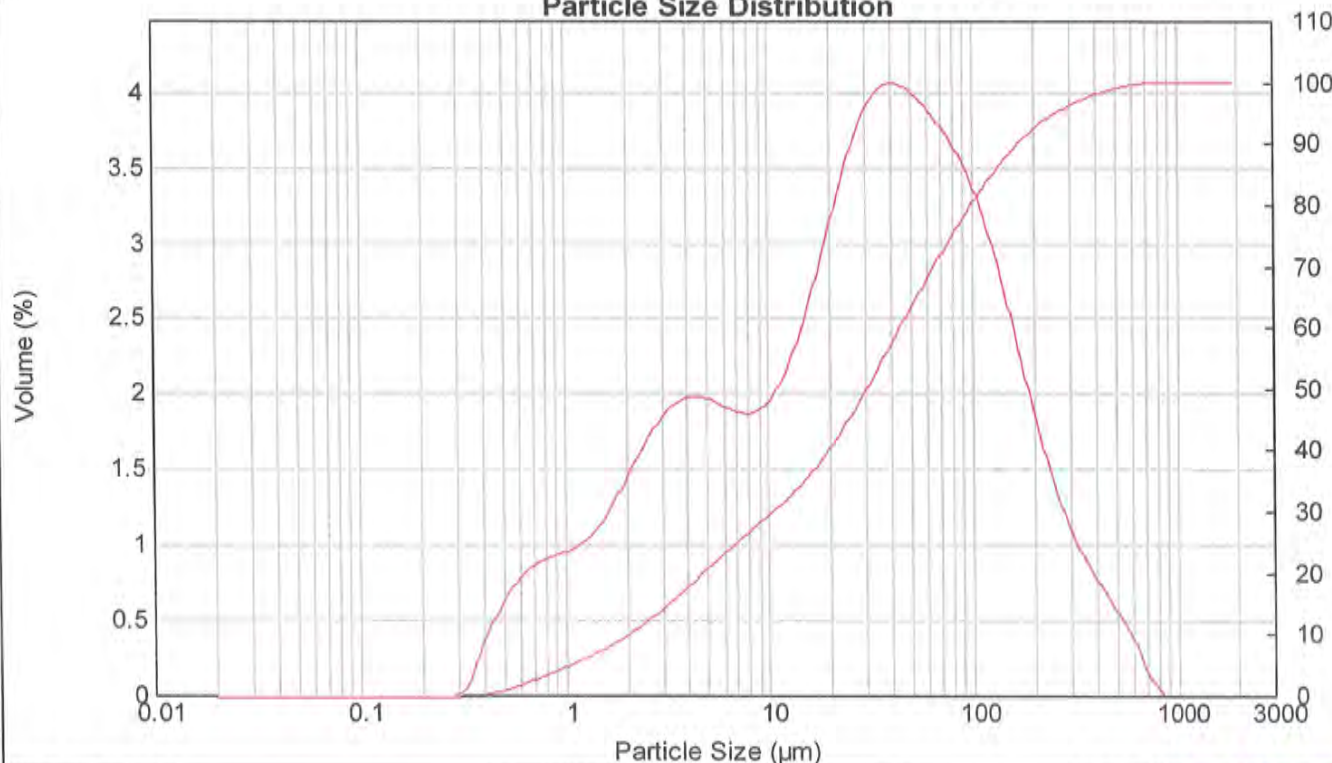
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.05 Residual (%) : 0.316
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0189 %Vol Specific Surface Area : 1.07 m²/g
Mean Diameters : D (0.1) : 2.03 um D (0.5) : 30.2 um D (0.9) : 167.7 um
D [4,3] : 65.13 um D [3,2] : 5.61 um Span : 5.485 Uniformity : 1.82

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.00	7.962	1.89	58.573	3.87	430.887	0.65
0.023	0.00	0.172	0.00	1.262	1.07	9.283	1.95	68.291	3.74	502.377	0.50
0.027	0.00	0.200	0.00	1.471	1.19	10.823	2.10	79.621	3.59	585.729	0.33
0.032	0.00	0.233	0.00	1.715	1.35	12.619	2.32	92.832	3.39	682.910	0.12
0.037	0.00	0.272	0.01	2.000	1.52	14.713	2.62	108.234	3.13	796.214	0.01
0.043	0.00	0.317	0.09	2.332	1.69	17.154	2.95	126.191	2.81	928.318	0.00
0.050	0.00	0.370	0.35	2.719	1.83	20.000	3.31	147.128	2.44	1082.339	0.00
0.059	0.00	0.431	0.53	3.170	1.93	23.318	3.63	171.539	2.07	1251.915	0.00
0.068	0.00	0.502	0.70	3.696	1.98	27.187	3.87	200.000	1.71	1471.285	0.00
0.080	0.00	0.586	0.81	4.309	1.99	31.698	4.02	233.183	1.40	1715.392	0.00
0.093	0.00	0.683	0.89	5.024	1.96	36.957	4.08	271.871	1.15	2000.000	0.00
0.108	0.00	0.796	0.93	5.857	1.92	43.089	4.05	316.979	0.95		
0.126	0.00	0.928	0.96	6.829	1.88	50.238	3.97	369.570	0.79		
0.147	0.00	1.082		7.962		58.573		430.887			

Particle Size Distribution



Result : Analysis Report

Attached page 35

Sample Details

Sample ID : MAWB-4B2X_2

Measured : Tuesday, April 25, 2023 12:58:13

Sample File : D:\Data Mastersizer2000\Technical
analysis\MTEC0859_66_51sam_Tetrattech-1.mea

Analysed : Tuesday, April 25, 2023 12:58:14

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

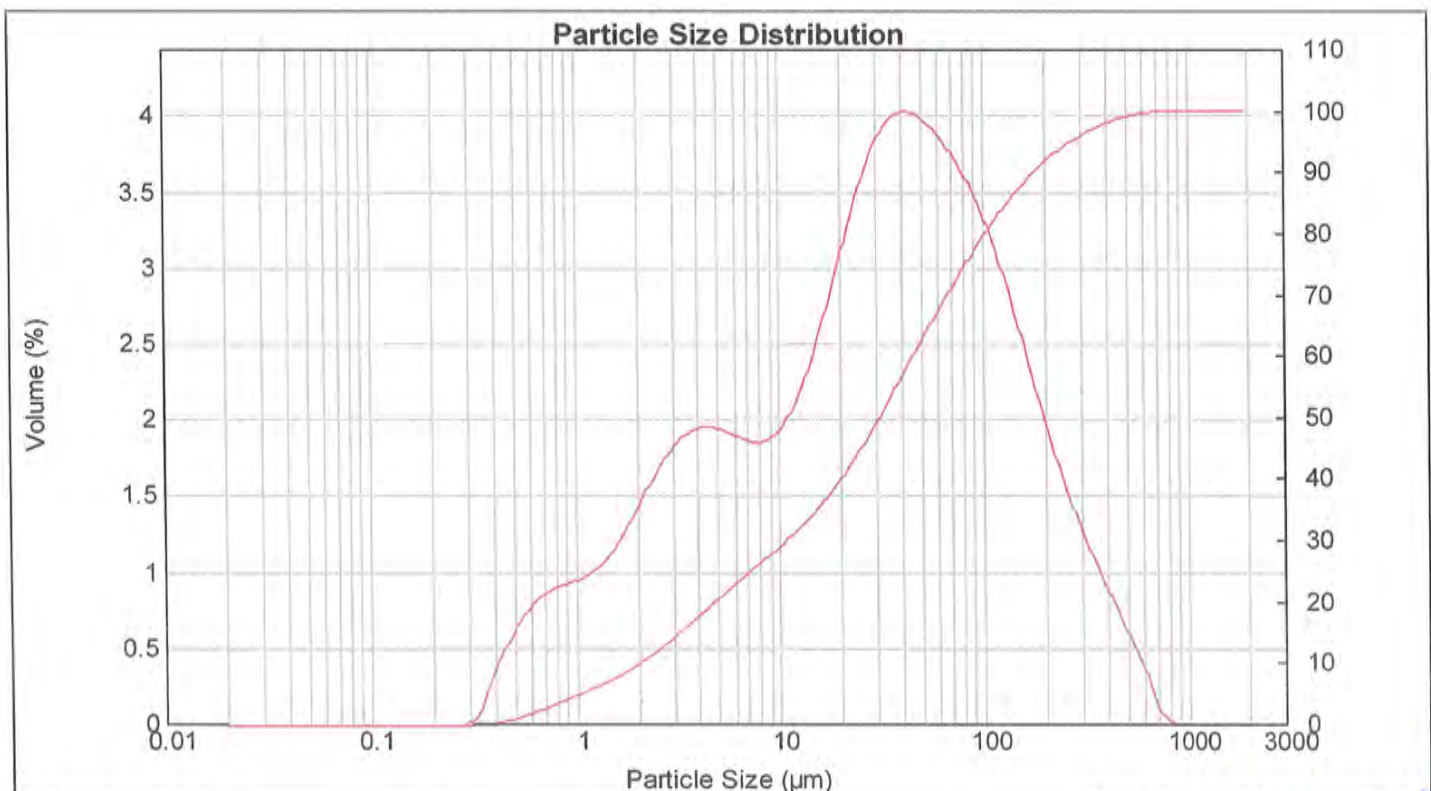
System Details

Accessory Name : Hydro 2000S (A)	Beam Length (mm) : 2.35	Obscuration (%) : 18.81	Residual (%) : 0.304
Particle RI : 1.530	Absorption : 0.1	Dispersant Name : Water	Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume	Concentration : 0.0188 %Vol	Specific Surface Area : 1.06 m ² /g
Mean Diameters :	D (0.1) : 2.05 um	D (0.5) : 30.93 um
D [4,3] : 67.21 um	D [3,2] : 5.67 um	Span : 5.671
		Uniformity : 1.83

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	0.99	7.962	1.87	58.573	3.85	430.887	0.72
0.023	0.00	0.172	0.00	1.252	1.05	9.283	1.94	68.291	3.72	502.377	0.51
0.027	0.00	0.200	0.00	1.471	1.18	10.823	2.08	79.621	3.55	585.729	0.31
0.032	0.00	0.233	0.00	1.715	1.33	12.619	2.30	92.832	3.36	682.910	0.08
0.037	0.00	0.272	0.01	2.000	1.50	14.713	2.59	108.234	3.10	796.214	0.00
0.043	0.00	0.317	0.09	2.332	1.67	17.154	2.92	126.191	2.80	928.318	0.00
0.050	0.00	0.370	0.34	2.719	1.90	20.000	3.26	147.128	2.47	1082.339	0.00
0.059	0.00	0.431	0.53	3.170	1.80	23.318	3.58	171.539	2.15	1261.915	0.00
0.068	0.00	0.502	0.69	3.696	1.95	27.187	3.82	200.000	1.84	1471.285	0.00
0.080	0.00	0.586	0.80	4.309	1.98	31.698	3.98	233.183	1.57	1715.392	0.00
0.093	0.00	0.683	0.88	5.024	1.93	36.957	4.04	271.871	1.10	2000.000	0.00
0.108	0.00	0.796	0.92	5.857	1.89	43.089	3.96	316.979	0.91		
0.126	0.00	0.928	0.95	6.829	1.87	50.238		369.570			
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 36

Sample Details

Sample ID : MAWB-4B2X_3

Measured : Tuesday, April 25, 2023 13:00:36

Sample File : D:\Data Mastersizer2000\Technical
analysis\TS 62\MTEC0950 62 51um Tetratex 4.mca

Analysed : Tuesday, April 25, 2023 13:00:38

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

System Details

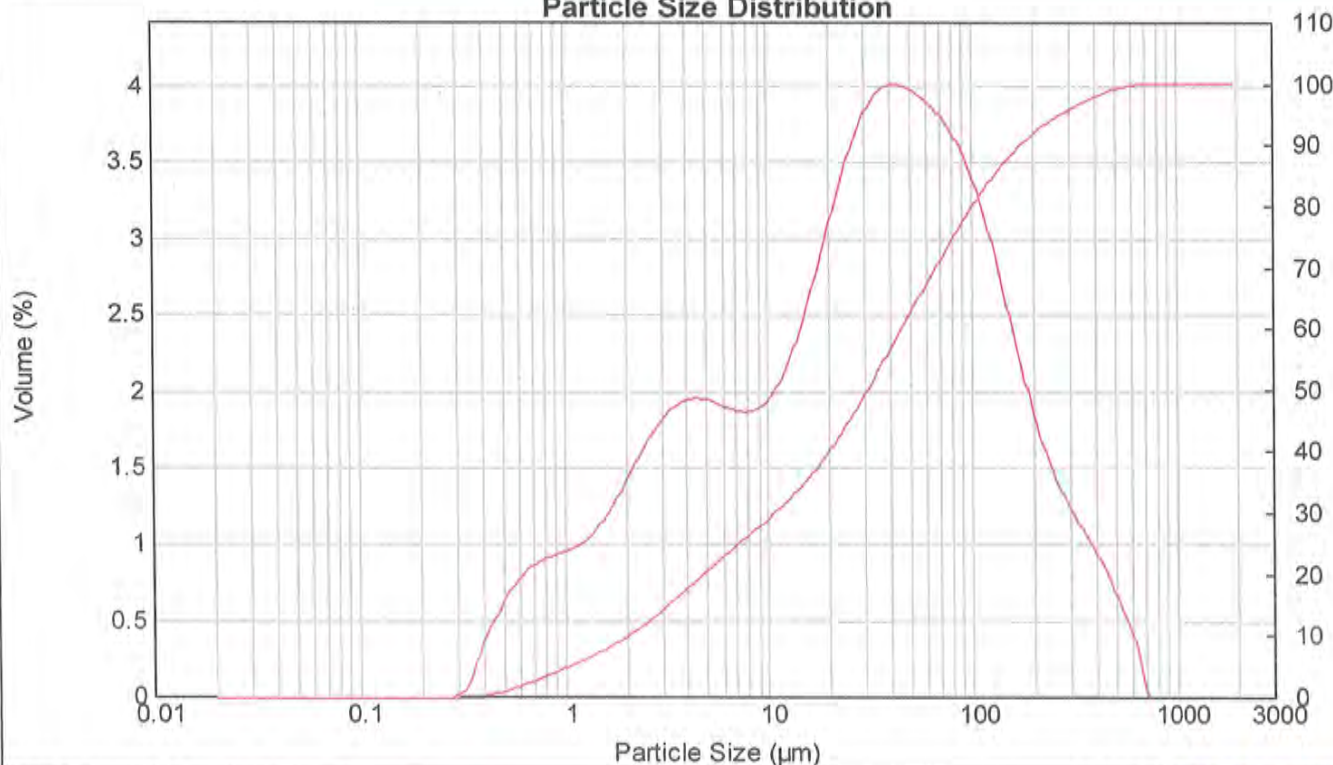
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 18.69 Residual (%) : 0.322
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0187 %Vol Specific Surface Area : 1.06 m²/g
Mean Diameters : D (0.1) : 2.04 um D (0.5) : 30.86 um D (0.9) : 174.89 um
D [4,3] : 67.06 um D [3,2] : 5.66 um Span : 5.600 Uniformity : 1.83

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.00	7.962	1.88	58.573	3.89	430.887	0.79
0.023	0.00	0.172	0.00	1.262	1.07	9.283	1.95	68.291	3.79	502.377	0.57
0.027	0.00	0.200	0.00	1.471	1.18	10.823	2.09	79.621	3.64	585.729	0.34
0.032	0.00	0.233	0.00	1.715	1.33	12.619	2.31	92.832	3.43	682.910	0.01
0.037	0.00	0.272	0.01	2.000	1.49	14.713	2.60	108.234	3.14	796.214	0.00
0.043	0.00	0.317	0.09	2.332	1.65	17.154	2.93	126.191	2.79	928.318	0.00
0.050	0.00	0.370	0.35	2.719	1.79	20.000	3.27	147.128	2.40	1082.339	0.00
0.059	0.00	0.431	0.53	3.170	1.89	23.318	3.57	171.539	2.04	1261.915	0.00
0.068	0.00	0.502	0.69	3.696	1.95	27.187	3.81	200.000	1.72	1471.285	0.00
0.080	0.00	0.586	0.81	4.309	1.96	31.698	3.96	233.183	1.46	1715.392	0.00
0.093	0.00	0.683	0.88	5.024	1.94	36.957	4.02	271.871	1.11	2000.000	0.00
0.108	0.00	0.796	0.93	5.857	1.90	43.089	4.02	316.979	0.96		
0.126	0.00	0.928	0.96	6.829	1.87	50.238	3.97	369.570			
0.147	0.00	1.082		7.962		58.573		430.887			

Particle Size Distribution



Report of Samples Analysis

Issued Date : 12 May 2023
Customer : Tetra Tech Inc.
 77 Soi Udomsuk 39/1, Sukhumvit 103 Road, Bangchak,
 Phrakhanong, Bangkok 10260
 Tel : 0 2361 3767 Fax : 0 2361 3768
Tested by : Physical Analysis Section,
 Technical Support for Material Analysis Division, MTEC
Date received : 18 April 2023
Date analyzed : 1 May 2023
Samples : Seabed Sediment No.40 – 51 of 51 samples.
Identification No. : See sample detail
Instrument : Mastersizer 2000, Malvern Instruments.
Test method : Laser diffraction technique.
Analytical conditions : Red light source : He-Ne laser source, λ : 633 nm.
 Blue light source : Solid state light source
 Beam length : 2.35 mm.
 Particle size range analysis : 0.02 – 2,000 μ m.
 Dispersion unit : Hydro 2000S (A)
 Dispersing medium : De-ionized water
 Treatment : Ultrasound 10 minutes with ultrasonic bath.
 : Stir at 2000 rpm during measuring.
 Sample refractive index : 1.5300 (as default standard wet)
 Number of experiments : 3
 Laser power : 86.6

Sample preparation : 1. Prepare the instrument for wet analysis. Stirrer should be
 set at 2000 rpm on Hydro 2000S (A).
 2. 10 – 50 ml. of sample was dispersed and ultrasound
 10 minutes with ultrasonic bath.
 3. Add the dispersed sample into Hydro 2000S (A) unit and
 measure the dispersed sample with Mastersizer 2000.
 4. All measurements are made three times.

Samples detail :

Sample No.	Sample Name	Sample No.	Sample Name
1	Control-3-A	7	MAWG-1C1
2	Control-3-B	8	MAWG-1C2
3	Control-3-C	9	MAWG-1C3
4	MAWG-1B1X	10	MAWG-1D1
5	MAWG-1B2X	11	MAWG-1D2
6	MAWG-1B3X	12	MAWG-1D3

Technical Terms :

- Obscuration :** value at particle come cover to laser beam (percent), ranging from 10 – 30%.
- Residual :** on error value of analysis. This value should be less than 5%.
- D [4, 3] :** mean diameter value by volume.
- D [3, 2] :** mean diameter value by surface area.
- D (v, 0.1) :** 10 volume percent less than or equal to a given diameter.
- D (v, 0.5) :** 50 volume percent less than or equal to a given diameter, median diameter.
- D (v, 0.9) :** 90 volume percent less than or equal to a given diameter.
- Span :** the width of the distribution, which is independent of median size (D (v, 0.5)).
- Uniformity :** a measure of the absolute deviations from the median(D (v, 0.5)).
- Specific S.A. :** specific surface area, calculated from density and D [3, 2] of a sample.

Results :

MTEC received samples from Tetra Tech Inc. Laser diffraction technique is used in order to analyze the particle size and size distribution by wet analysis.

The results of the particle size and size distribution of samples are shown in tables 1 – 24 and the attachments No.1 – 36.

Table 1 Mastersizer 2000 results of Control-3-A

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	27.63	1.56	16.22	60.09	3.61
	2	27.16	1.55	16.11	59.45	3.60
	3	28.62	1.56	16.12	60.41	3.65
2	1	28.71	1.57	16.06	60.18	3.65
	2	28.96	1.56	15.93	59.96	3.67
	3	27.86	1.56	15.89	59.97	3.68
3	1	28.55	1.57	15.85	60.58	3.72
	2	28.16	1.56	15.77	59.89	3.70
	3	28.34	1.56	15.68	60.97	3.79
Mean		28.22	1.56	15.96	60.16	3.67
STD		0.58	0.01	0.18	0.44	0.06
RSD%		2.04	0.37	1.12	0.73	1.61

Table 2 Mastersizer 2000 results of Control-3-A (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	23.42	67.33	9.25	29.16
	2	23.48	67.46	9.06	29.07
	3	23.29	67.33	9.37	28.59
2	1	23.26	67.45	9.30	28.68
	2	23.42	67.33	9.25	28.47
	3	23.44	67.30	9.26	28.23
3	1	23.40	67.16	9.44	28.40
	2	23.53	67.22	9.25	28.29
	3	23.59	66.85	9.56	28.23
Mean		23.43	67.27	9.30	28.57
STD		0.10	0.18	0.14	0.35

Table 3 Mastersizer 2000 results of Control-3-B

No.of measurement	Sub-run	D [4,3] (μm)	D (v,0.1) (μm)	D (v,0.5) (μm)	D (v,0.9) (μm)	Span
1	1	89.10	1.89	27.30	289.52	10.54
	2	86.06	1.86	26.59	270.50	10.11
	3	81.10	1.85	26.25	262.30	9.92
2	1	87.44	1.85	26.32	289.54	10.93
	2	81.09	1.81	25.45	262.38	10.24
	3	92.32	1.76	25.04	304.18	12.08
3	1	88.39	1.70	23.47	273.47	11.58
	2	88.97	1.69	23.24	264.76	11.32
	3	91.02	1.72	23.88	300.73	12.52
Mean		87.28	1.79	25.28	279.71	11.03
STD		3.95	0.08	1.47	16.52	0.91
RSD%		4.53	4.23	5.82	5.91	8.29

Table 4 Mastersizer 2000 results of Control-3-B (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	18.54	52.02	29.44	33.60
	2	18.82	52.07	29.11	32.31
	3	18.97	52.46	28.57	32.84
2	1	18.94	52.19	28.87	32.32
	2	19.44	52.40	28.16	32.47
	3	19.84	51.08	29.08	31.41
3	1	20.52	52.45	27.03	31.15
	2	20.64	52.02	27.34	30.52
	3	20.42	51.21	28.37	30.47
Mean		19.57	51.99	28.44	31.90
STD		0.81	0.51	0.82	1.07

Table 5 Mastersizer 2000 results of Control-3-C

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	22.76	1.56	16.75	52.78	3.06
	2	22.85	1.55	16.70	53.15	3.09
	3	22.39	1.54	16.37	52.08	3.09
2	1	22.14	1.54	16.29	51.53	3.07
	2	22.70	1.56	16.55	52.78	3.10
	3	22.39	1.56	16.39	52.23	3.09
3	1	22.24	1.55	16.26	51.91	3.10
	2	22.58	1.56	16.36	52.66	3.12
	3	22.22	1.54	15.98	51.92	3.15
Mean		22.48	1.55	16.40	52.34	3.10
STD		0.26	0.01	0.24	0.53	0.03
RSD%		1.15	0.57	1.44	1.01	0.90

Table 6 Mastersizer 2000 results of Control-3-C (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	22.91	70.90	6.20	30.32
	2	22.92	70.72	6.36	30.33
	3	23.03	71.03	5.94	29.95
2	1	23.05	71.26	5.69	29.88
	2	22.80	70.97	6.23	30.09
	3	22.85	71.18	5.97	30.05
3	1	23.01	71.15	5.84	30.12
	2	22.86	70.93	6.21	29.94
	3	23.15	70.90	5.95	29.72
Mean		22.95	71.00	6.04	30.04
STD		0.11	0.17	0.22	0.20

Table 7 Mastersizer 2000 results of MAWG-1B1X

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	26.77	1.63	16.73	57.99	3.37
	2	26.68	1.62	16.60	57.66	3.38
	3	27.25	1.64	17.01	58.83	3.36
2	1	26.04	1.65	16.83	57.67	3.33
	2	26.98	1.66	16.96	58.39	3.35
	3	27.16	1.66	17.02	58.81	3.36
3	1	27.63	1.66	16.92	58.22	3.34
	2	26.22	1.66	16.95	57.74	3.31
	3	27.18	1.65	16.87	58.50	3.37
Mean		26.88	1.65	16.87	58.20	3.35
STD		0.51	0.01	0.14	0.46	0.02
RSD%		1.90	0.79	0.82	0.80	0.66

Table 8 Mastersizer 2000 results of MAWG-1B1X (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	22.74	68.80	8.46	30.34
	2	22.85	68.85	8.30	30.51
	3	22.51	68.74	8.74	30.64
2	1	22.49	69.23	8.29	30.69
	2	22.39	69.02	8.58	30.56
	3	22.28	68.97	8.74	30.42
3	1	22.28	69.17	8.55	30.33
	2	22.27	69.40	8.33	30.59
	3	22.34	69.01	8.65	30.28
Mean		22.46	69.02	8.52	30.48
STD		0.21	0.22	0.18	0.15

Table 9 Mastersizer 2000 results of MAWG-1B2X

No.of measurement	Sub-run	D [4,3] (μm)	D (v,0.1) (μm)	D (v,0.5) (μm)	D (v,0.9) (μm)	Span
1	1	30.66	1.66	17.56	68.68	3.82
	2	30.61	1.65	17.74	68.30	3.76
	3	30.89	1.66	17.91	69.39	3.78
2	1	30.27	1.66	17.97	69.65	3.78
	2	31.84	1.67	18.02	71.13	3.85
	3	30.79	1.67	18.08	70.14	3.79
3	1	30.01	1.65	17.59	68.27	3.79
	2	31.28	1.65	17.72	70.10	3.86
	3	30.28	1.64	17.68	69.48	3.84
Mean		30.74	1.66	17.81	69.46	3.81
STD		0.56	0.01	0.19	0.94	0.04
RSD%		1.83	0.55	1.09	1.35	0.97

Table 10 Mastersizer 2000 results of MAWG-1B2X (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	23.09	64.94	11.98	32.70
	2	22.92	65.21	11.88	32.94
	3	22.76	65.04	12.20	32.85
2	1	22.69	65.02	12.28	32.66
	2	22.61	64.80	12.59	32.55
	3	22.54	65.04	12.42	32.81
3	1	22.80	65.37	11.83	32.27
	2	22.74	64.89	12.38	32.59
	3	22.75	65.03	12.22	32.50
Mean		22.77	65.04	12.20	32.65
STD		0.16	0.17	0.26	0.20

Table 11 Mastersizer 2000 results of MAWG-1B3X

No.of measurement	Sub-run	D [4,3] (μm)	D (v,0.1) (μm)	D (v,0.5) (μm)	D (v,0.9) (μm)	Span
1	1	31.79	1.49	12.12	79.33	6.42
	2	32.25	1.47	11.95	78.62	6.46
	3	31.38	1.47	11.78	78.35	6.53
2	1	31.84	1.47	11.85	79.00	6.55
	2	31.89	1.47	11.76	79.30	6.62
	3	33.08	1.46	11.59	79.72	6.76
3	1	31.13	1.47	11.71	80.38	6.74
	2	32.88	1.47	11.83	82.77	6.87
	3	32.54	1.45	11.61	82.55	6.99
Mean		32.08	1.47	11.80	80.00	6.66
STD		0.66	0.01	0.17	1.62	0.19
RSD%		2.04	0.61	1.42	2.02	2.90

Table 12 Mastersizer 2000 results of MAWG-1B3X (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	27.41	58.50	14.09	32.52
	2	27.61	58.49	13.90	32.30
	3	27.74	58.37	13.90	32.51
2	1	27.67	58.22	14.10	32.68
	2	27.74	58.17	14.09	32.67
	3	27.91	58.12	13.97	31.68
3	1	27.78	57.97	14.25	31.90
	2	27.72	57.64	14.65	32.30
	3	27.93	57.62	14.46	31.48
Mean		27.72	58.12	14.15	32.23
STD		0.15	0.33	0.25	0.44

Table 13 Mastersizer 2000 results of MAWG-1C1

No.of measurement	Sub-run	D [4,3] (μm)	D (v,0.1) (μm)	D (v,0.5) (μm)	D (v,0.9) (μm)	Span
1	1	38.11	1.51	19.86	88.59	4.39
	2	38.55	1.50	19.57	85.43	4.29
	3	39.10	1.51	19.85	88.93	4.40
2	1	39.93	1.51	19.75	88.10	4.39
	2	40.04	1.50	19.55	87.74	4.41
	3	40.27	1.51	19.87	90.63	4.48
3	1	38.47	1.49	19.53	87.78	4.42
	2	38.07	1.49	19.46	85.90	4.34
	3	38.29	1.48	19.28	86.96	4.43
Mean		38.98	1.50	19.64	87.78	4.39
STD		0.88	0.01	0.21	1.58	0.06
RSD%		2.26	0.75	1.07	1.80	1.28

Table 14 Mastersizer 2000 results of MAWG-1C1 (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	22.38	61.18	16.45	32.26
	2	22.49	61.69	15.82	32.55
	3	22.32	61.33	16.36	32.41
2	1	22.37	61.30	16.33	32.45
	2	22.53	61.30	16.18	32.30
	3	22.29	61.04	16.68	32.30
3	1	22.51	61.40	16.09	32.17
	2	22.51	61.51	15.98	32.34
	3	22.64	61.49	15.87	31.83
Mean		22.45	61.36	16.19	32.29
STD		0.11	0.19	0.28	0.20

Table 15 Mastersizer 2000 results of MAWG-1C2

No.of measurement	Sub-run	D [4,3] (μm)	D (v,0.1) (μm)	D (v,0.5) (μm)	D (v,0.9) (μm)	Span
1	1	31.99	1.45	18.17	71.43	3.85
	2	31.91	1.45	18.10	71.72	3.88
	3	31.54	1.46	18.26	71.96	3.86
2	1	31.71	1.45	18.17	72.61	3.92
	2	31.95	1.46	18.31	72.66	3.89
	3	31.27	1.45	18.16	71.17	3.84
3	1	31.79	1.45	18.24	72.59	3.90
	2	31.82	1.46	18.39	72.68	3.87
	3	31.96	1.47	18.50	73.79	3.91
Mean		31.77	1.45	18.25	72.29	3.88
STD		0.24	0.01	0.13	0.80	0.03
RSD%		0.75	0.49	0.70	1.11	0.67

Table 16 Mastersizer 2000 results of MAWG-1C2 (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	23.44	63.67	12.89	33.74
	2	23.43	63.64	12.93	33.40
	3	23.26	63.70	13.04	33.56
2	1	23.25	63.58	13.17	33.21
	2	23.17	63.63	13.20	33.30
	3	23.24	63.93	12.84	33.59
3	1	23.16	63.67	13.17	33.24
	2	23.02	63.73	13.26	33.51
	3	22.97	63.50	13.53	33.50
Mean		23.21	63.67	13.11	33.45
STD		0.16	0.12	0.21	0.18

Table 17 Mastersizer 2000 results of MAWG-1C3

No.of measurement	Sub-run	D [4,3] (μm)	D (v,0.1) (μm)	D (v,0.5) (μm)	D (v,0.9) (μm)	Span
1	1	33.03	1.45	18.66	74.30	3.90
	2	33.81	1.46	18.66	75.85	3.99
	3	33.44	1.47	18.89	75.79	3.93
2	1	34.84	1.47	18.64	74.68	3.93
	2	33.43	1.47	18.60	74.75	3.94
	3	32.34	1.45	18.23	72.25	3.88
3	1	32.11	1.46	18.37	73.33	3.91
	2	33.31	1.47	18.61	75.92	4.00
	3	33.24	1.46	18.31	75.58	4.05
Mean		33.28	1.46	18.55	74.72	3.95
STD		0.80	0.01	0.21	1.27	0.05
RSD%		2.39	0.50	1.12	1.69	1.34

Table 18 Mastersizer 2000 results of MAWG-1C3 (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	23.20	63.12	13.68	33.70
	2	23.10	62.95	13.95	33.33
	3	22.96	63.09	13.95	33.60
2	1	23.06	63.28	13.67	33.40
	2	23.05	63.23	13.72	33.53
	3	23.29	63.66	13.05	33.36
3	1	23.21	63.43	13.36	33.42
	2	23.05	62.97	13.99	33.35
	3	23.23	62.97	13.80	32.81
Mean		23.13	63.19	13.68	33.39
STD		0.11	0.24	0.31	0.25

Table 19 Mastersizer 2000 results of MAWG-1D1

No.of measurement	Sub-run	D [4,3] (μm)	D (v,0.1) (μm)	D (v,0.5) (μm)	D (v,0.9) (μm)	Span
1	1	43.93	1.56	20.83	105.08	4.97
	2	43.36	1.57	20.79	104.19	4.94
	3	41.63	1.55	20.35	98.81	4.78
2	1	42.74	1.55	20.39	100.51	4.85
	2	42.60	1.55	20.36	101.35	4.90
	3	40.73	1.55	20.14	98.90	4.83
3	1	40.93	1.52	19.77	98.95	4.93
	2	43.64	1.53	19.95	104.71	5.17
	3	40.65	1.82	21.08	92.49	4.30
Mean		42.24	1.58	20.40	100.55	4.85
STD		1.29	0.09	0.43	3.95	0.23
RSD%		3.06	5.72	2.10	3.93	4.84

Table 20 Mastersizer 2000 results of MAWG-1D1 (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	21.73	59.11	19.16	32.27
	2	21.72	59.28	19.00	32.43
	3	21.94	59.71	18.35	32.35
2	1	21.91	59.61	18.48	32.32
	2	21.93	59.57	18.50	32.12
	3	22.02	59.76	18.22	32.26
3	1	22.30	59.57	18.13	32.06
	2	22.16	59.11	18.73	31.74
	3	20.20	62.66	17.15	31.65
Mean		21.77	59.82	18.41	32.13
STD		0.62	1.09	0.59	0.27

Table 21 Mastersizer 2000 results of MAWG-1D2

No.of measurement	Sub-run	D [4,3] (µm)	D (v,0.1) (µm)	D (v,0.5) (µm)	D (v,0.9) (µm)	Span
1	1	41.84	1.63	19.43	100.40	5.08
	2	41.67	1.63	19.13	97.45	5.01
	3	41.49	1.62	18.98	96.67	5.01
2	1	42.61	1.61	18.91	101.74	5.30
	2	41.32	1.60	18.51	97.74	5.19
	3	41.59	1.90	19.61	94.27	4.71
3	1	42.76	1.88	19.30	93.55	4.75
	2	41.87	1.82	18.47	91.61	4.86
	3	42.54	1.82	18.48	93.64	4.97
Mean		41.97	1.72	18.98	96.34	4.99
STD		0.53	0.13	0.43	3.37	0.19
RSD%		1.27	7.39	2.25	3.50	3.87

Table 22 Mastersizer 2000 results of MAWG-1D2 (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	21.65	60.55	17.80	31.34
	2	21.66	61.00	17.33	31.36
	3	21.72	61.04	17.24	31.09
2	1	21.78	60.59	17.63	30.99
	2	22.01	60.92	17.07	30.76
	3	20.02	63.56	16.42	30.46
3	1	20.22	63.36	16.43	30.12
	2	20.85	63.27	15.88	29.65
	3	20.90	63.04	16.06	29.81
Mean		21.20	61.93	16.87	30.62
STD		0.73	1.33	0.70	0.64

Table 23 Mastersizer 2000 results of MAWG-1D3

No.of measurement	Sub-run	D [4,3] (μm)	D (v,0.1) (μm)	D (v,0.5) (μm)	D (v,0.9) (μm)	Span
1	1	42.60	1.56	20.80	101.80	4.82
	2	42.95	1.55	20.48	100.18	4.82
	3	42.52	1.57	20.91	103.36	4.87
2	1	42.95	1.55	20.41	101.42	4.89
	2	41.40	1.53	19.96	94.23	4.64
	3	41.31	1.54	20.08	98.56	4.83
3	1	41.32	1.53	19.86	100.76	5.00
	2	42.78	1.53	20.03	103.22	5.08
	3	42.06	1.53	19.94	102.83	5.08
Mean		42.21	1.54	20.27	100.71	4.89
STD		0.70	0.01	0.39	2.88	0.14
RSD%		1.67	0.90	1.93	2.86	2.87

Table 24 Mastersizer 2000 results of MAWG-1D3 (Volume in%) (By customer request)

No.of measurement	Sub-run	0.02 - 3.9 (micron)	3.9 – 62.5 (micron)	62.5 - 2000 (micron)	Mode (micron)
1	1	21.72	59.14	19.14	33.12
	2	21.89	59.49	18.63	33.00
	3	21.63	59.02	19.35	33.01
2	1	21.89	59.29	18.82	32.64
	2	22.15	60.15	17.70	32.99
	3	22.05	59.69	18.27	32.54
3	1	22.20	59.28	18.52	32.40
	2	22.13	58.92	18.96	32.31
	3	22.17	58.74	19.09	32.35
Mean		21.98	59.30	18.72	32.70
STD		0.21	0.43	0.51	0.32

Note : 1. The specific surface area is inapplicable unless the density of a sample is known.
 2. The results of particle size distribution are dispersion particle only.
 3. Some particle of sample are vary size and size over range of instrument.

Interpretation/Opinion : None

Attached pages :

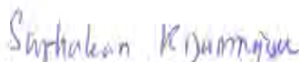
The attachment number	Detail
1 – 3	Mastersizer 2000 results of Control-3-A
4 – 6	Mastersizer 2000 results of Control-3-B
7 – 9	Mastersizer 2000 results of Control-3-C
10 – 12	Mastersizer 2000 results of MAWG-1B1X
13 – 15	Mastersizer 2000 results of MAWG-1B2X
16 – 18	Mastersizer 2000 results of MAWG-1B3X
19 – 21	Mastersizer 2000 results of MAWG-1C1
22 – 24	Mastersizer 2000 results of MAWG-1C2
25 – 27	Mastersizer 2000 results of MAWG-1C3
28 – 30	Mastersizer 2000 results of MAWG-1D1
31 – 33	Mastersizer 2000 results of MAWG-1D2
34 – 36	Mastersizer 2000 results of MAWG-1D3

Work performed by :



(Mr.Arintarached Sirinantawittaya)

Approved by :



(Ms.Suphakan Kijamhajsuk)

Remark

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2. MTEC will not accept liability for any damage whatsoever, resulting directly or indirectly, from using data, results, conclusions or recommendations in this report for the purpose of designing, manufacturing or for other purposes.
3. Experimental results are only valid for the specimens tested.

Result : Analysis Report

Attached page 1

Sample Details

Sample ID : Control-3-A_1

Measured : Monday, May 1, 2023 14:15:57

Sample File : C:\Users\001827\Desktop\501827\Technical service\Tetra
MTEC0850_66_1_51sam\MTEC0850_66_51sam_Tetra

Analysed : Monday, May 1, 2023 14:15:59

Sample Notes : Dispersion medium : De-ionized water,
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

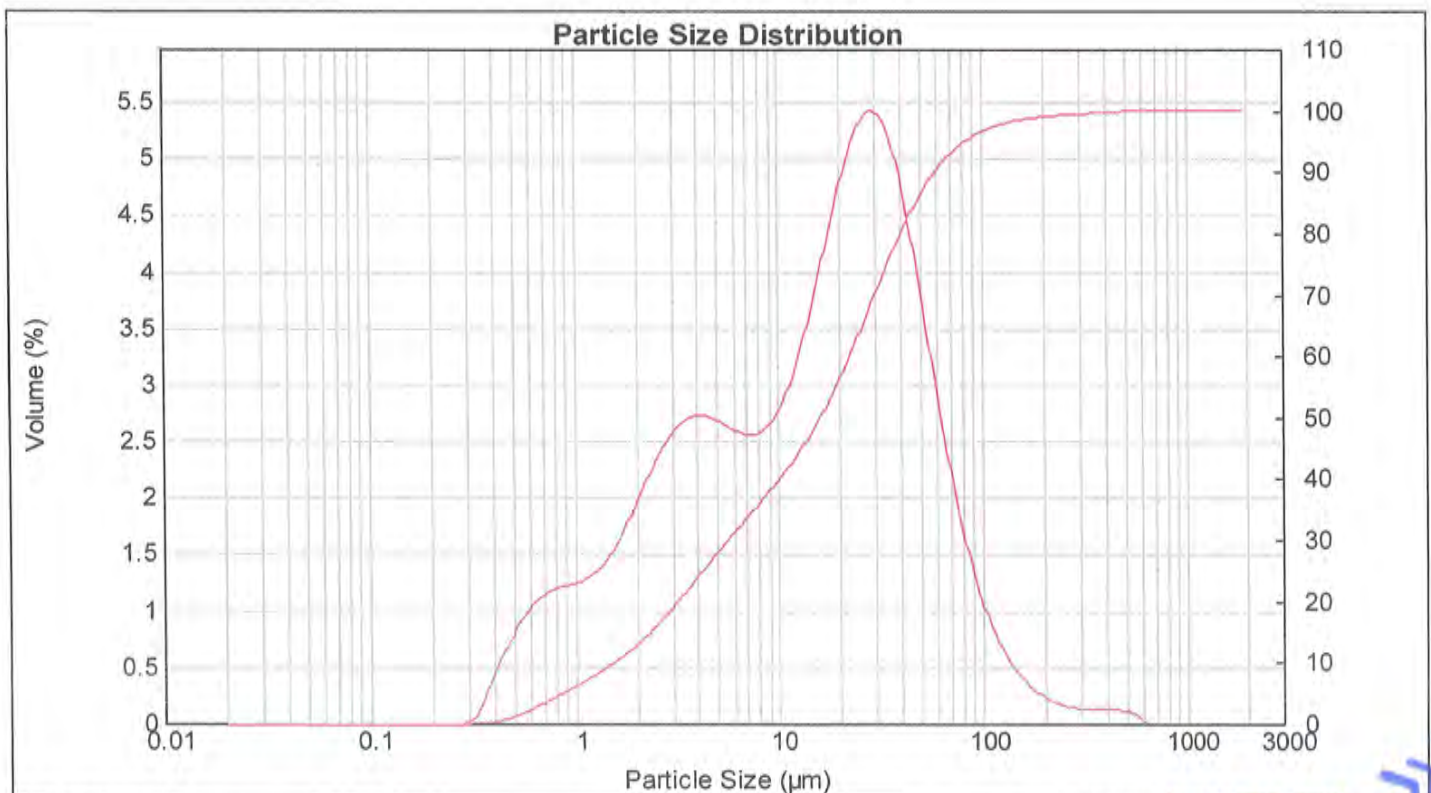
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.93 Residual (%) : 0.790
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0150 %Vol Specific Surface Area : 1.4 m²/g
Mean Diameters : D (0.1) : 1.55 um D (0.5) : 16.11 um D (0.9) : 59.45 um
D [4,3] : 27.16 um D [3,2] : 4.28 um Span : 3.595 Uniformity : 1.34

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.062	1.30	7.962	2.62	58.573	2.72	430.887	0.12
0.023	0.00	0.172	0.00	1.262	1.40	9.283	2.77	68.291	2.05	502.377	0.09
0.027	0.00	0.200	0.00	1.471	1.57	10.823	3.05	79.621	1.50	585.729	0.01
0.032	0.00	0.233	0.00	1.715	1.81	12.619	3.47	92.832	1.08	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.08	14.713	3.96	108.234	0.77	796.214	0.00
0.043	0.00	0.317	0.11	2.332	2.34	17.154	4.50	126.191	0.39	928.318	0.00
0.050	0.00	0.370	0.42	2.719	2.55	20.000	4.98	147.128	0.55	1082.339	0.00
0.059	0.00	0.431	0.67	3.170	2.68	23.318	5.32	171.539	0.28	1261.915	0.00
0.068	0.00	0.502	0.90	3.696	2.74	27.187	5.43	200.000	0.20	1471.285	0.00
0.080	0.00	0.585	1.06	4.309	2.72	31.698	5.27	233.183	0.16	1715.392	0.00
0.093	0.00	0.683	1.17	5.024	2.66	36.957	4.84	271.871	0.13	2000.000	0.00
0.108	0.00	0.795	1.22	5.857	2.60	43.089	4.21	316.979	0.13		
0.126	0.00	0.928	1.25	6.829	2.57	50.238	3.46	369.570	0.13		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 2

Sample Details

Sample ID : Control-3-A_2

Measured : Monday, May 1, 2023 14:17:32

Sample File : C:\Users\001827\Desktop\Ö'äÄ\Technical service\Tetra
MTEC0859 SS 1.51um\MTEC0859 SS 1.51um Tetra

Analysed : Monday, May 1, 2023 14:17:33

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

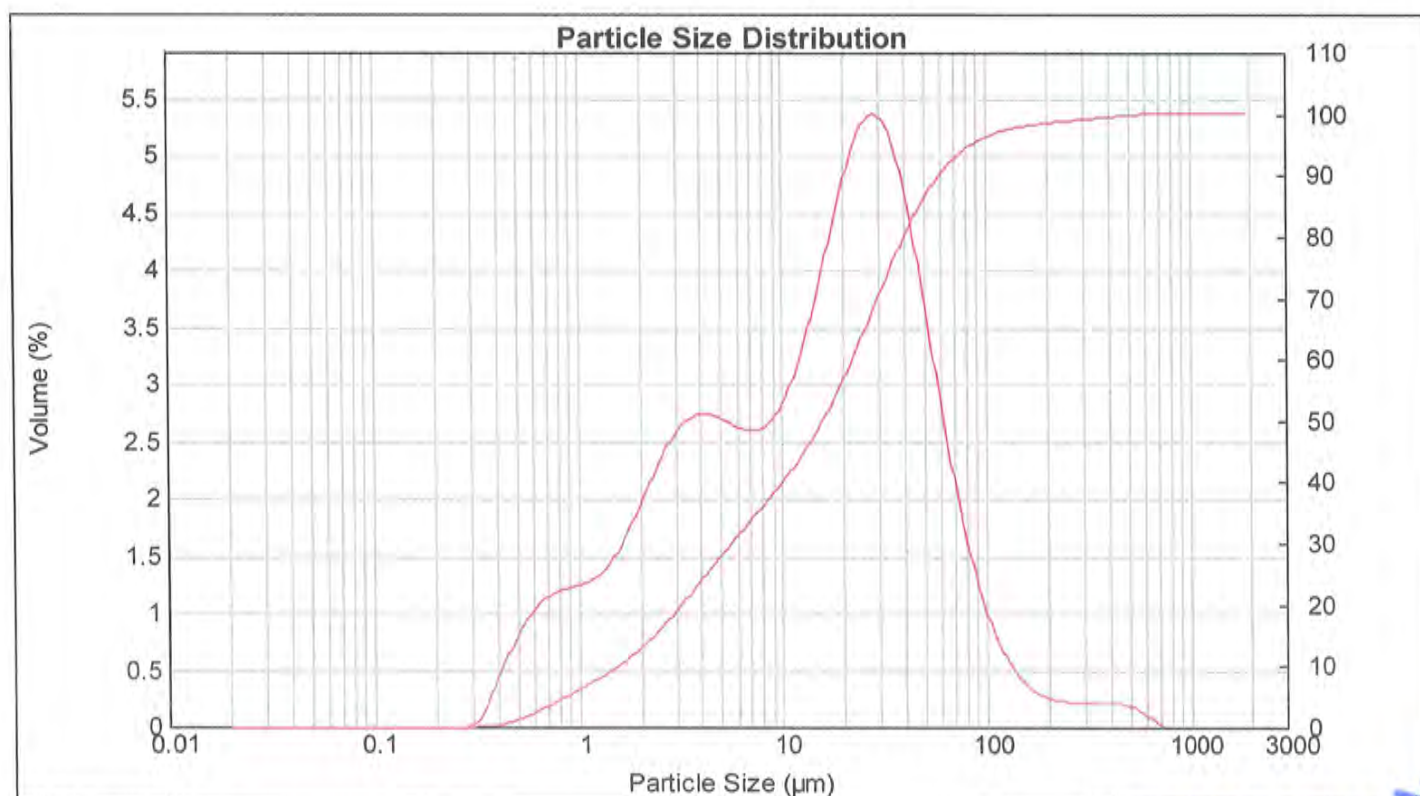
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.41 Residual (%) : 0.798
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0146 %Vol Specific Surface Area : 1.4 m²/g
Mean Diameters : D (0.1) : 1.55 um D (0.5) : 15.93 um D (0.9) : 59.96 um
D [4,3] : 28.95 um D [3,2] : 4.29 um Span : 3.665 Uniformity : 1.46

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.29	7.962	2.66	58.573	2.63	430.887	0.20
0.023	0.00	0.172	0.00	1.262	1.39	9.283	2.83	68.291	1.97	502.377	0.16
0.027	0.00	0.200	0.00	1.471	1.56	10.823	3.12	79.621	1.43	585.729	0.09
0.032	0.00	0.233	0.00	1.715	1.80	12.619	3.52	92.832	1.02	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.07	14.713	4.02	108.234	0.71	796.214	0.00
0.043	0.00	0.317	0.11	2.332	2.54	17.154	4.53	126.191	0.36	928.318	0.00
0.050	0.00	0.370	0.41	2.719	2.68	20.000	4.99	147.128	0.28	1082.339	0.00
0.059	0.00	0.431	0.66	3.170	2.75	23.318	5.30	171.539	0.24	1261.915	0.00
0.068	0.00	0.502	0.89	3.696	2.74	27.187	5.18	200.000	0.22	1471.285	0.00
0.080	0.00	0.586	1.16	4.309	2.63	31.696	4.73	233.183	0.22	1715.392	0.00
0.093	0.00	0.683	1.21	5.024	2.60	36.957	3.36	271.871	0.21	2000.000	0.00
0.108	0.00	0.796	1.25	5.857		43.089		316.979			
0.126	0.00	0.928		6.829		50.238		369.570			
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 3

Sample Details

Sample ID : Control-3-A_3

Measured : Monday, May 1, 2023 14:18:51

Sample File : C:\Users\001827\Desktop\501a\Technical service\Tetra
tech\066\MTEC0850_66_1_51cm\MTEC0850_66_51cm_Tetra

Analysed : Monday, May 1, 2023 14:18:52

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

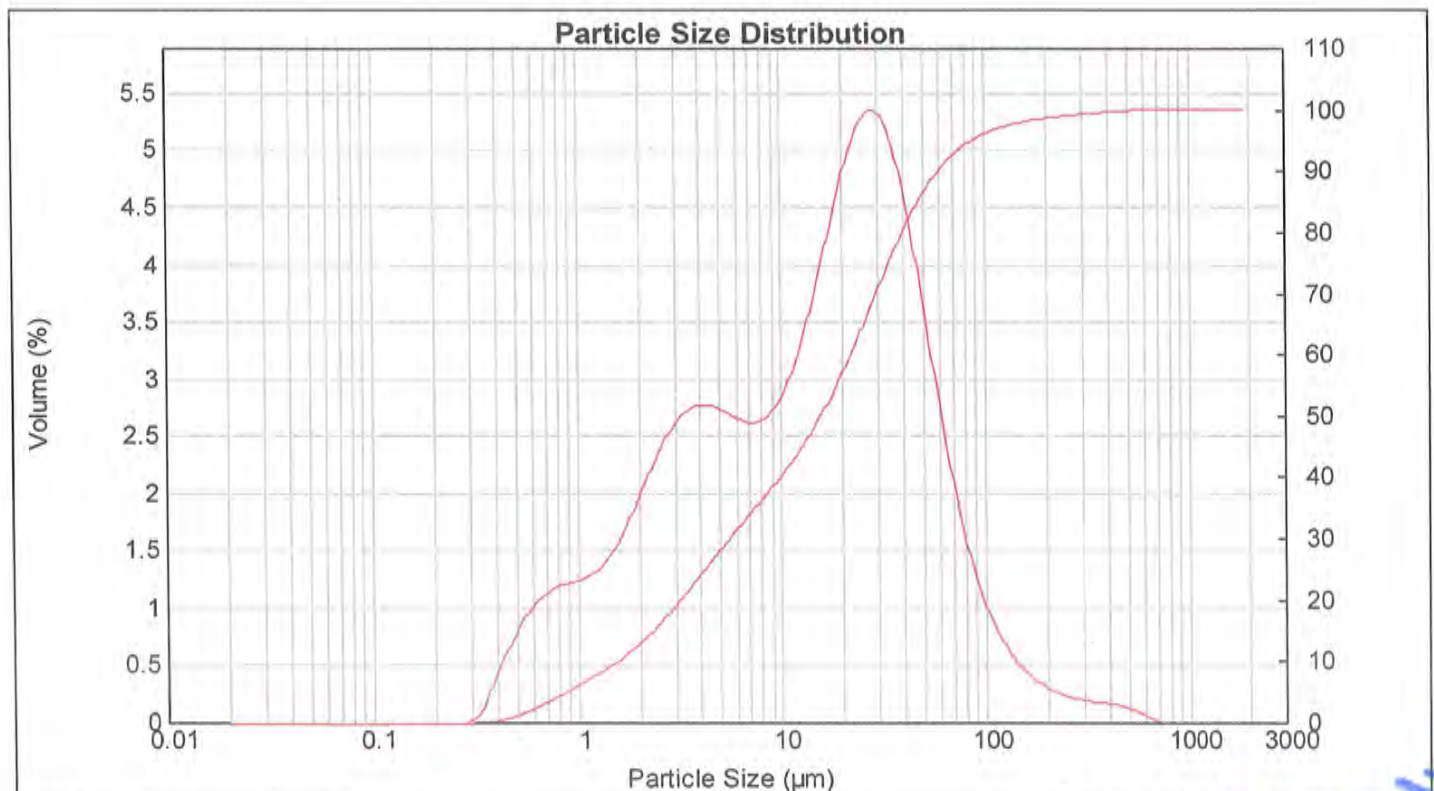
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.23 Residual (%) : 0.787
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0144 %Vol Specific Surface Area : 1.4 m²/g
Mean Diameters : D (0.1) : 1.56 um D (0.5) : 15.77 um D (0.9) : 59.89 um
D [4,3] : 28.16 um D [3,2] : 4.29 um Span : 3.699 Uniformity : 1.43

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.062	1.29	7.962	2.67	58.573	2.56	430.887	0.14
0.023	0.00	0.172	0.00	1.262	1.40	9.283	2.84	68.291	1.92	502.377	0.10
0.027	0.00	0.200	0.00	1.471	1.57	10.623	3.12	79.621	1.42	585.729	0.05
0.032	0.00	0.233	0.00	1.715	1.82	12.619	3.53	92.832	1.04	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.09	14.713	4.02	108.234	0.77	796.214	0.00
0.043	0.00	0.317	0.11	2.332	2.36	17.154	4.54	126.191	0.58	928.318	0.00
0.050	0.00	0.370	0.41	2.719	2.57	20.000	4.99	147.128	0.44	1082.339	0.00
0.059	0.00	0.431	0.66	3.170	2.72	23.318	5.29	171.539	0.34	1261.915	0.00
0.068	0.00	0.502	0.89	3.695	2.77	27.187	5.36	200.000	0.28	1471.285	0.00
0.080	0.00	0.586	1.05	4.309	2.71	31.696	4.68	233.183	0.20	1715.392	0.00
0.093	0.00	0.683	1.16	5.024	2.65	36.957	3.28	271.871	0.17	2000.000	0.00
0.108	0.00	0.796	1.21	5.857	2.62	43.069		316.979			
0.126	0.00	0.928	1.24	6.829		50.238		369.570			
0.147	0.00	1.062		7.962		58.573		430.887			



Result : Analysis Report

Attached page 4

Sample Details

Sample ID : Control-3-B_1

Measured : Monday, May 1, 2023 14:36:58

Sample File : C:\Users\001827\Desktop\501a\Technical service\Tetra
tech\066\MTEC\0950_66_1_51sam\MTEC\0950_66_51sam_Tetrat

Analysed : Monday, May 1, 2023 14:37:00

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

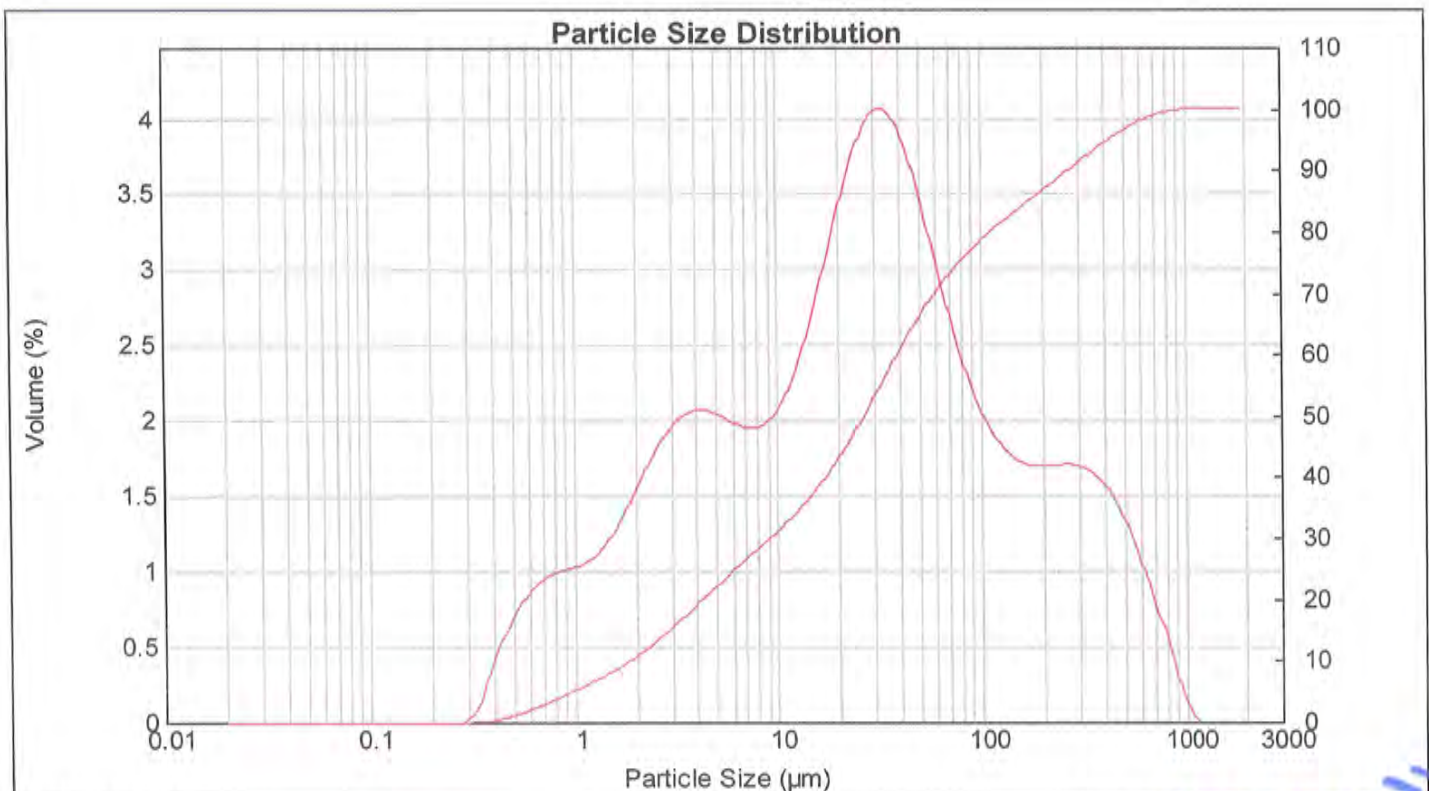
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.74 Residual (%) : 0.309
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0185 %Vol Specific Surface Area : 1.15 m²/g
Mean Diameters : D (0.1) : 1.86 um D (0.5) : 26.58 um D (0.9) : 270.5 um
D [4,3] : 86.06 um D [3,2] : 5.23 um Span : 10.105 Uniformity : 2.9

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.07	7.962	1.98	58.573	2.95	430.887	1.44
0.023	0.00	0.172	0.00	1.262	1.15	9.283	2.07	68.291	2.60	502.377	1.24
0.027	0.00	0.200	0.00	1.471	1.15	10.823	2.25	79.621	2.31	585.729	0.99
0.032	0.00	0.233	0.00	1.715	1.44	12.619	2.52	92.832	2.07	682.910	0.71
0.037	0.00	0.272	0.01	2.000	1.62	14.713	2.86	108.234	1.90	796.214	0.44
0.043	0.00	0.317	0.12	2.332	1.80	17.154	3.23	126.191	1.79	928.318	0.16
0.050	0.00	0.370	0.39	2.719	1.94	20.000	3.58	147.128	1.72	1082.339	0.00
0.059	0.00	0.431	0.59	3.170	2.03	23.318	3.87	171.539	1.70	1261.915	0.00
0.068	0.00	0.502	0.77	3.696	2.08	27.187	4.04	200.000	1.71	1471.285	0.00
0.080	0.00	0.586	0.89	4.309	2.07	31.698	4.06	233.183	1.71	1715.392	0.00
0.093	0.00	0.683	0.96	5.024	2.03	36.957	3.93	271.871	1.67	2000.000	0.00
0.108	0.00	0.796	1.00	5.857	1.99	43.089	3.66	316.979	1.58		
0.126	0.00	0.928	1.03	6.829	1.96	50.238	3.32	369.570			
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 5

Sample Details

Sample ID : Control-3-B_2

Measured : Monday, May 1, 2023 14:39:20

Sample File : C:\Users\001827\Desktop\501a\Technical service\Tetra
tech\066\MTEC0950_66_1_51sam\MTEC0950_66_51sam_Tetrat

Analysed : Monday, May 1, 2023 14:39:21

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

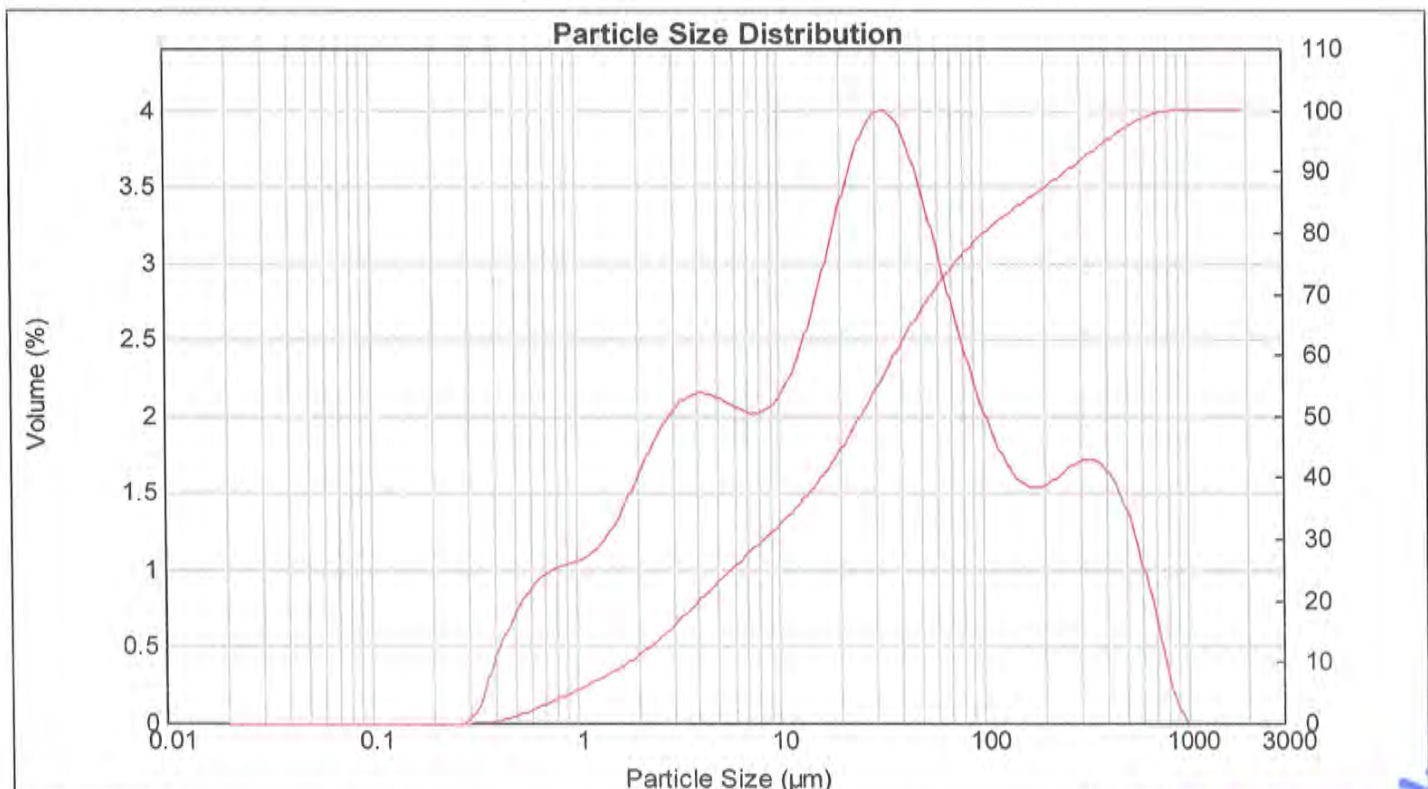
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.51 Residual (%) : 0.333
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0177 %Vol Specific Surface Area : 1.18 m²/g
Mean Diameters : D (0.1) : 1.81 um D (0.5) : 25.45 um D (0.9) : 262.38 um
D [4,3] : 81.08 um D [3,2] : 5.09 um Span : 10.237 Uniformity : 2.85

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.10	7.962	2.04	58.573	2.99	430.887	1.52
0.023	0.00	0.172	0.00	1.262	1.18	9.283	2.13	68.291	2.65	502.377	1.27
0.027	0.00	0.200	0.00	1.471	1.32	10.823	2.30	79.621	2.34	585.729	0.95
0.032	0.00	0.233	0.00	1.715	1.49	12.619	2.55	92.832	2.06	682.910	0.59
0.037	0.00	0.272	0.01	2.000	1.69	14.713	2.87	108.234	1.83	796.214	0.20
0.043	0.00	0.317	0.12	2.332	1.87	17.154	3.22	126.191	1.66	928.318	0.01
0.050	0.00	0.370	0.41	2.719	2.02	20.000	3.55	147.128	1.54	1082.339	0.00
0.059	0.00	0.431	0.61	3.170	2.11	23.318	3.82	171.539	1.58	1261.915	0.00
0.068	0.00	0.502	0.78	3.696	2.15	27.187	3.98	200.000	1.64	1471.285	0.00
0.080	0.00	0.586	0.91	4.309	2.15	31.698	4.01	233.183	1.70	1715.392	0.00
0.093	0.00	0.683	0.98	5.024	2.06	36.957	3.65	271.871	1.72	2000.000	0.00
0.108	0.00	0.796	1.03	5.857	2.03	43.089	3.34	316.979	1.66		
0.126	0.00	0.928	1.06	6.829		50.238		369.570			
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 6

Sample Details

Sample ID : Control-3-B_3

Measured : Monday, May 1, 2023 14:45:33

Sample File : C:\Users\001827\Desktop\501a\Technical service\Tetra
tech\066\MTEC0859_66_1_51sam\MTEC0859_66_51sam_Tetrat

Analysed : Monday, May 1, 2023 14:45:34

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

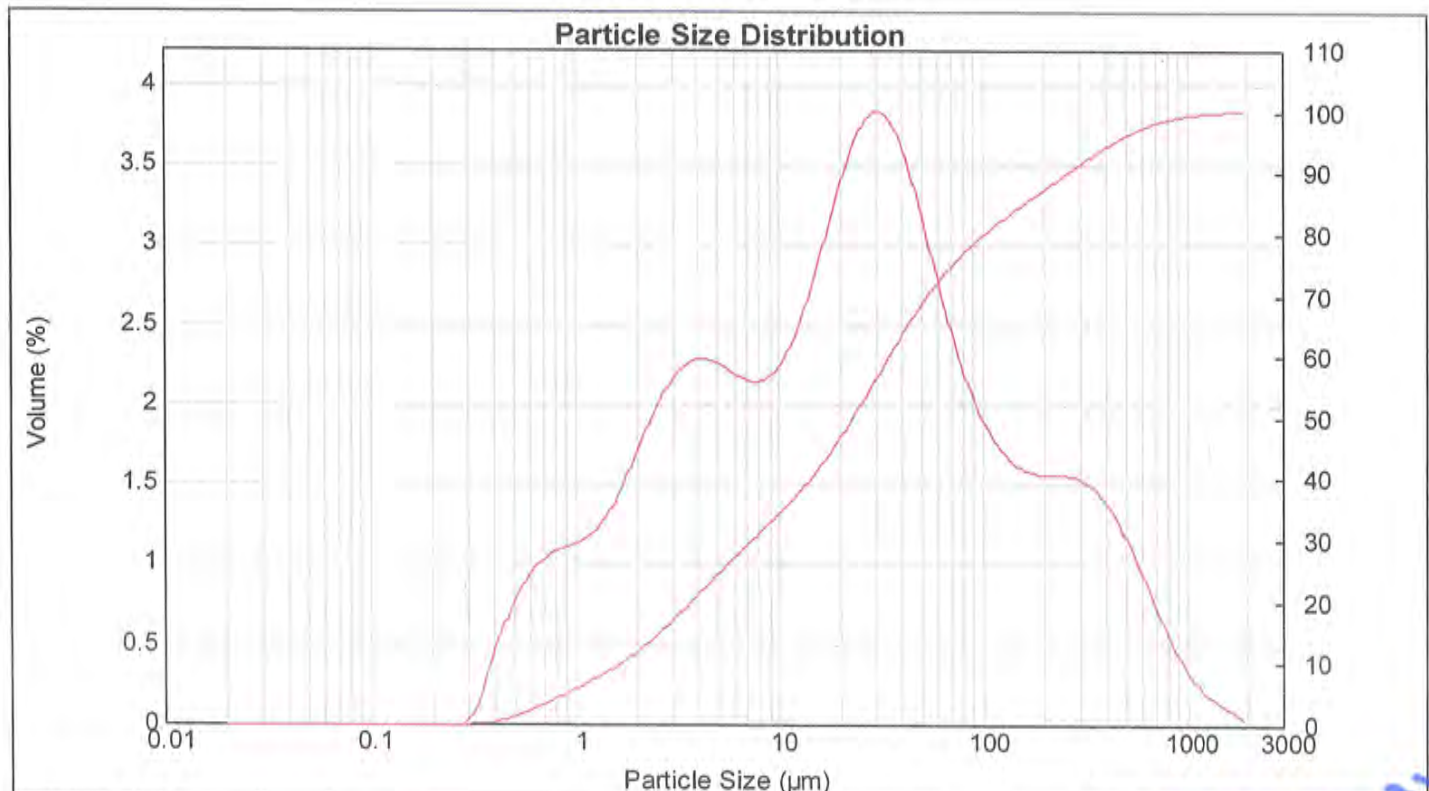
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 18.96 Residual (%) : 0.332
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0163 %Vol Specific Surface Area : 1.25 m²/g
Mean Diameters : D (0.1) : 1.69 um D (0.5) : 23.24 um D (0.9) : 264.76 um
D [4,3] : 88.97 um D [3,2] : 4.82 um Span : 11.321 Uniformity : 3.5

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.17	7.962	2.16	58.573	2.69	430.887	1.26
0.023	0.00	0.172	0.00	1.262	1.26	9.283	2.24	68.291	2.38	502.377	1.09
0.027	0.00	0.200	0.00	1.471	1.40	10.823	2.40	79.621	2.12	585.729	0.89
0.032	0.00	0.233	0.00	1.715	1.58	12.619	2.63	92.832	1.91	682.910	0.68
0.037	0.00	0.272	0.01	2.000	1.79	14.713	2.92	108.234	1.76	796.214	0.50
0.043	0.00	0.317	0.13	2.332	1.98	17.154	3.23	126.191	1.66	928.318	0.34
0.050	0.00	0.370	0.43	2.719	2.24	20.000	3.52	147.128	1.57	1082.339	0.24
0.059	0.00	0.431	0.65	3.170	2.28	23.318	3.74	171.539	1.56	1261.915	0.16
0.068	0.00	0.502	0.83	3.696	2.28	27.187	3.84	200.000	1.54	1471.285	0.10
0.080	0.00	0.586	0.97	4.309	2.15	31.698	3.63	233.183	1.49	1715.392	0.05
0.093	0.00	0.683	1.05	5.024	2.18	36.957	3.03	271.871	1.40	2000.000	
0.108	0.00	0.796	1.13	5.857		43.089		316.979			
0.126	0.00	0.928		6.829		50.238		369.570			
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 7

Sample Details

Sample ID : Control-3-C_1

Measured : Monday, May 1, 2023 14:55:57

Sample File : C:\Users\001827\Desktop\50'aÄÖ\Technical service\Tetra
tech\066\MTEC0859_66_1_51nm\MTEC0859_66_51nm_Tetra

Analysed : Monday, May 1, 2023 14:55:59

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

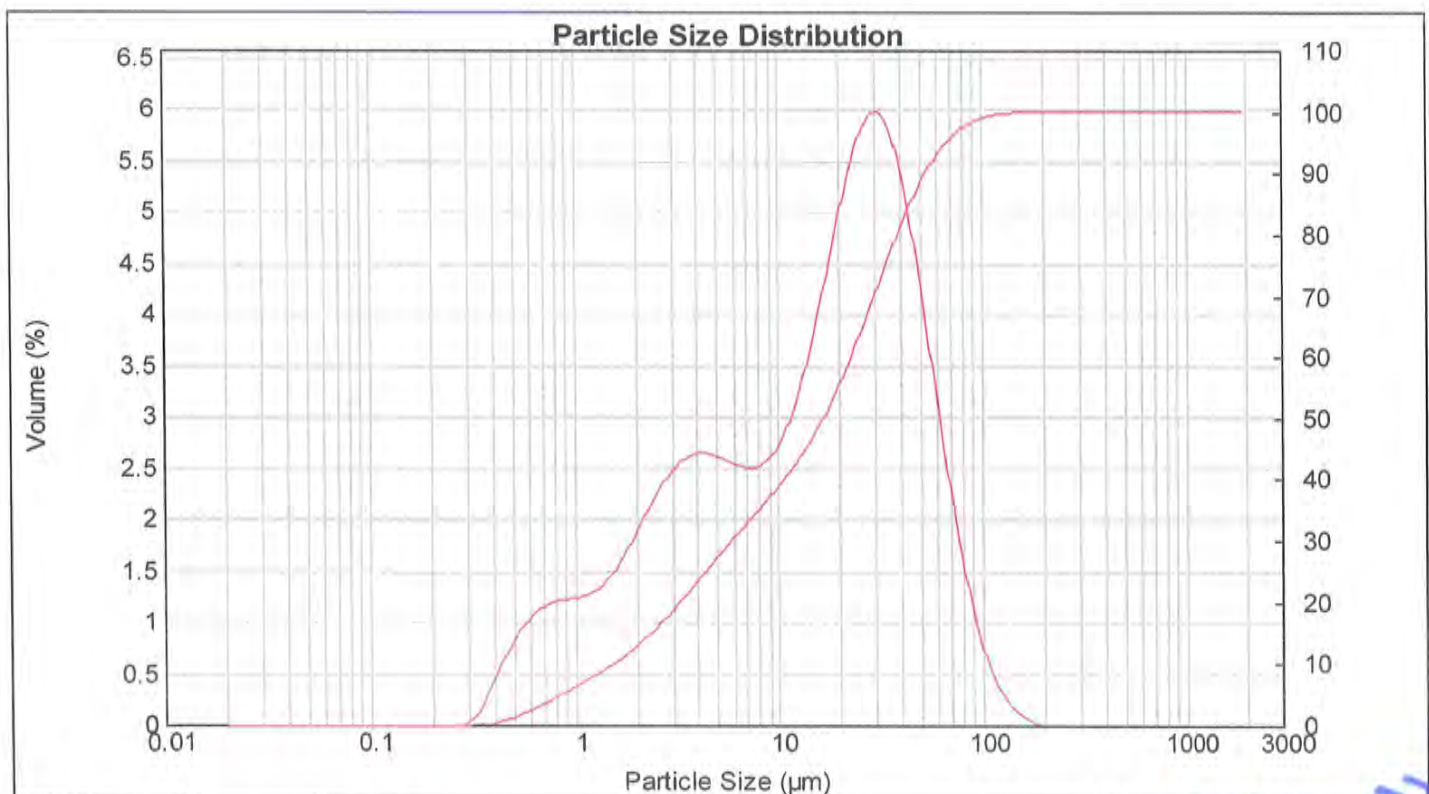
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.56 Residual (%) : 0.891
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0158 %Vol Specific Surface Area : 1.4 m²/g
Mean Diameters : D (0.1) : 1.55 um D (0.5) : 16.7 um D (0.9) : 53.15 um
D [4,3] : 22.85 um D [3,2] : 4.3 um Span : 3.090 Uniformity : 1.01

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.27	7.962	2.56	58.573	2.88	430.887	0.00
0.023	0.00	0.172	0.00	1.262	1.36	9.283	2.72	68.291	2.02	502.377	0.00
0.027	0.00	0.200	0.00	1.471	1.36	10.823	3.03	79.621	1.31	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.73	12.619	3.48	92.832	0.78	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.99	14.713	4.04	108.234	0.42	796.214	0.00
0.043	0.00	0.317	0.13	2.332	2.24	17.154	4.68	126.191	0.20	928.318	0.00
0.050	0.00	0.370	0.43	2.719	2.44	20.000	5.29	147.128	0.08	1082.339	0.00
0.059	0.00	0.431	0.68	3.170	2.58	23.318	5.76	171.539	0.01	1261.915	0.00
0.068	0.00	0.502	0.91	3.696	2.65	27.187	5.98	200.000	0.00	1471.285	0.00
0.080	0.00	0.586	1.07	4.309	2.64	31.698	5.88	233.183	0.00	1715.392	0.00
0.093	0.00	0.683	1.17	5.024	2.59	36.957	5.44	271.871	0.00	2000.000	0.00
0.106	0.00	0.796	1.22	5.857	2.53	43.089	4.72	316.979	0.00		
0.126	0.00	0.928	1.24	6.829	2.51	50.238	3.82	369.570	0.00		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 8

Sample Details

Sample ID : Control-3-C_2

Measured : Monday, May 1, 2023 14:57:48

Sample File : C:\Users\001827\Desktop\Ö'äÖ\Technical service\Tetra
table\MTEC0950 66 1 51cm\MTEC0950 66 51cm TetraTech

Analysed : Monday, May 1, 2023 14:57:49

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

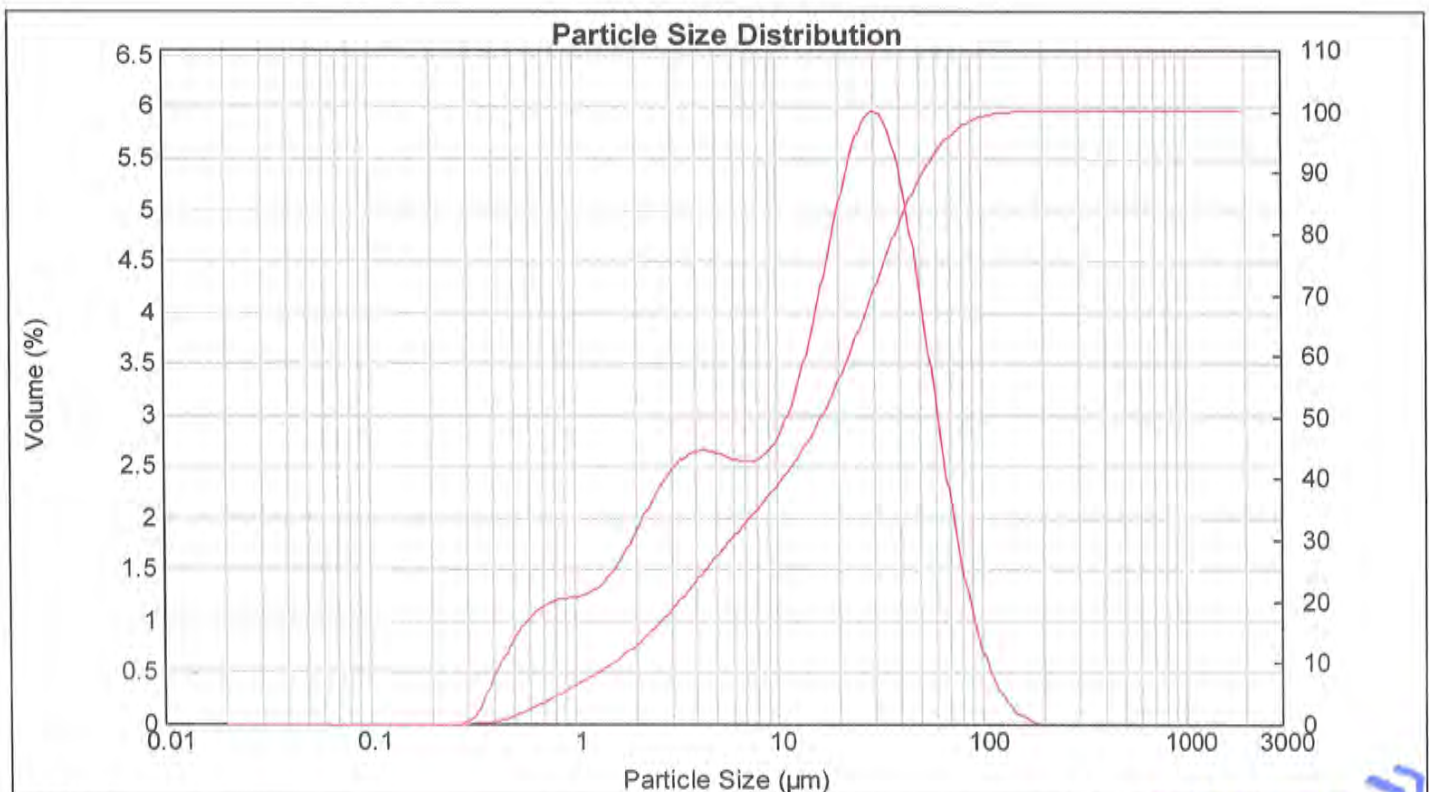
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.03 Residual (%) : 0.884
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0153 %Vol Specific Surface Area : 1.39 m²/g
Mean Diameters : D (0.1) : 1.56 um D (0.5) : 16.55 um D (0.9) : 52.77 um
D [4,3] : 22.69 um D [3,2] : 4.32 um Span : 3.095 Uniformity : 1.02

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.27	7.962	2.61	58.573	2.84	430.887	0.00
0.023	0.00	0.172	0.00	1.262	1.35	9.283	2.78	68.291	1.98	502.377	0.00
0.027	0.00	0.200	0.00	1.471	1.35	10.823	3.08	79.621	1.28	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.51	12.619	3.52	92.832	0.76	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.97	14.713	4.09	108.234	0.40	796.214	0.00
0.043	0.00	0.317	0.12	2.332	2.22	17.154	4.71	126.191	0.19	928.318	0.00
0.050	0.00	0.370	0.43	2.719	2.43	20.000	5.31	147.128	0.07	1082.339	0.00
0.059	0.00	0.431	0.67	3.170	2.58	23.318	5.76	171.539	0.01	1261.915	0.00
0.068	0.00	0.502	0.90	3.696	2.65	27.187	5.97	200.000	0.00	1471.285	0.00
0.080	0.00	0.586	1.07	4.309	2.62	31.698	5.40	233.183	0.00	1715.392	0.00
0.093	0.00	0.683	1.17	5.024	2.57	36.957	4.67	271.871	0.00	2000.000	0.00
0.108	0.00	0.796	1.21	5.857	2.55	43.089	3.77	316.979	0.00		
0.126	0.00	0.928	1.24	6.829		50.238		369.570	0.00		
0.147	0.00	1.082		7.962		58.573		430.887	0.00		



Result : Analysis Report

Attached page 9

Sample Details

Sample ID : Control-3-C_3

Measured : Monday, May 1, 2023 14:58:35

Sample File : C:\Users\001827\Desktop\ISO\Technical service\Tetra
tech\001827\MTEC00950_66_1_51sam\MTEC00950_66_51sam_Tetra.tch

Analysed : Monday, May 1, 2023 14:58:36

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

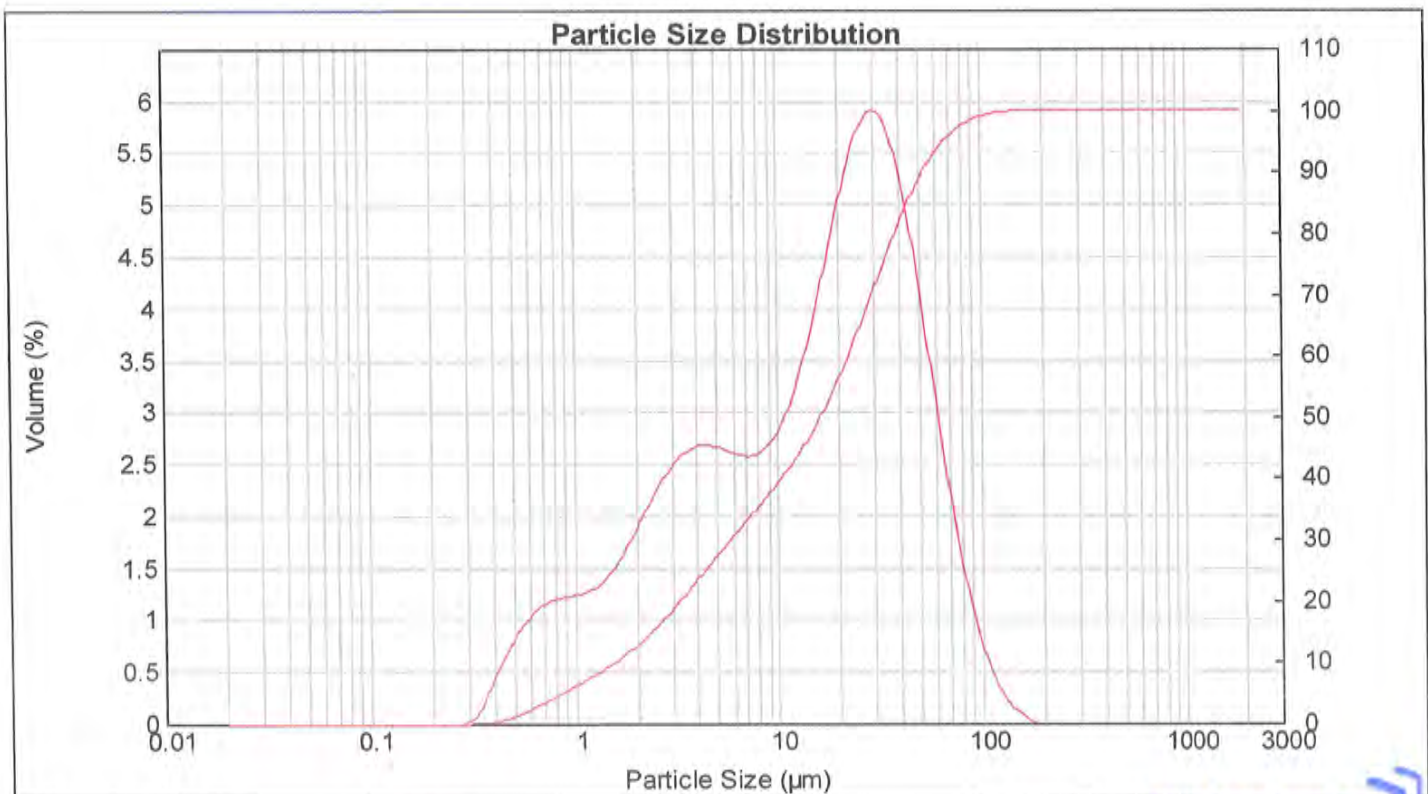
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.89 Residual (%) : 0.879
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0152 %Vol Specific Surface Area : 1.39 m²/g
Mean Diameters : D (0.1) : 1.56 um D (0.5) : 16.36 um D (0.9) : 52.66 um
D [4,3] : 22.58 um D [3,2] : 4.31 um Span : 3.124 Uniformity : 1.02

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.27	7.962	2.64	58.573	2.81	430.887	0.00
0.023	0.00	0.172	0.00	1.262	1.36	9.283	2.81	68.291	1.98	502.377	0.00
0.027	0.00	0.200	0.00	1.471	1.36	10.823	3.11	79.621	1.29	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.51	12.619	3.55	92.832	0.76	682.910	0.00
0.037	0.00	0.272	0.00	2.000	1.73	14.713	4.11	108.234	0.41	796.214	0.00
0.043	0.00	0.317	0.01	2.332	1.98	17.154	4.72	126.191	0.18	926.318	0.00
0.050	0.00	0.370	0.12	2.719	2.23	20.000	5.29	147.128	0.08	1082.339	0.00
0.059	0.00	0.431	0.42	3.170	2.44	23.318	5.73	171.539	0.00	1261.915	0.00
0.068	0.00	0.502	0.67	3.696	2.59	27.187	5.92	200.000	0.00	1471.285	0.00
0.080	0.00	0.586	0.90	4.309	2.67	31.698	5.79	233.183	0.00	1715.392	0.00
0.093	0.00	0.683	1.05	5.024	2.68	36.957	5.34	271.671	0.00	2000.000	0.00
0.108	0.00	0.796	1.16	5.857	2.65	43.089	4.62	316.979	0.00		
0.126	0.00	0.928	1.21	6.829	2.60	50.238	3.73	369.570	0.00		
0.147	0.00	1.082	1.24	7.962	2.58	58.573		430.887			



Result : Analysis Report

Attached page 10

Sample Details

Sample ID : MAWG-1B1X_1

Measured : Monday, May 1, 2023 15:09:29

Sample File : C:\Users\001827\Desktop\501a\Technical service\Tetra
tech\055\MTEC0950_66_1_51sam\MTEC0950_66_51sam_Tetra

Analysed : Monday, May 1, 2023 15:09:31

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

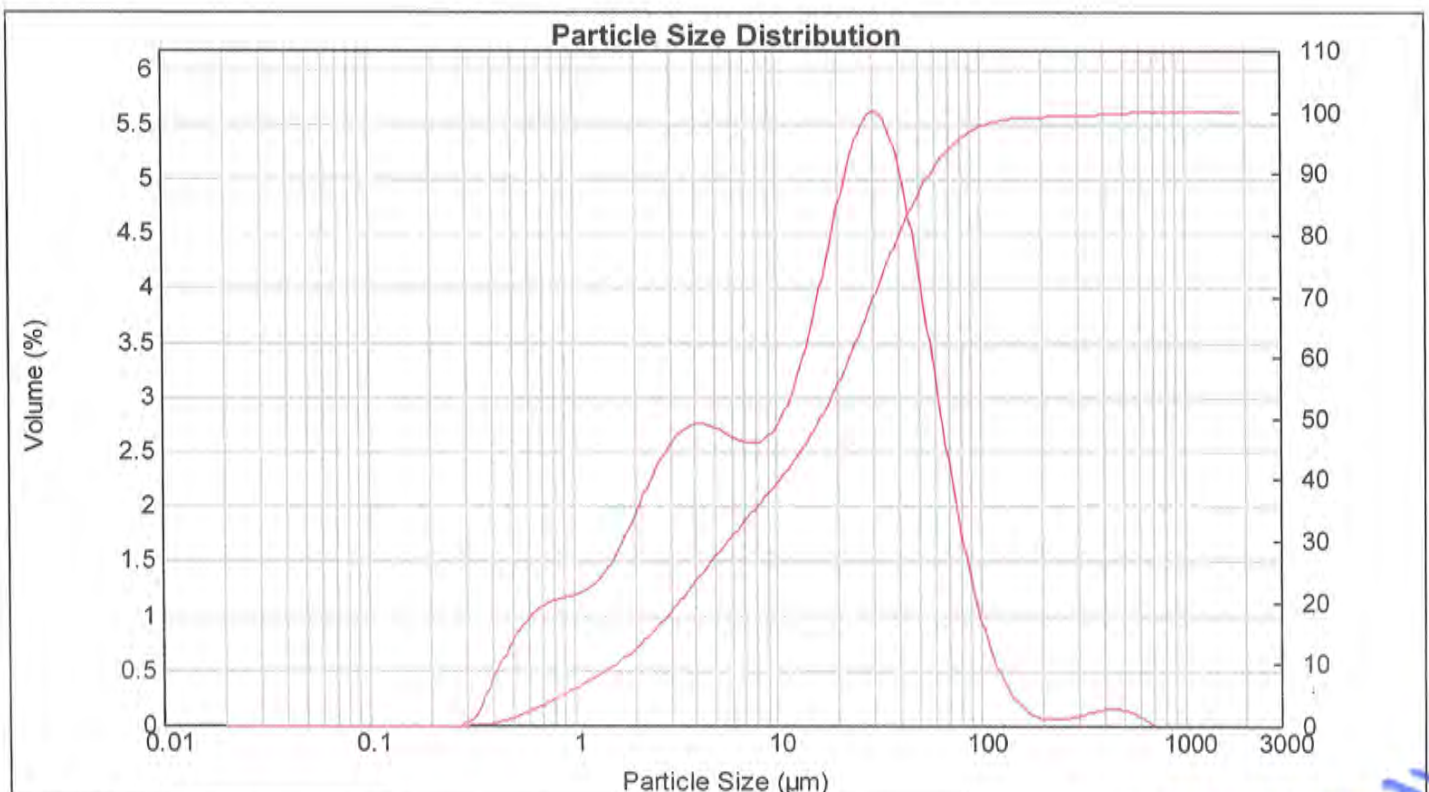
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.08 Residual (%) : 0.808
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0155 %Vol Specific Surface Area : 1.36 m²/g
Mean Diameters : D (0.1) : 1.62 um D (0.5) : 16.6 um D (0.9) : 57.65 um
D [4,3] : 26.68 um D [3,2] : 4.41 um Span : 3.376 Uniformity : 1.25

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.24	7.962	2.60	58.573	2.95	430.887	0.15
0.023	0.00	0.172	0.00	1.262	1.34	9.283	2.73	68.291	2.18	502.377	0.12
0.027	0.00	0.200	0.00	1.471	1.34	10.823	2.99	79.621	1.53	585.729	0.06
0.032	0.00	0.233	0.00	1.715	1.76	12.619	3.38	92.832	1.00	682.910	0.00
0.037	0.00	0.272	0.01	2.000	2.04	14.713	3.88	108.234	0.61	796.214	0.00
0.043	0.00	0.317	0.11	2.332	2.31	17.154	4.44	126.191	0.34	928.318	0.00
0.050	0.00	0.370	0.40	2.719	2.53	20.000	4.98	147.128	0.17	1082.339	0.00
0.059	0.00	0.431	0.63	3.170	2.68	23.318	5.41	171.539	0.09	1261.915	0.00
0.068	0.00	0.502	0.85	3.696	2.75	27.187	5.61	200.000	0.06	1471.285	0.00
0.080	0.00	0.596	1.01	4.309	2.75	31.698	5.54	233.183	0.06	1715.392	0.00
0.093	0.00	0.683	1.11	5.024	2.70	36.957	5.17	271.871	0.08	2000.000	0.00
0.108	0.00	0.796	1.16	5.857	2.63	43.089	4.55	316.979	0.11		
0.126	0.00	0.928	1.19	6.829	2.58	50.238	3.77	369.570	0.14		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 11

Sample Details

Sample ID : MAWG-1B1X_2

Measured : Monday, May 1, 2023 15:10:48

Sample File : C:\Users\001827\Desktop\ISO\Technical service\Tetra
tech\ISO\MTEC0859_55_1_51sam\MTEC0859_55_51sam_TetraTech

Analysed : Monday, May 1, 2023 15:10:50

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

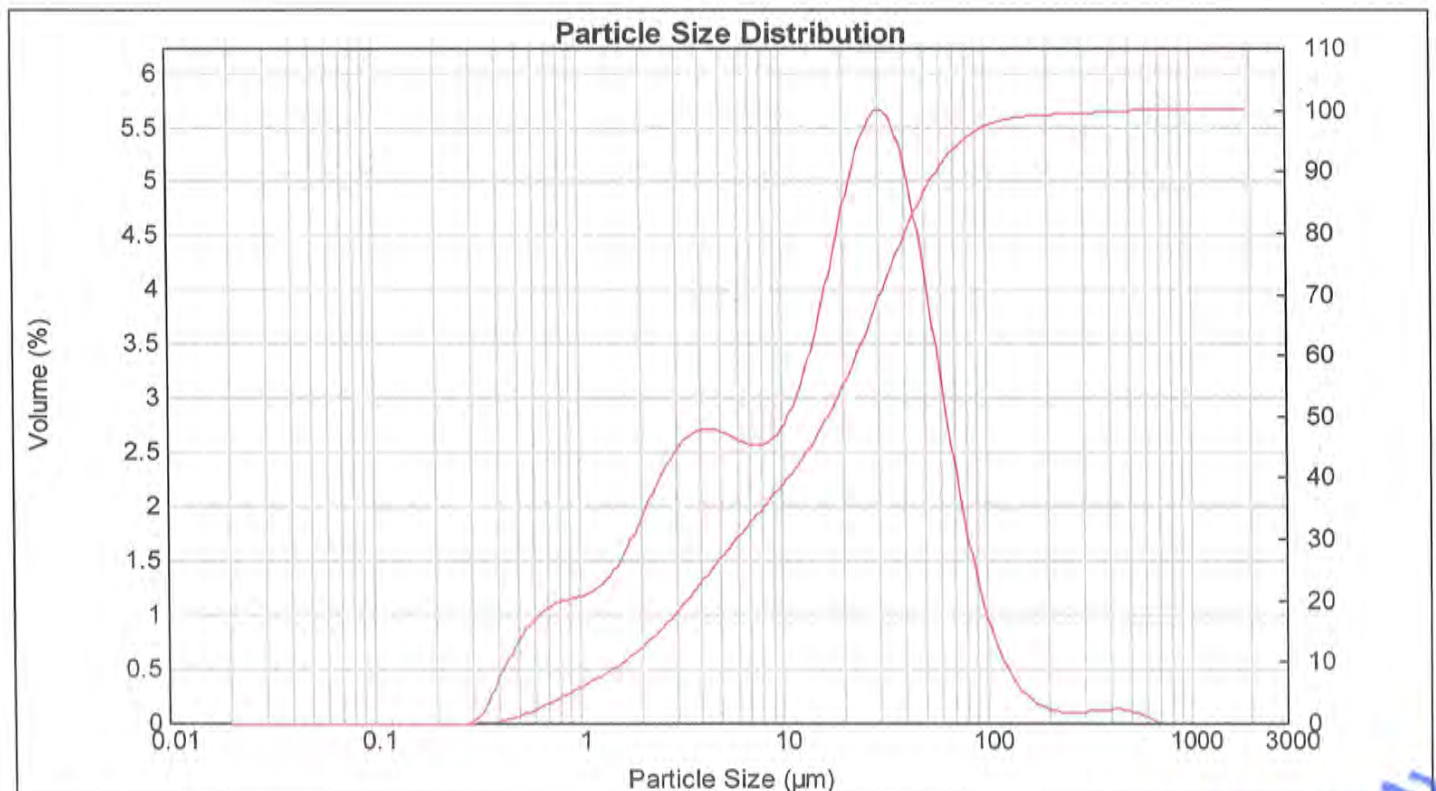
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.74 Residual (%) : 0.823
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0155 %Vol Specific Surface Area : 1.34 m²/g
Mean Diameters : D (0.1) : 1.66 um D (0.5) : 16.96 um D (0.9) : 58.39 um
D [4,3] : 26.98 um D [3,2] : 4.48 um Span : 3.346 Uniformity : 1.24

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.062	1.21	7.962	2.60	58.573	2.95	430.887	0.12
0.023	0.00	0.172	0.00	1.262	1.31	9.283	2.73	68.291	2.17	502.377	0.09
0.027	0.00	0.200	0.00	1.471	1.31	10.823	2.73	79.621	2.17	585.729	0.04
0.032	0.00	0.233	0.00	1.715	1.49	12.619	2.99	92.832	1.52	682.910	0.00
0.037	0.00	0.272	0.00	2.000	1.72	14.713	3.38	108.234	1.02	796.214	0.00
0.043	0.00	0.317	0.01	2.332	1.99	17.154	3.89	126.191	0.65	928.318	0.00
0.050	0.00	0.370	0.10	2.719	2.26	20.000	4.46	147.128	0.40	1082.339	0.00
0.059	0.00	0.431	0.39	3.170	2.48	23.318	5.01	171.539	0.25	1261.915	0.00
0.068	0.00	0.502	0.62	3.696	2.63	27.187	5.45	200.000	0.16	1471.285	0.00
0.080	0.00	0.586	0.84	4.309	2.71	31.698	5.66	233.183	0.11	1715.392	0.00
0.093	0.00	0.683	0.99	5.024	2.72	36.957	5.59	271.871	0.10	2000.000	0.00
0.108	0.00	0.796	1.09	5.857	2.67	43.089	5.21	316.979	0.10		
0.126	0.00	0.928	1.14	6.829	2.61	50.238	4.58	369.570	0.11		
0.147	0.00	1.082	1.17	7.962	2.57	58.573	3.79	430.887	0.12		



Result : Analysis Report

Attached page 12

Sample Details

Sample ID : MAWG-1B1X_3

Measured : Monday, May 1, 2023 15:12:39

Sample File : C:\Users\001827\Desktop\ŞÖ'â\Technical service\Tetra
tech\066\MTEC0850_66_1_51um\MTEC0850_66_51um_Tetra

Analysed : Monday, May 1, 2023 15:12:41

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

System Details

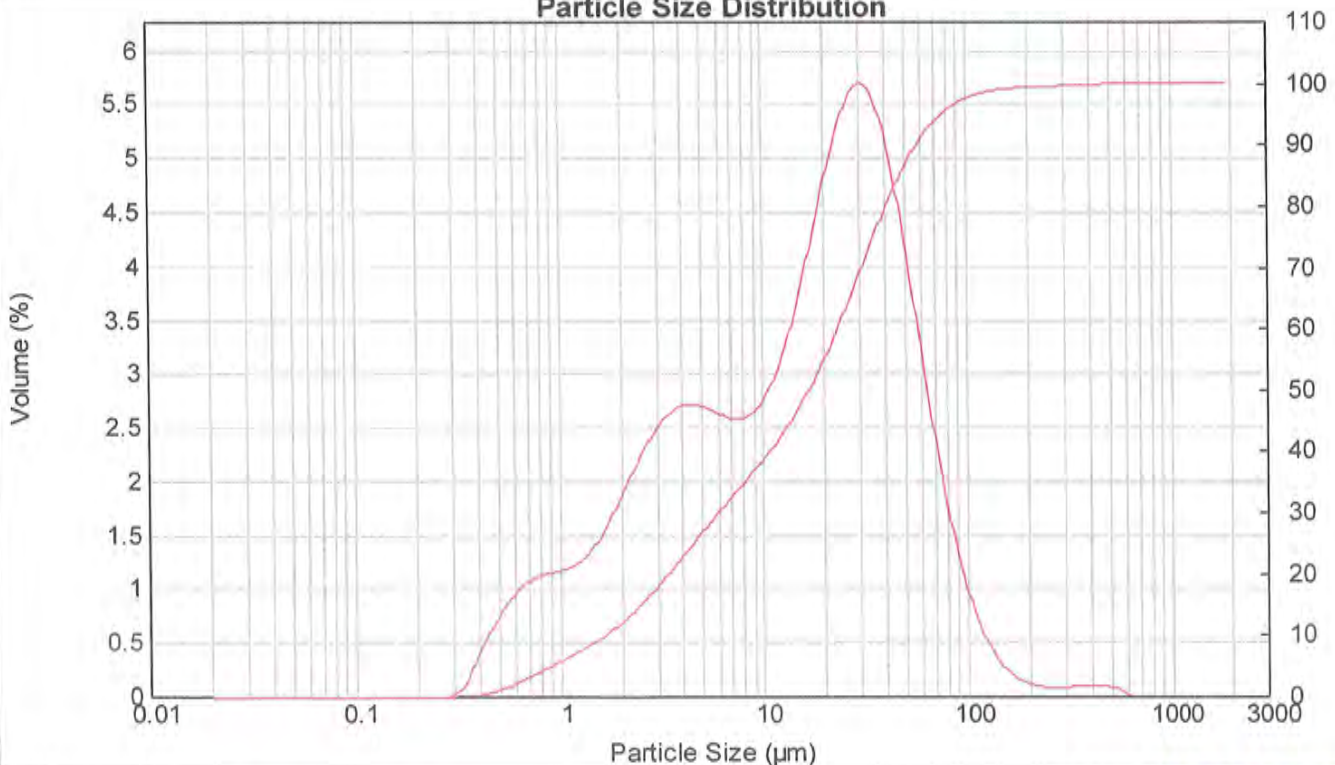
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.50 Residual (%) : 0.826
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0153 %Vol Specific Surface Area : 1.33 m²/g
Mean Diameters : D (0.1) : 1.66 um D (0.5) : 16.95 um D (0.9) : 57.74 um
D [4,3] : 26.22 um D [3,2] : 4.5 um Span : 3.309 Uniformity : 1.19

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.062	1.21	7.962	2.62	58.573	2.96	430.887	0.10
0.023	0.00	0.172	0.00	1.262	1.31	9.283	2.75	68.291	2.17	502.377	0.08
0.027	0.00	0.200	0.00	1.471	1.31	10.823	3.01	79.621	1.51	585.729	0.00
0.032	0.00	0.233	0.00	1.715	1.48	12.619	3.41	92.832	1.00	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.71	14.713	3.91	108.234	0.63	796.214	0.00
0.043	0.00	0.317	0.10	2.332	2.24	17.154	4.49	126.191	0.39	928.318	0.00
0.050	0.00	0.370	0.38	2.719	2.46	20.000	5.04	147.128	0.23	1082.339	0.00
0.059	0.00	0.431	0.62	3.170	2.62	23.318	5.48	171.539	0.14	1261.915	0.00
0.068	0.00	0.502	0.83	3.695	2.71	27.187	5.70	200.000	0.08	1471.285	0.00
0.080	0.00	0.586	0.99	4.309	2.72	31.698	5.62	233.183	0.09	1715.392	0.00
0.093	0.00	0.683	1.09	5.024	2.68	36.957	5.25	271.871	0.08	2000.000	0.00
0.108	0.00	0.796	1.14	5.857	2.62	43.089	4.61	316.979	0.09		
0.126	0.00	0.928	1.17	6.829	2.59	50.238	3.80	369.570	0.10		
0.147	0.00	1.082		7.962		58.573		430.887			

Particle Size Distribution



Result : Analysis Report

Attached page 13

Sample Details

Sample ID : MAWG-1B2X_1

Measured : Monday, May 1, 2023 15:22:57

Sample File : C:\Users\001827\Desktop\50'a\Technical service\Tetra
tech\066\MTEC0859_66_1_51sam\MTEC0859_66_1_51sam_TetraTech

Analysed : Monday, May 1, 2023 15:22:58

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

System Details

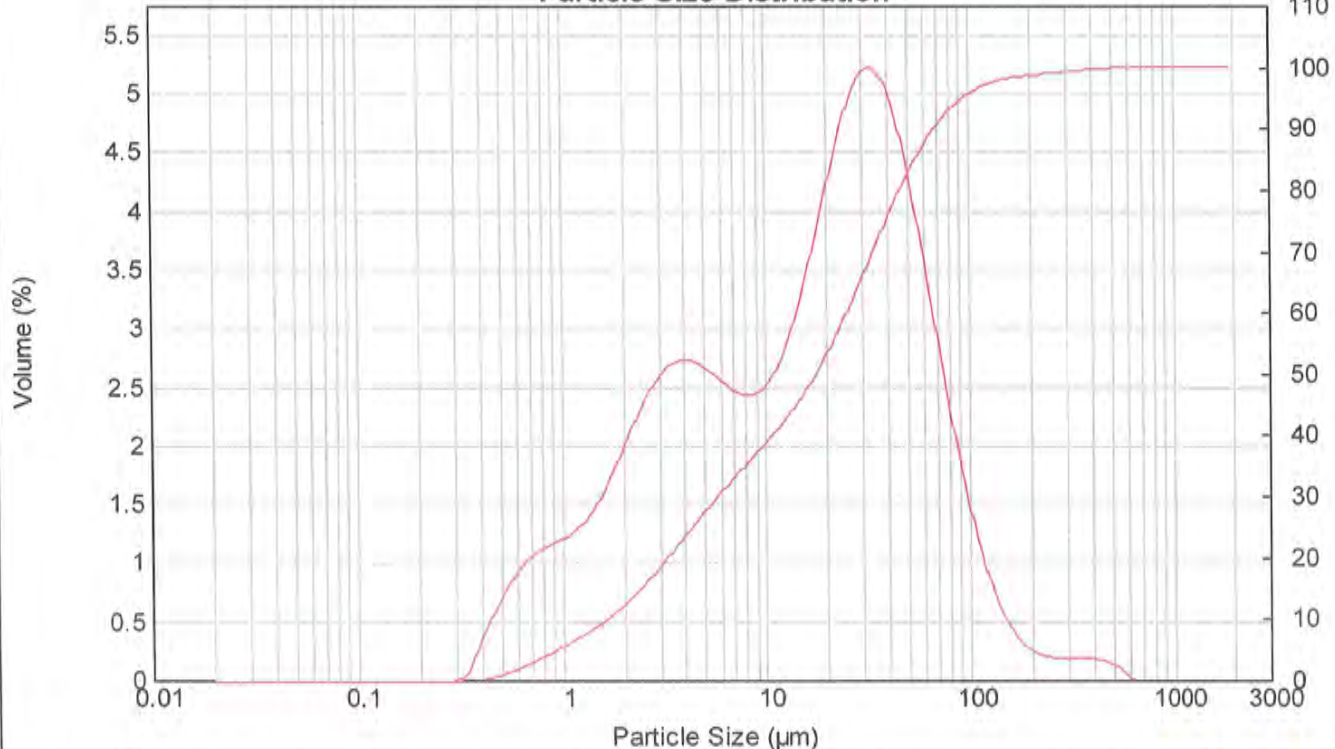
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.24 Residual (%) : 0.752
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0150 %Vol Specific Surface Area : 1.32 m²/g
Mean Diameters : D (0.1) : 1.65 um D (0.5) : 17.74 um D (0.9) : 68.3 um
D [4,3] : 30.61 um D [3,2] : 4.55 um Span : 3.756 Uniformity : 1.39

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.062	1.27	7.962	2.44	58.573	3.39	430.887	0.16
0.023	0.00	0.172	0.00	1.262	1.40	9.283	2.52	68.291	2.71	502.377	0.11
0.027	0.00	0.200	0.00	1.471	1.59	10.823	2.71	79.621	2.06	585.729	0.01
0.032	0.00	0.233	0.00	1.715	1.83	12.619	3.02	92.832	1.50	662.910	0.00
0.037	0.00	0.272	0.00	2.000	2.11	14.713	3.45	108.234	1.04	796.214	0.00
0.043	0.00	0.317	0.00	2.332	2.36	17.154	3.95	126.191	0.68	928.318	0.00
0.050	0.00	0.370	0.06	2.719	2.56	20.000	4.45	147.128	0.44	1082.339	0.00
0.059	0.00	0.431	0.34	3.170	2.69	23.318	4.89	171.539	0.30	1261.915	0.00
0.068	0.00	0.502	0.57	3.696	2.74	27.187	5.17	200.000	0.23	1471.285	0.00
0.080	0.00	0.586	0.79	4.309	2.71	31.698	5.23	233.183	0.20	1715.392	0.00
0.093	0.00	0.683	0.96	5.024	2.64	36.957	5.04	271.871	0.19	2000.000	0.00
0.108	0.00	0.796	1.08	5.857	2.54	43.089	4.64	316.979	0.19		
0.126	0.00	0.928	1.15	6.829	2.46	50.238	4.06	369.570	0.18		
0.147	0.00	1.062	1.20	7.962		58.573		430.887			

Particle Size Distribution



Result : Analysis Report

Attached page 14

Sample Details

Sample ID : MAWG-1B2X_2

Measured : Monday, May 1, 2023 15:24:00

Sample File : C:\Users\001827\Desktop\501827\Technical service\Tetra
Tech\001827\MTEC0859_00_51sam_Tetrattech

Analysed : Monday, May 1, 2023 15:24:02

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

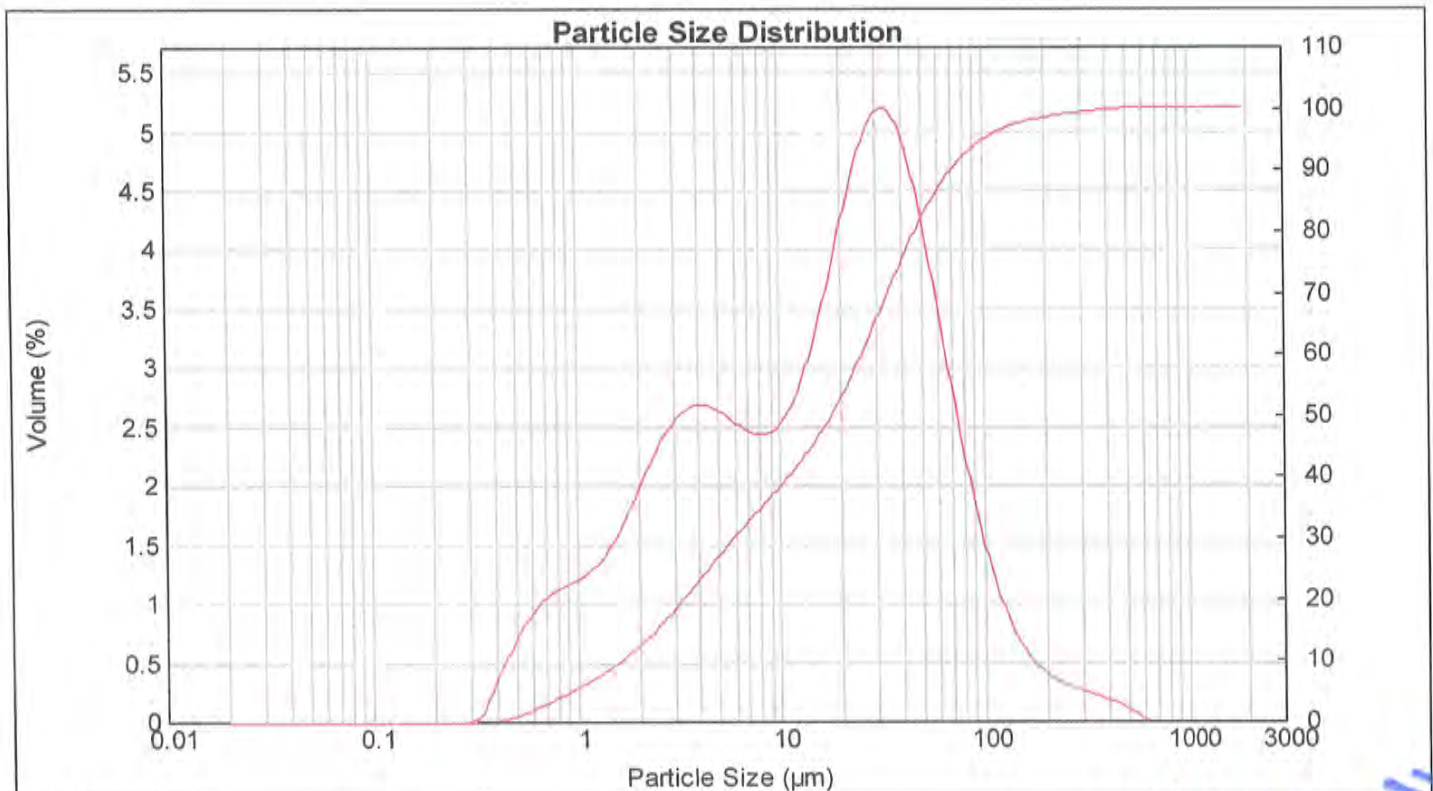
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 18.89 Residual (%) : 0.755
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0149 %Vol Specific Surface Area : 1.31 m²/g
Mean Diameters : D (0.1) : 1.67 um D (0.5) : 18.02 um D (0.9) : 71.13 um
D [4,3] : 31.84 um D [3,2] : 4.6 um Span : 3.854 Uniformity : 1.43

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.062	1.27	7.962	2.44	58.573	3.30	430.887	0.14
0.023	0.00	0.172	0.00	1.262	1.39	9.283	2.52	68.291	2.64	502.377	0.08
0.027	0.00	0.200	0.00	1.471	1.57	10.823	2.72	79.621	2.04	585.729	0.01
0.032	0.00	0.233	0.00	1.715	1.81	12.619	3.03	92.832	1.53	682.910	0.00
0.037	0.00	0.272	0.00	2.000	2.07	14.713	3.45	108.234	1.12	796.214	0.00
0.043	0.00	0.317	0.06	2.332	2.31	17.154	3.95	126.191	0.81	928.318	0.00
0.050	0.00	0.370	0.33	2.719	2.51	20.000	4.46	147.128	0.59	1082.339	0.00
0.059	0.00	0.431	0.56	3.170	2.64	23.318	4.88	171.539	0.45	1261.915	0.00
0.068	0.00	0.502	0.78	3.696	2.69	27.187	5.15	200.000	0.37	1471.285	0.00
0.080	0.00	0.586	0.95	4.309	2.67	31.698	5.19	233.183	0.31	1715.392	0.00
0.093	0.00	0.683	1.07	5.024	2.61	36.957	4.99	271.871	0.27	2000.000	0.00
0.108	0.00	0.796	1.14	5.857	2.52	43.080	4.56	316.979	0.23		
0.126	0.00	0.928	1.20	6.829	2.45	50.238	3.97	369.570	0.19		
0.147	0.00	1.062		7.962		58.573		430.887			



Result : Analysis Report

Attached page 15

Sample Details

Sample ID : MAWG-1B2X_3

Measured : Monday, May 1, 2023 15:26:53

Sample File : C:\Users\001827\Desktop\501a\Technical service\Tetra
tech\MTEC0859_66_51um\MTEC0859_66_51um_Tetrat

Analysed : Monday, May 1, 2023 15:26:55

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

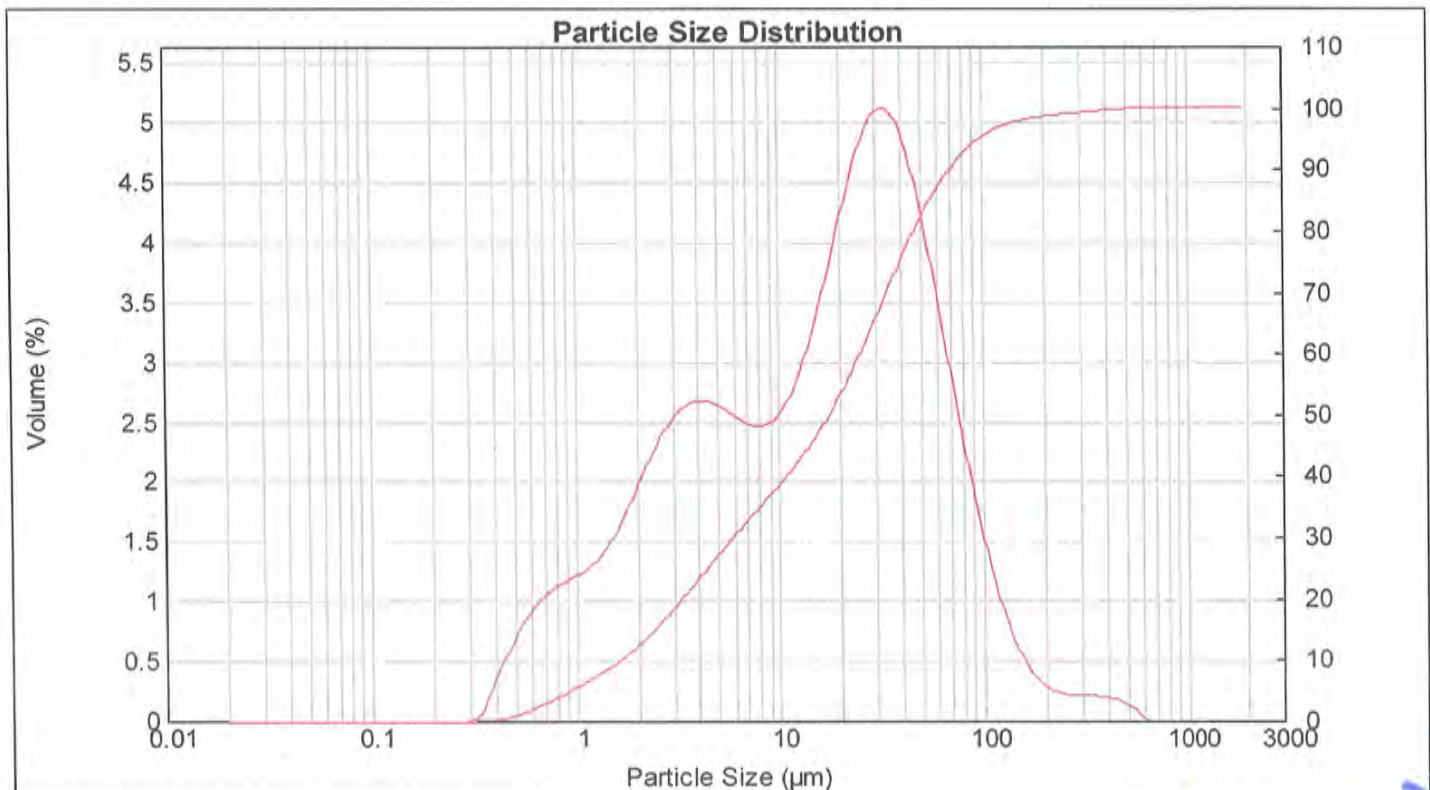
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 18.46 Residual (%) : 0.748
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0144 %Vol Specific Surface Area : 1.32 m²/g
Mean Diameters : D (0.1) : 1.65 um D (0.5) : 17.72 um D (0.9) : 70.1 um
D [4,3] : 31.28 um D [3,2] : 4.56 um Span : 3.863 Uniformity : 1.42

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.29	7.962	2.48	58.573	3.37	430.887	0.17
0.023	0.00	0.172	0.00	1.262	1.41	9.283	2.57	68.291	2.73	502.377	0.11
0.027	0.00	0.200	0.00	1.471	1.59	10.823	2.77	79.621	2.11	585.729	0.01
0.032	0.00	0.233	0.00	1.715	1.82	12.619	3.08	92.832	1.57	682.910	0.00
0.037	0.00	0.272	0.00	2.000	2.07	14.713	3.49	108.234	1.11	796.214	0.00
0.043	0.00	0.317	0.00	2.332	2.31	17.154	3.96	126.191	0.75	928.318	0.00
0.050	0.00	0.370	0.06	2.719	2.51	20.000	4.43	147.128	0.50	1082.339	0.00
0.059	0.00	0.431	0.33	3.170	2.64	23.318	4.83	171.539	0.34	1261.915	0.00
0.068	0.00	0.502	0.56	3.695	2.69	27.187	5.08	200.000	0.26	1471.285	0.00
0.080	0.00	0.586	0.79	4.309	2.68	31.698	5.12	233.183	0.22	1715.392	0.00
0.093	0.00	0.683	0.96	5.024	2.62	36.957	4.94	271.871	0.21	2000.000	0.00
0.108	0.00	0.796	1.08	5.857	2.54	43.089	4.54	316.979	0.20		
0.126	0.00	0.928	1.16	6.829	2.49	50.238	4.00	369.570	0.20		
0.147	0.00	1.082	1.22	7.962		58.573		430.887			



Result : Analysis Report

Attached page 16

Sample Details

Sample ID : MAWG-1B3X_1

Measured : Monday, May 1, 2023 15:42:07

Sample File : C:\Users\001827\Desktop\ISO\Technical service\Tetra
tech\066\MTEC0950_66_1_51um\MTEC0950_66_1_51um_Tetrat

Analysed : Monday, May 1, 2023 15:42:08

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

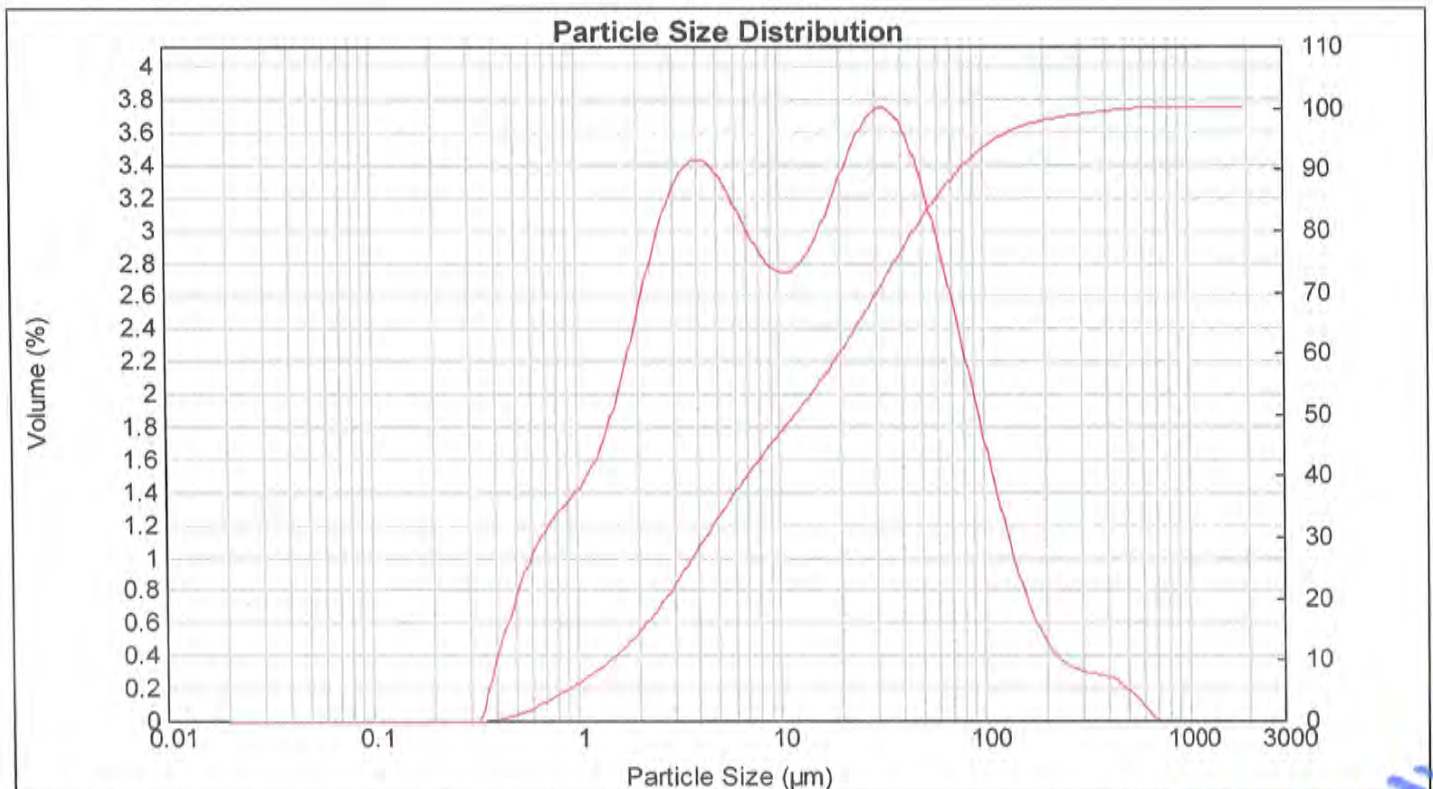
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.60 Residual (%) : 0.546
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0141 %Vol Specific Surface Area : 1.49 m²/g
Mean Diameters : D (0.1) : 1.47 um D (0.5) : 11.95 um D (0.9) : 78.61 um
D [4,3] : 32.25 um D [3,2] : 4.02 um Span : 6.455 Uniformity : 2.34

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.062	1.52	7.962	2.83	58.573	2.84	430.887	0.23
0.023	0.00	0.172	0.00	1.262	1.70	9.283	2.76	68.291	2.49	502.377	0.16
0.027	0.00	0.200	0.00	1.471	1.96	10.823	2.76	79.621	2.13	585.729	0.06
0.032	0.00	0.233	0.00	1.715	2.29	12.619	2.85	92.832	1.76	682.910	0.00
0.037	0.00	0.272	0.00	2.000	2.63	14.713	3.01	108.234	1.40	796.214	0.00
0.043	0.00	0.317	0.00	2.332	2.95	17.154	3.21	126.191	1.07	928.318	0.00
0.050	0.00	0.370	0.02	2.719	3.21	20.000	3.43	147.128	0.79	1082.339	0.00
0.059	0.00	0.431	0.34	3.170	3.38	23.318	3.62	171.539	0.57	1261.915	0.00
0.068	0.00	0.502	0.60	3.696	3.41	27.187	3.73	200.000	0.43	1471.285	0.00
0.080	0.00	0.586	1.05	4.309	3.29	31.698	3.65	233.183	0.31	1715.392	0.00
0.093	0.00	0.683	1.20	5.024	3.13	36.957	3.45	271.871	0.29	2000.000	0.00
0.108	0.00	0.796	1.40	5.857	2.96	43.089	3.17	316.970	0.27		
0.126	0.00	0.928		6.829		50.238		369.570			
0.147	0.00	1.062		7.962		58.573		430.887			



Result : Analysis Report

Attached page 17

Sample Details

Sample ID : MAWG-1B3X_2

Measured : Monday, May 1, 2023 15:43:10

Sample File : C:\Users\001827\Desktop\01a\Technical service\Tetra
tech\066\MTEC0950_66_1_51um\MTEC0950_66_51um_Tetrat

Analysed : Monday, May 1, 2023 15:43:11

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

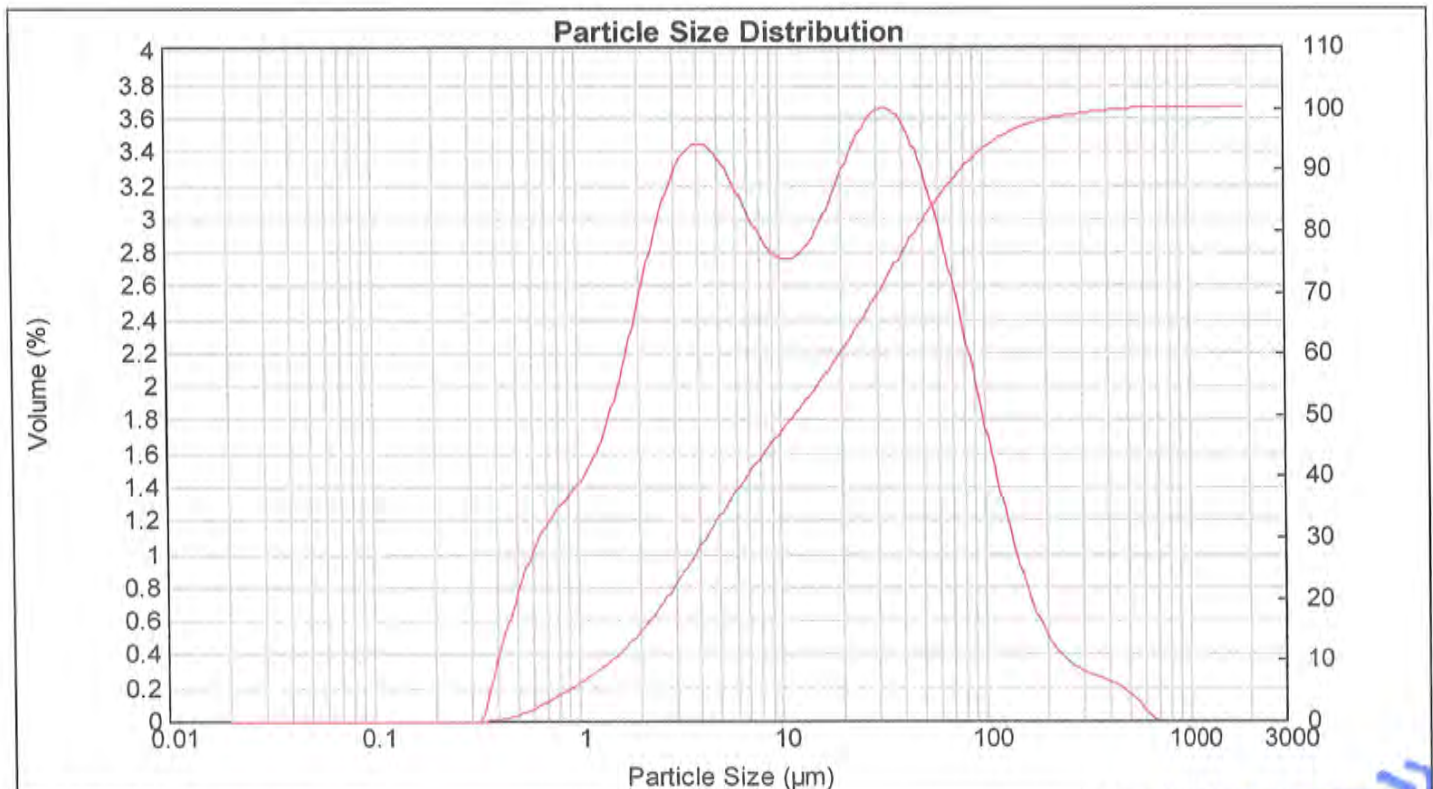
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.45 Residual (%) : 0.542
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0139 %Vol Specific Surface Area : 1.5 m²/g
Mean Diameters : D (0.1) : 1.47 um D (0.5) : 11.76 um D (0.9) : 79.3 um
D [4,3] : 31.89 um D [3,2] : 4.01 um Span : 6.617 Uniformity : 2.35

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.53	7.962	2.85	58.573	2.87	430.887	0.20
0.023	0.00	0.172	0.00	1.262	1.72	9.283	2.78	68.291	2.53	502.377	0.13
0.027	0.00	0.200	0.00	1.471	1.98	10.823	2.77	79.621	2.17	585.729	0.04
0.032	0.00	0.233	0.00	1.715	2.30	12.619	2.85	92.832	1.80	682.910	0.00
0.037	0.00	0.272	0.00	2.000	2.65	14.713	2.99	108.234	1.44	796.214	0.00
0.043	0.00	0.317	0.00	2.332	2.97	17.154	3.17	126.191	1.10	928.318	0.00
0.050	0.00	0.370	0.02	2.719	3.23	20.000	3.37	147.128	0.82	1082.339	0.00
0.059	0.00	0.431	0.04	3.170	3.39	23.318	3.54	171.539	0.61	1261.915	0.00
0.068	0.00	0.502	0.09	3.695	3.46	27.187	3.65	200.000	0.46	1471.285	0.00
0.080	0.00	0.586	0.15	4.309	3.42	31.698	3.67	233.183	0.36	1715.392	0.00
0.093	0.00	0.683	0.20	5.024	3.31	36.957	3.59	271.671	0.27	2000.000	0.00
0.108	0.00	0.796	0.26	5.857	3.16	43.089	3.41	316.979	0.20		
0.126	0.00	0.928	0.31	6.829	2.99	50.238	3.17	369.570	0.15		
0.147	0.00	1.082	0.37	7.962	2.85	58.573	2.85	430.887	0.10		



Result : Analysis Report

Attached page 18

Sample Details

Sample ID : MAWG-1B3X_3

Measured : Monday, May 1, 2023 15:44:13

Sample File : C:\Users\001827\Desktop\50'a\Technical service\Tetra
tech\066\MTFC0950_66_1_51nm\MTFC0950_66_51nm_Tetra

Analysed : Monday, May 1, 2023 15:44:15

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

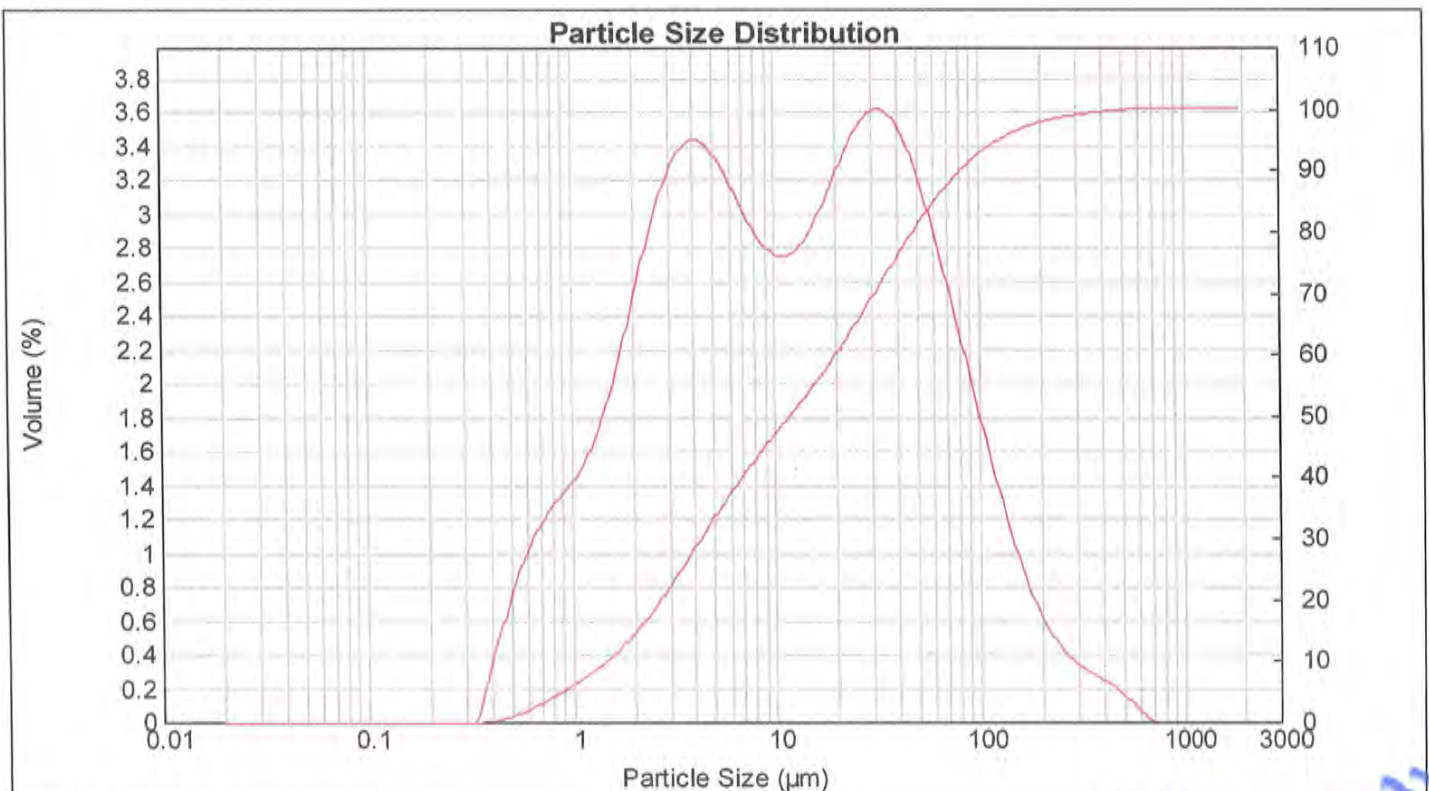
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.34 Residual (%) : 0.540
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0138 %Vol Specific Surface Area : 1.5 m²/g
Mean Diameters : D (0.1) : 1.47 um D (0.5) : 11.83 um D (0.9) : 82.77 um
D [4,3] : 32.88 um D [3,2] : 4.01 um Span : 6.870 Uniformity : 2.42

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.54	7.962	2.84	58.573	2.80	430.887	0.20
0.023	0.00	0.172	0.00	1.262	1.72	9.283	2.77	68.291	2.49	502.377	0.12
0.027	0.00	0.200	0.00	1.471	1.98	10.823	2.76	79.621	2.16	585.729	0.04
0.032	0.00	0.233	0.00	1.715	2.30	12.619	2.83	92.832	1.83	682.910	0.00
0.037	0.00	0.272	0.00	2.000	2.64	14.713	2.96	108.234	1.50	796.214	0.00
0.043	0.00	0.317	0.02	2.332	2.96	17.154	3.14	126.191	1.20	928.318	0.00
0.050	0.00	0.370	0.02	2.719	3.21	20.000	3.34	147.128	0.93	1082.339	0.00
0.059	0.00	0.431	0.04	3.170	3.37	23.318	3.50	171.539	0.71	1261.915	0.00
0.068	0.00	0.502	0.05	3.696	3.44	27.187	3.61	200.000	0.55	1471.285	0.00
0.080	0.00	0.586	0.05	4.309	3.41	31.698	3.62	233.183	0.43	1715.392	0.00
0.093	0.00	0.683	0.05	5.024	3.30	36.957	3.53	271.871	0.35	2000.000	0.00
0.108	0.00	0.796	0.05	5.857	3.15	43.089	3.35	316.979	0.30		
0.126	0.00	0.928	0.05	6.829	2.98	50.238	3.10	369.570	0.25		
0.147	0.00	1.082	0.05	7.962	2.84	58.573	2.80	430.887	0.20		



Result : Analysis Report

Attached page 19

Sample Details

Sample ID : MAWG-1C1_1

Measured : Monday, May 1, 2023 15:57:17

Sample File : C:\Users\001827\Desktop\501a\Technical service\Tetra
tech\001827\MTEC0950_66_1_51sam\MTEC0950_66_1_51sam_Tetrat

Analysed : Monday, May 1, 2023 15:57:18

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

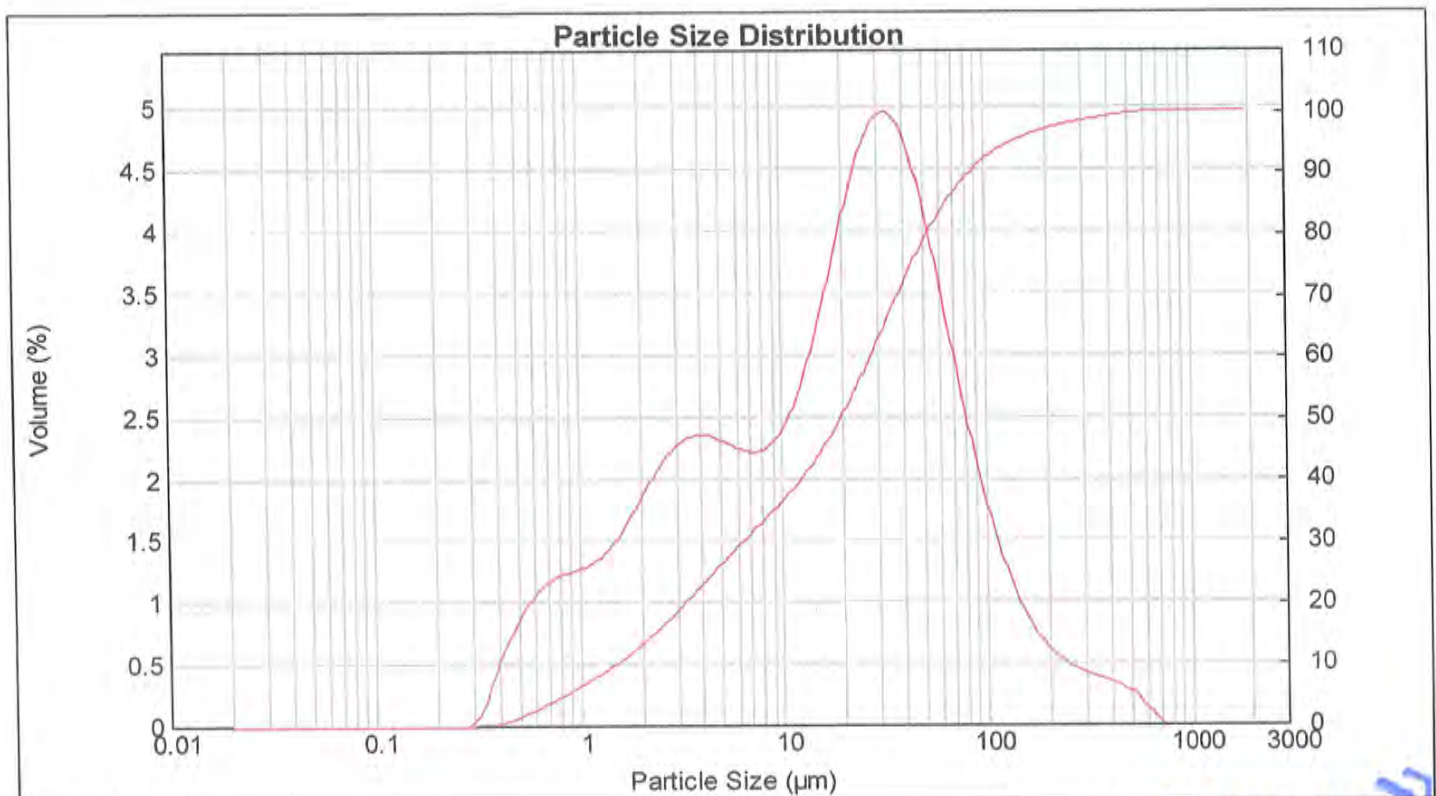
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.39 Residual (%) : 0.378
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0152 %Vol Specific Surface Area : 1.38 m²/g
Mean Diameters : D (0.1) : 1.5 um D (0.5) : 19.57 um D (0.9) : 85.43 um
D [4,3] : 38.55 um D [3,2] : 4.36 um Span : 4.288 Uniformity : 1.63

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.32	7.962	2.26	58.573	3.39	430.887	0.30
0.023	0.00	0.172	0.00	1.262	1.40	9.283	2.39	68.291	2.82	502.377	0.23
0.027	0.00	0.200	0.00	1.471	1.40	10.823	2.62	79.621	2.29	585.729	0.11
0.032	0.00	0.233	0.00	1.715	1.54	12.619	2.96	92.832	1.83	682.910	0.01
0.037	0.00	0.272	0.01	2.000	1.92	14.713	3.39	108.234	1.43	796.214	0.00
0.043	0.00	0.317	0.15	2.332	2.10	17.154	3.87	126.191	1.11	928.318	0.00
0.050	0.00	0.370	0.49	2.719	2.24	20.000	4.32	147.128	0.87	1082.339	0.00
0.059	0.00	0.431	0.73	3.170	2.33	23.318	4.70	171.539	0.69	1261.915	0.00
0.068	0.00	0.502	0.94	3.696	2.35	27.187	4.93	200.000	0.57	1471.285	0.00
0.080	0.00	0.585	1.09	4.309	2.34	31.698	4.79	233.183	0.49	1715.392	0.00
0.093	0.00	0.683	1.18	5.024	2.29	36.957	4.44	271.871	0.43	2000.000	0.00
0.108	0.00	0.795	1.23	5.857	2.24	43.089	3.95	316.979	0.39		
0.126	0.00	0.928	1.27	6.829	2.21	50.238		369.570	0.36		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 20

Sample Details

Sample ID : MAWG-1C1_2

Measured : Monday, May 1, 2023 15:58:20

Sample File : C:\Users\001827\Desktop\501a\Technical service\Tetra
tech\066\MTEC0850_66_1_51sam\MTEC0850_66_51sam_Tetrat

Analysed : Monday, May 1, 2023 15:58:21

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

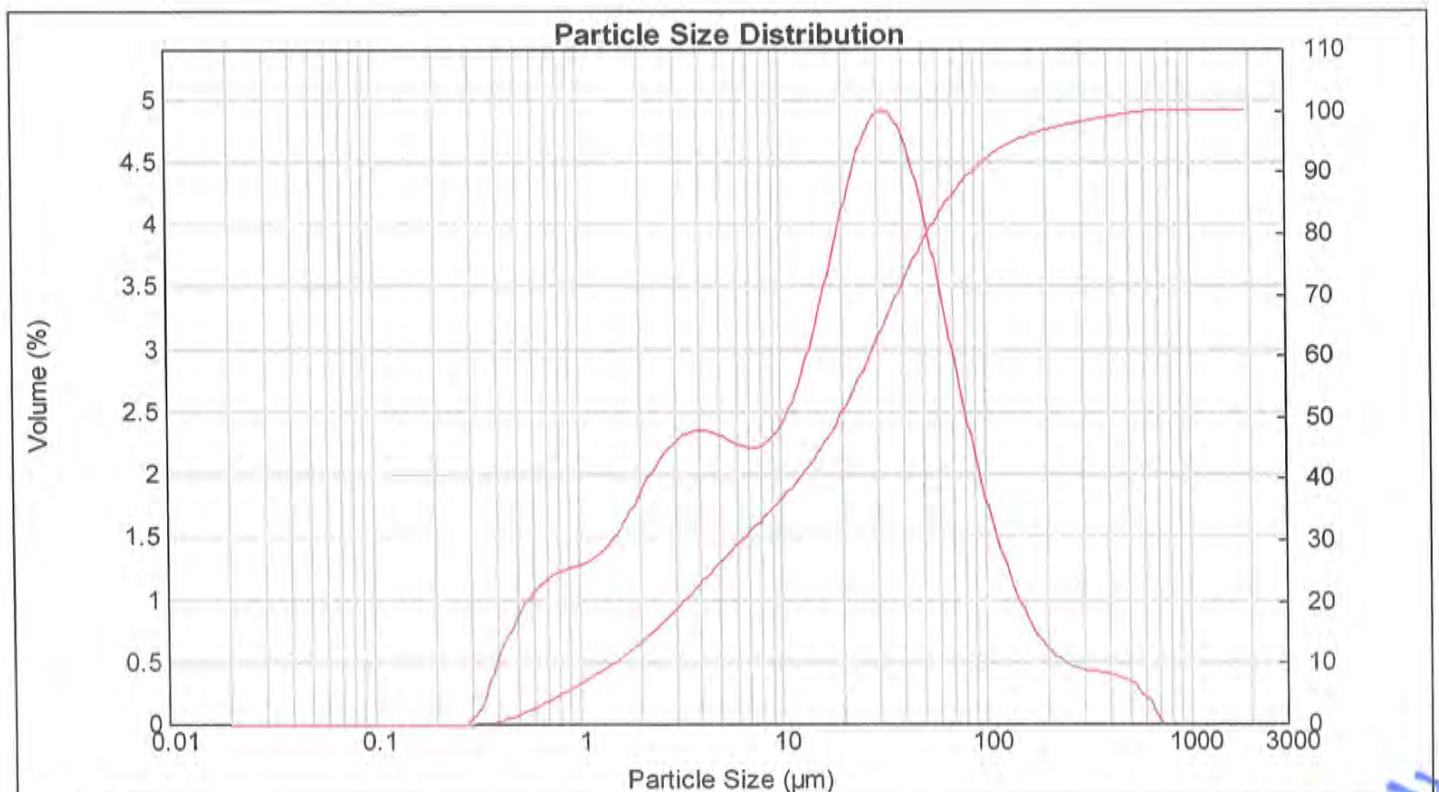
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.20 Residual (%) : 0.372
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0150 %Vol Specific Surface Area : 1.38 m²/g
Mean Diameters : D (0.1) : 1.5 um D (0.5) : 19.55 um D (0.9) : 87.74 um
D [4,3] : 40.04 um D [3,2] : 4.35 um Span : 4.412 Uniformity : 1.71

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.32	7.962	2.26	58.573	3.35	430.887	0.37
0.023	0.00	0.172	0.00	1.262	1.40	9.283	2.39	68.291	2.80	502.377	0.31
0.027	0.00	0.200	0.00	1.471	1.40	10.823	2.39	79.621	2.80	585.729	0.18
0.032	0.00	0.233	0.00	1.715	1.54	12.619	2.62	92.832	2.30	682.910	0.01
0.037	0.00	0.272	0.00	2.000	1.92	14.713	3.38	108.234	1.46	796.214	0.00
0.043	0.00	0.317	0.01	2.332	1.92	17.154	3.38	126.191	1.46	928.318	0.00
0.050	0.00	0.370	0.16	2.719	2.10	20.000	3.85	147.128	1.14	1082.339	0.00
0.059	0.00	0.431	0.49	3.170	2.24	23.318	4.30	171.539	0.88	1261.915	0.00
0.068	0.00	0.502	0.73	3.696	2.33	27.187	4.66	200.000	0.69	1471.285	0.00
0.080	0.00	0.586	0.94	4.309	2.36	31.698	4.88	233.183	0.56	1715.392	0.00
0.093	0.00	0.683	1.09	5.024	2.34	36.957	4.91	271.871	0.48	2000.000	0.00
0.108	0.00	0.796	1.18	5.857	2.29	43.089	4.73	316.979	0.44		
0.126	0.00	0.928	1.24	6.829	2.24	50.238	4.37	369.570	0.42		
0.147	0.00	1.082	1.27	7.962	2.22	58.573	3.89	430.887	0.41		



Result : Analysis Report

Attached page 21

Sample Details

Sample ID : MAWG-1C1_3

Measured : Monday, May 1, 2023 15:59:23

Sample File : C:\Users\001827\Desktop\ŠÓ'ãÄÖ\Technical service\Tetra
tech\088\MTEC0850_66_1_51mm\MTEC0850_66_51mm_Tetrat

Analysed : Monday, May 1, 2023 15:59:25

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

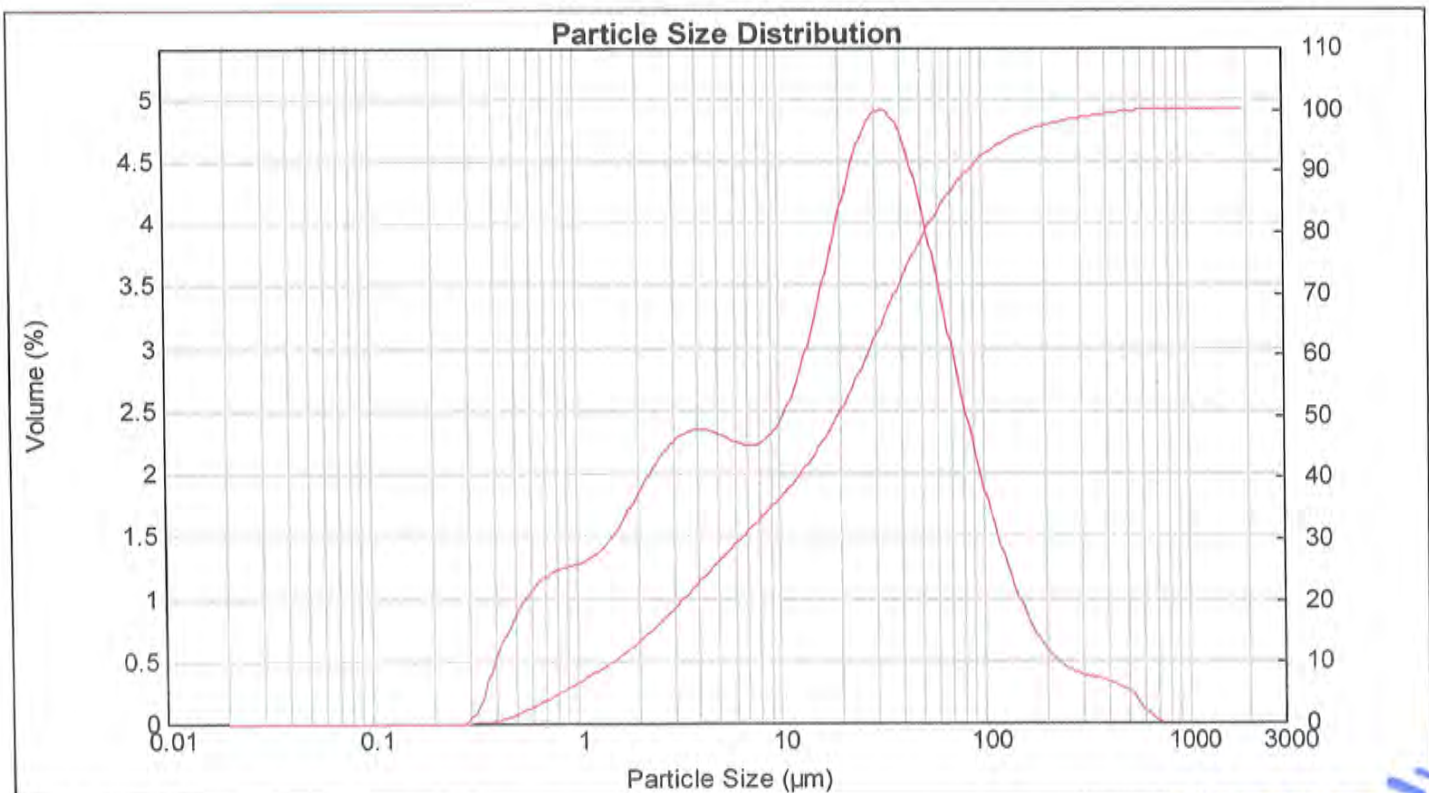
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.06 Residual (%) : 0.381
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0149 %Vol Specific Surface Area : 1.38 m²/g
Mean Diameters : D (0.1) : 1.49 um D (0.5) : 19.46 um D (0.9) : 85.9 um
D [4,3] : 38.07 um D [3,2] : 4.34 um Span : 4.337 Uniformity : 1.62

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.32	7.962	2.28	58.573	3.39	430.887	0.29
0.023	0.00	0.172	0.00	1.262	1.41	9.283	2.41	68.291	2.86	502.377	0.21
0.027	0.00	0.200	0.00	1.471	1.54	10.823	2.64	79.621	2.36	585.729	0.08
0.032	0.00	0.233	0.00	1.715	1.72	12.619	2.98	92.832	1.91	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.91	14.713	3.40	108.234	1.52	796.214	0.00
0.043	0.00	0.317	0.01	2.332	2.23	17.154	3.86	126.191	1.18	928.318	0.00
0.050	0.00	0.370	0.16	2.719	2.09	20.000	4.30	147.128	0.90	1082.339	0.00
0.059	0.00	0.431	0.49	3.170	2.32	23.318	4.67	171.539	0.69	1261.915	0.00
0.068	0.00	0.502	0.73	3.696	2.35	27.187	4.88	200.000	0.54	1471.285	0.00
0.080	0.00	0.586	0.94	4.309	2.34	31.698	4.91	233.183	0.45	1715.392	0.00
0.093	0.00	0.683	1.09	5.024	2.30	36.957	4.73	271.871	0.39	2000.000	0.00
0.108	0.00	0.796	1.19	5.857	2.25	43.089	4.39	316.979	0.37		
0.126	0.00	0.928	1.24	6.829	2.23	50.238	3.92	369.570	0.34		
0.147	0.00	1.082	1.28	7.962	2.23	58.573		430.887			



Result : Analysis Report

Attached page 22

Sample Details

Sample ID : MAWG-1C2_1

Measured : Monday, May 1, 2023 16:08:53

Sample File : C:\Users\001827\Desktop\501a\Technical service\Tetra
Tech\066\MTEC0851_66_51sam\MTEC0851_66_51sam_Tetrattech

Analysed : Monday, May 1, 2023 16:08:54

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

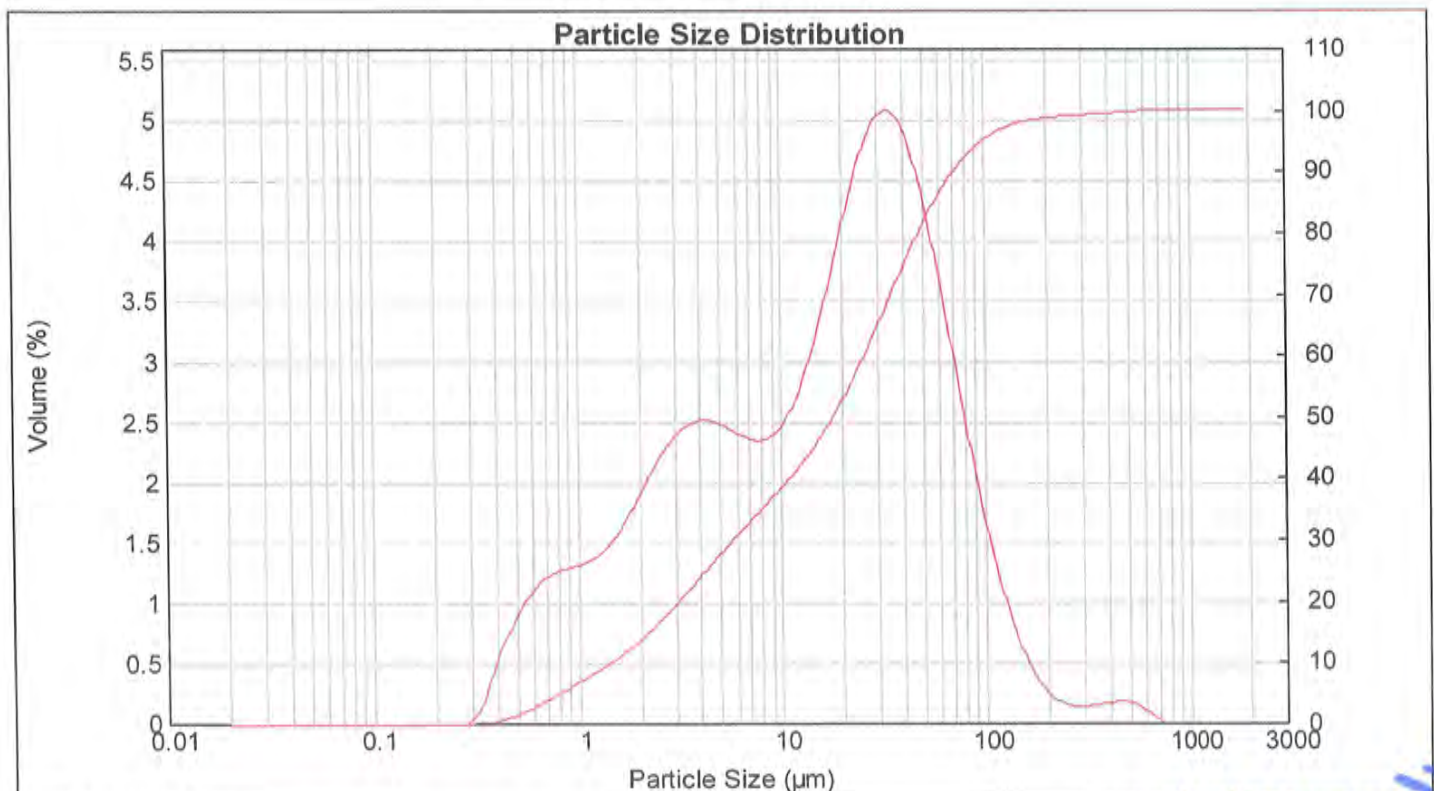
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.92 Residual (%) : 0.373
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0151 %Vol Specific Surface Area : 1.43 m²/g
Mean Diameters : D (0.1) : 1.45 um D (0.5) : 18.1 um D (0.9) : 71.72 um
D [4,3] : 31.91 um D [3,2] : 4.19 um Span : 3.883 Uniformity : 1.43

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.062	1.36	7.962	2.37	58.573	3.51	430.887	0.18
0.023	0.00	0.172	0.00	1.262	1.44	9.283	2.47	68.291	2.87	502.377	0.16
0.027	0.00	0.200	0.00	1.471	1.59	10.823	2.67	79.621	2.26	585.729	0.09
0.032	0.00	0.233	0.00	1.715	1.78	12.619	2.99	92.832	1.70	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.99	14.713	3.41	108.234	1.22	796.214	0.00
0.043	0.00	0.317	0.01	2.332	2.19	17.154	3.88	126.191	0.82	928.318	0.00
0.050	0.00	0.370	0.16	2.719	2.36	20.000	4.36	147.128	0.53	1082.339	0.00
0.059	0.00	0.431	0.51	3.170	2.47	23.318	4.76	171.539	0.33	1261.915	0.00
0.068	0.00	0.502	0.76	3.696	2.52	27.187	5.03	200.000	0.21	1471.285	0.00
0.080	0.00	0.586	0.98	4.309	2.51	31.698	5.10	233.183	0.15	1715.392	0.00
0.093	0.00	0.683	1.23	5.024	2.40	36.957	4.96	271.871	0.14	2000.000	0.00
0.108	0.00	0.796	1.28	5.857	2.36	43.089	4.11	316.979	0.15		
0.126	0.00	0.928	1.31	6.829		50.238		369.570	0.17		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 23

Sample Details

Sample ID : MAWG-1C2_2

Measured : Monday, May 1, 2023 16:10:12

Sample File : C:\Users\001827\Desktop\ISO\Technical service\Tetra
tech\066\MTEC0950_66_1_51sam\MTEC0950_66_1_51sam_Tetratach

Analysed : Monday, May 1, 2023 16:10:14

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

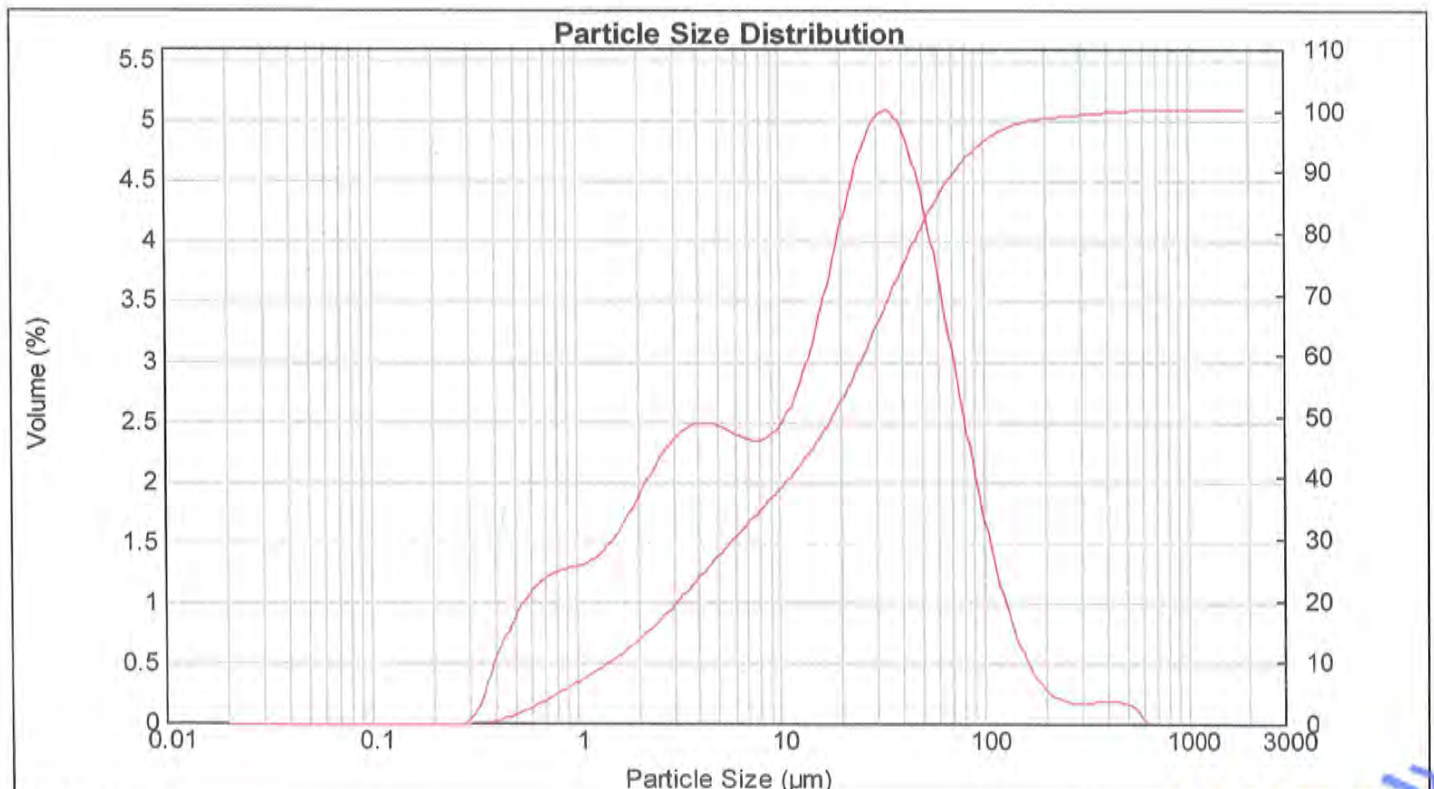
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.67 Residual (%) : 0.372
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0150 %Vol Specific Surface Area : 1.42 m²/g
Mean Diameters : D (0.1) : 1.46 um D (0.5) : 18.31 um D (0.9) : 72.65 um
D [4,3] : 31.95 um D [3,2] : 4.23 um Span : 3.888 Uniformity : 1.41

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.35	7.962	2.37	58.573	3.52	430.887	0.18
0.023	0.00	0.172	0.00	1.262	1.43	9.283	2.47	68.291	2.90	502.377	0.14
0.027	0.00	0.200	0.00	1.471	1.57	10.823	2.68	79.621	2.29	585.729	0.01
0.032	0.00	0.233	0.00	1.715	1.75	12.619	3.00	92.832	1.74	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.96	14.713	3.42	108.234	1.25	796.214	0.00
0.043	0.00	0.317	0.01	2.332	2.16	17.154	3.89	126.191	0.85	928.318	0.00
0.050	0.00	0.370	0.15	2.719	2.33	20.000	4.37	147.128	0.56	1082.339	0.00
0.059	0.00	0.431	0.75	3.170	2.44	23.318	4.77	171.539	0.36	1261.915	0.00
0.068	0.00	0.502	0.97	3.696	2.49	27.187	5.03	200.000	0.24	1471.285	0.00
0.080	0.00	0.586	1.12	4.309	2.45	31.698	5.10	233.183	0.17	1715.392	0.00
0.093	0.00	0.683	1.22	5.024	2.39	36.957	4.61	271.871	0.18	2000.000	0.00
0.108	0.00	0.796	1.27	5.857	2.35	43.089	4.11	316.979	0.18		
0.126	0.00	0.928	1.30	6.829		50.238		369.570	0.18		
0.147	0.00	1.082		7.962		58.573		430.887	0.18		



Result : Analysis Report

Attached page 24

Sample Details

Sample ID : MAWG-1C2_3

Measured : Monday, May 1, 2023 16:12:03

Sample File : C:\Users\001827\Desktop\501a\Technical service\Tetra
tech\066\MTEC0859_66_1_51sam\MTEC0859_66_51sam_Tetra

Analysed : Monday, May 1, 2023 16:12:05

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

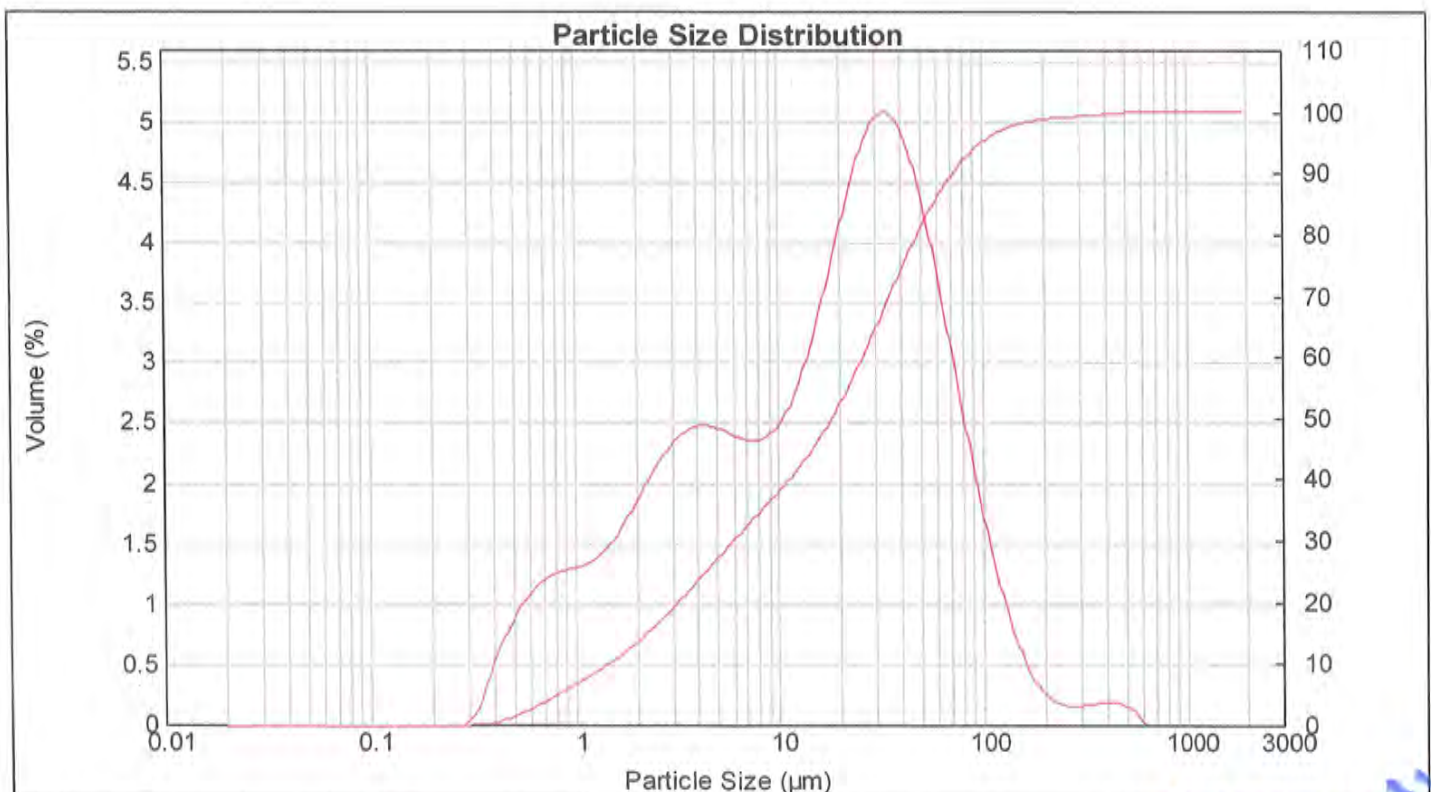
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.46 Residual (%) : 0.377
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0149 %Vol Specific Surface Area : 1.41 m²/g
Mean Diameters : D (0.1) : 1.46 um D (0.5) : 18.39 um D (0.9) : 72.68 um
D [4,3] : 31.82 um D [3,2] : 4.24 um Span : 3.872 Uniformity : 1.39

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.34	7.962	2.38	58.573	3.57	430.887	0.18
0.023	0.00	0.172	0.00	1.262	1.42	9.283	2.48	68.291	2.95	502.377	0.12
0.027	0.00	0.200	0.00	1.471	1.42	10.823	2.48	79.621	2.95	585.729	0.01
0.032	0.00	0.233	0.00	1.715	1.55	12.619	2.69	92.832	2.34	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.74	14.713	3.01	108.234	1.77	796.214	0.00
0.043	0.00	0.317	0.01	2.332	1.94	17.154	3.42	126.191	1.27	928.318	0.00
0.050	0.00	0.370	0.15	2.719	2.14	20.000	3.89	147.128	0.86	1082.339	0.00
0.059	0.00	0.431	0.50	3.170	2.30	23.318	4.36	171.539	0.55	1261.915	0.00
0.068	0.00	0.502	0.75	3.696	2.42	27.187	4.76	200.000	0.34	1471.285	0.00
0.080	0.00	0.586	0.97	4.309	2.48	31.698	5.02	233.183	0.22	1715.392	0.00
0.093	0.00	0.683	1.12	5.024	2.48	36.957	5.10	271.871	0.17	2000.000	0.00
0.108	0.00	0.796	1.22	5.857	2.44	43.089	4.96	316.979	0.16		
0.126	0.00	0.928	1.27	6.829	2.39	50.238	4.63	369.570	0.17		
0.147	0.00	1.082	1.30	7.962	2.36	58.573	4.15	430.887	0.19		



Result : Analysis Report

Attached page 25

Sample Details

Sample ID : MAWG-1C3_1

Measured : Monday, May 1, 2023 16:22:30

Sample File : C:\Users\001827\Desktop\501a\Technical service\Tetra
tech\066\MTEC0859_66_1_51sam\MTEC0859_66_51sam_Tetratech

Analysed : Monday, May 1, 2023 16:22:32

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

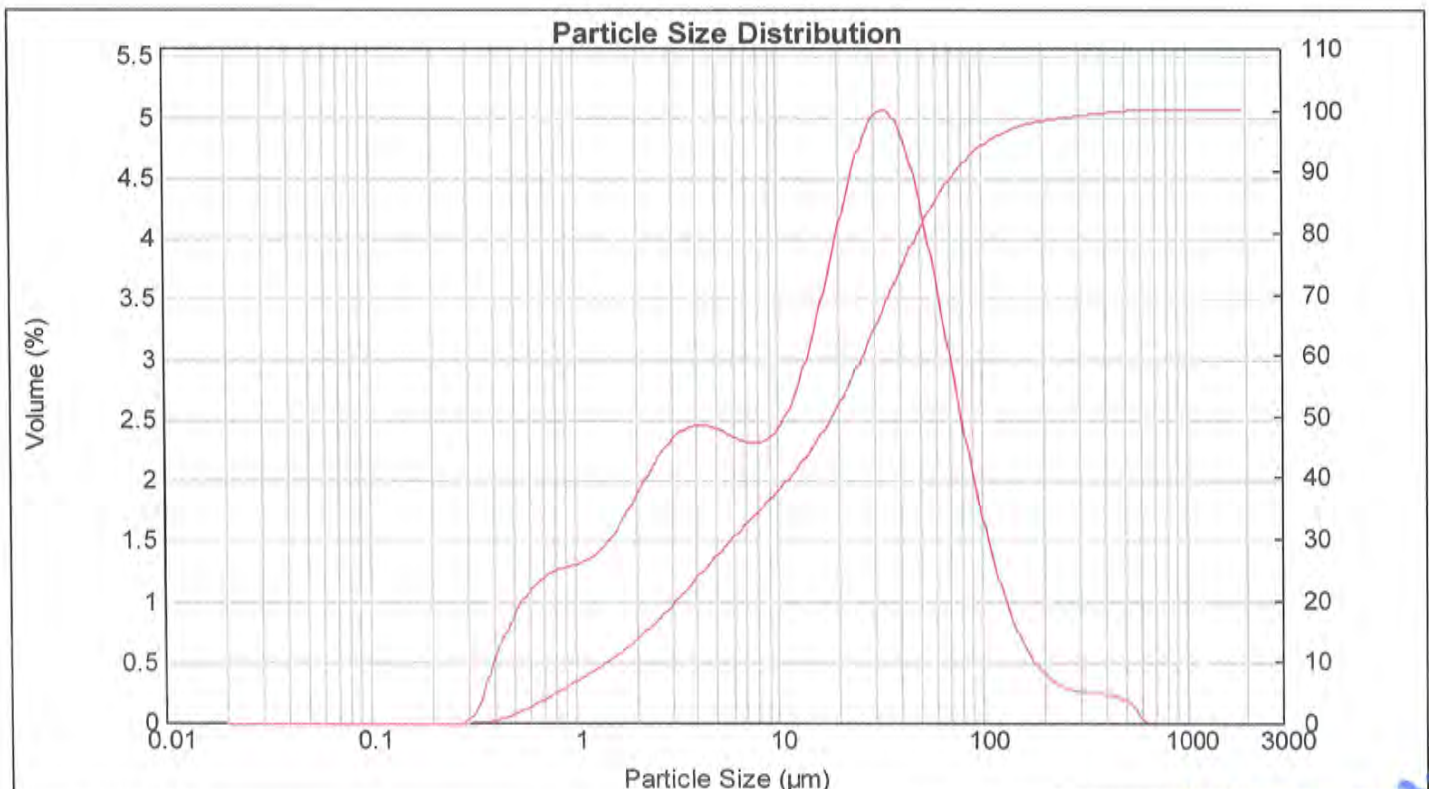
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.96 Residual (%) : 0.403
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0153 %Vol Specific Surface Area : 1.41 m²/g
Mean Diameters : D (0.1) : 1.46 um D (0.5) : 18.66 um D (0.9) : 75.85 um
D [4,3] : 33.81 um D [3,2] : 4.26 um Span : 3.986 Uniformity : 1.48

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.35	7.962	2.33	58.573	3.47	430.887	0.21
0.023	0.00	0.172	0.00	1.262	1.43	9.283	2.43	68.291	2.86	502.377	0.15
0.027	0.00	0.200	0.00	1.471	1.57	10.823	2.64	79.621	2.27	585.729	0.01
0.032	0.00	0.233	0.00	1.715	1.76	12.619	2.95	92.832	1.74	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.96	14.713	3.37	108.234	1.29	796.214	0.00
0.043	0.00	0.317	0.14	2.332	2.16	17.154	3.85	126.191	0.93	928.318	0.00
0.050	0.00	0.370	0.49	2.719	2.31	20.000	4.33	147.128	0.66	1082.339	0.00
0.059	0.00	0.431	0.74	3.170	2.41	23.318	4.74	171.539	0.48	1261.915	0.00
0.068	0.00	0.502	0.97	3.696	2.46	27.187	5.00	200.000	0.36	1471.285	0.00
0.080	0.00	0.586	1.12	4.309	2.45	31.698	5.07	233.183	0.26	1715.362	0.00
0.093	0.00	0.683	1.22	5.024	2.41	36.957	4.93	271.871	0.25	2000.000	0.00
0.108	0.00	0.796	1.27	5.857	2.35	43.089	4.57	316.979	0.25		
0.126	0.00	0.928	1.31	6.829	2.31	50.238	4.07	369.570	0.24		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 26

Sample Details

Sample ID : MAWG-1C3_2

Measured : Monday, May 1, 2023 16:23:33

Sample File : C:\Users\001827\Desktop\501a\Technical service\Tetra
tech\066\MTEC0059_66_1_51sam\MTEC0059_66_51sam_Tetrat

Analysed : Monday, May 1, 2023 16:23:35

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

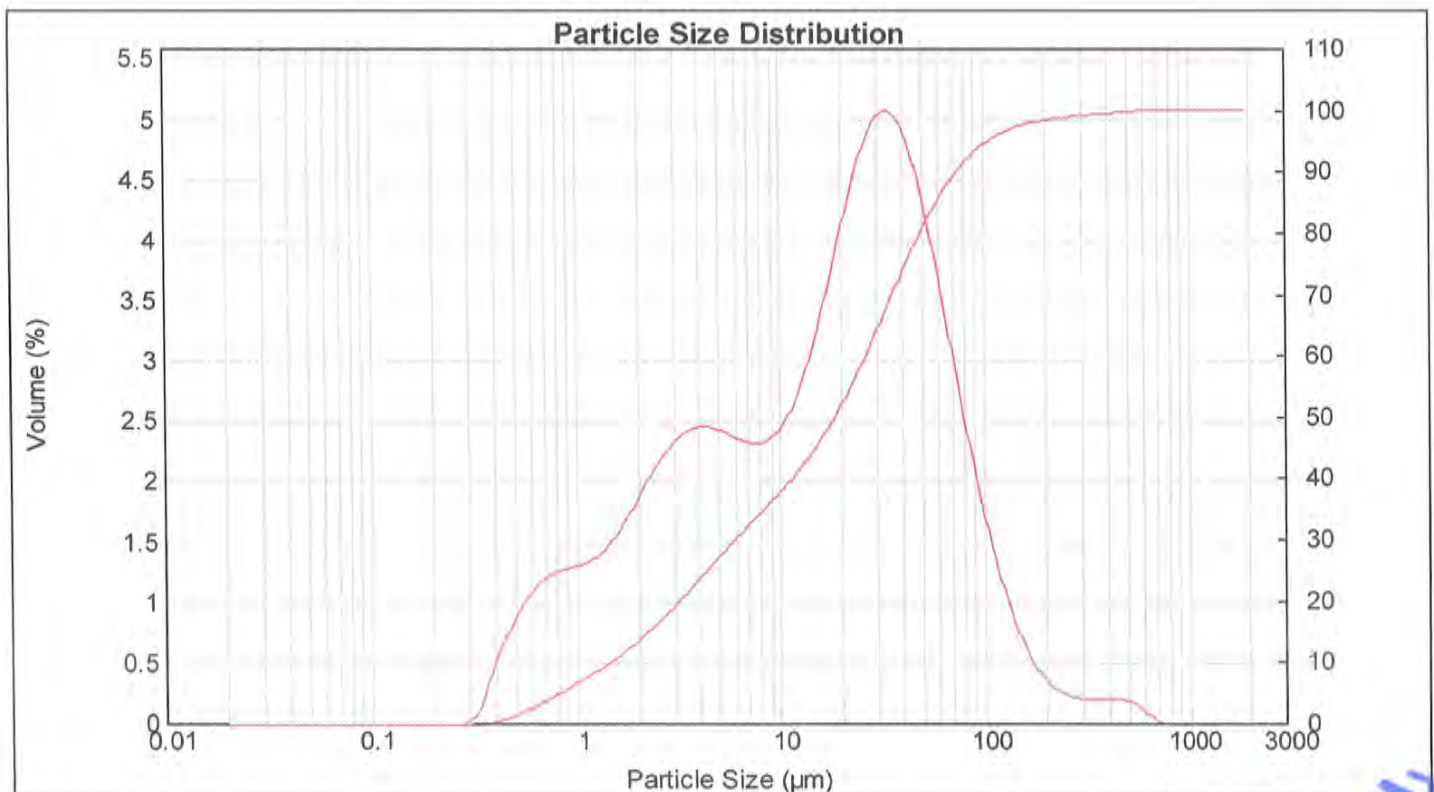
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.66 Residual (%) : 0.393
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0150 %Vol Specific Surface Area : 1.41 m²/g
Mean Diameters : D (0.1) : 1.47 um D (0.5) : 18.6 um D (0.9) : 74.75 um
D [4,3] : 33.42 um D [3,2] : 4.26 um Span : 3.939 Uniformity : 1.46

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.35	7.962	2.35	58.573	3.51	430.887	0.20
0.023	0.00	0.172	0.00	1.262	1.43	9.283	2.45	68.291	2.88	502.377	0.16
0.027	0.00	0.200	0.00	1.471	1.57	10.823	2.65	79.621	2.29	585.729	0.08
0.032	0.00	0.233	0.00	1.715	1.75	12.619	2.97	92.832	1.75	682.910	0.00
0.037	0.00	0.272	0.01	2.000	1.96	14.713	3.38	108.234	1.29	796.214	0.00
0.043	0.00	0.317	0.01	2.332	2.15	17.154	3.86	126.191	0.91	928.318	0.00
0.050	0.00	0.370	0.14	2.719	2.31	20.000	4.33	147.128	0.63	1082.339	0.00
0.059	0.00	0.431	0.49	3.170	2.41	23.318	4.74	171.539	0.43	1261.915	0.00
0.068	0.00	0.502	0.96	3.696	2.46	27.187	5.01	200.000	0.31	1471.285	0.00
0.080	0.00	0.586	1.12	4.309	2.46	31.698	5.09	233.183	0.24	1715.392	0.00
0.093	0.00	0.683	1.22	5.024	2.42	36.957	4.95	271.871	0.21	2000.000	0.00
0.108	0.00	0.796	1.27	5.857	2.36	43.089	4.61	316.979	0.20		
0.126	0.00	0.928	1.30	6.829	2.33	50.238	4.10	369.570	0.21		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 27

Sample Details

Sample ID : MAWG-1C3_3

Measured : Monday, May 1, 2023 16:24:36

Sample File : C:\Users\001827\Desktop\ISO'a\Technical service\Tetra
tech\066\MTEC0950_66_1_51nm\MTEC0950_66_51nm_TetraTech

Analysed : Monday, May 1, 2023 16:24:38

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

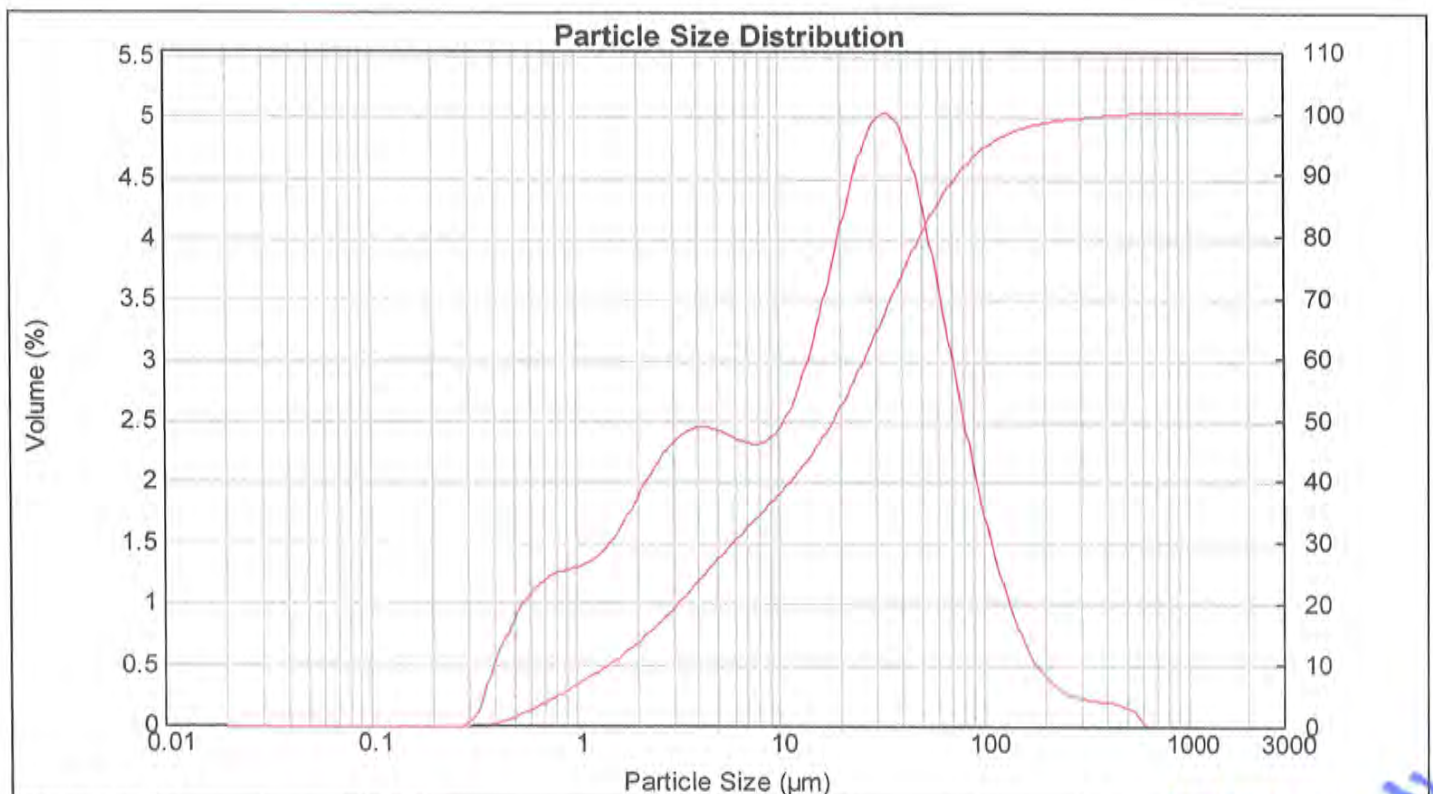
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.47 Residual (%) : 0.384
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0149 %Vol Specific Surface Area : 1.41 m²/g
Mean Diameters : D (0.1) : 1.47 um D (0.5) : 18.61 um D (0.9) : 75.92 um
D [4,3] : 33.31 um D [3,2] : 4.26 um Span : 4.001 Uniformity : 1.46

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.35	7.962	2.35	58.573	3.48	430.887	0.18
0.023	0.00	0.172	0.00	1.262	1.43	9.283	2.45	68.291	2.88	502.377	0.13
0.027	0.00	0.200	0.00	1.471	1.43	10.823	2.45	79.621	2.88	585.729	0.01
0.032	0.00	0.233	0.00	1.715	1.57	12.619	2.65	92.832	2.30	682.910	0.00
0.037	0.00	0.272	0.00	2.000	1.75	14.713	2.97	108.234	1.78	796.214	0.00
0.043	0.00	0.317	0.01	2.332	1.93	17.154	3.38	126.191	1.34	928.318	0.00
0.050	0.00	0.370	0.14	2.719	2.15	20.000	3.85	147.128	0.97	1082.339	0.00
0.059	0.00	0.431	0.49	3.170	2.31	23.318	4.32	171.539	0.69	1261.915	0.00
0.068	0.00	0.502	0.74	3.695	2.42	27.187	4.72	200.000	0.49	1471.285	0.00
0.080	0.00	0.586	0.96	4.309	2.46	31.698	4.98	233.183	0.36	1715.392	0.00
0.093	0.00	0.683	1.12	5.024	2.46	36.957	5.05	271.871	0.28	2000.000	0.00
0.108	0.00	0.796	1.22	5.857	2.42	43.089	4.91	316.979	0.24		
0.126	0.00	0.928	1.27	6.829	2.36	50.238	4.56	369.570	0.21		
0.147	0.00	1.082	1.30	7.962	2.33	58.573	4.06	430.887	0.20		



Result : Analysis Report

Attached page 28

Sample Details

Sample ID : MAWG-1D1_1

Measured : Monday, May 1, 2023 16:35:48

Sample File : C:\Users\001827\Desktop\501a\Technical service\Tetra
tech\066\MTEC0950_66_1_51sam\MTEC0950_66_51sam_Tetrat

Analysed : Monday, May 1, 2023 16:35:50

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

System Details

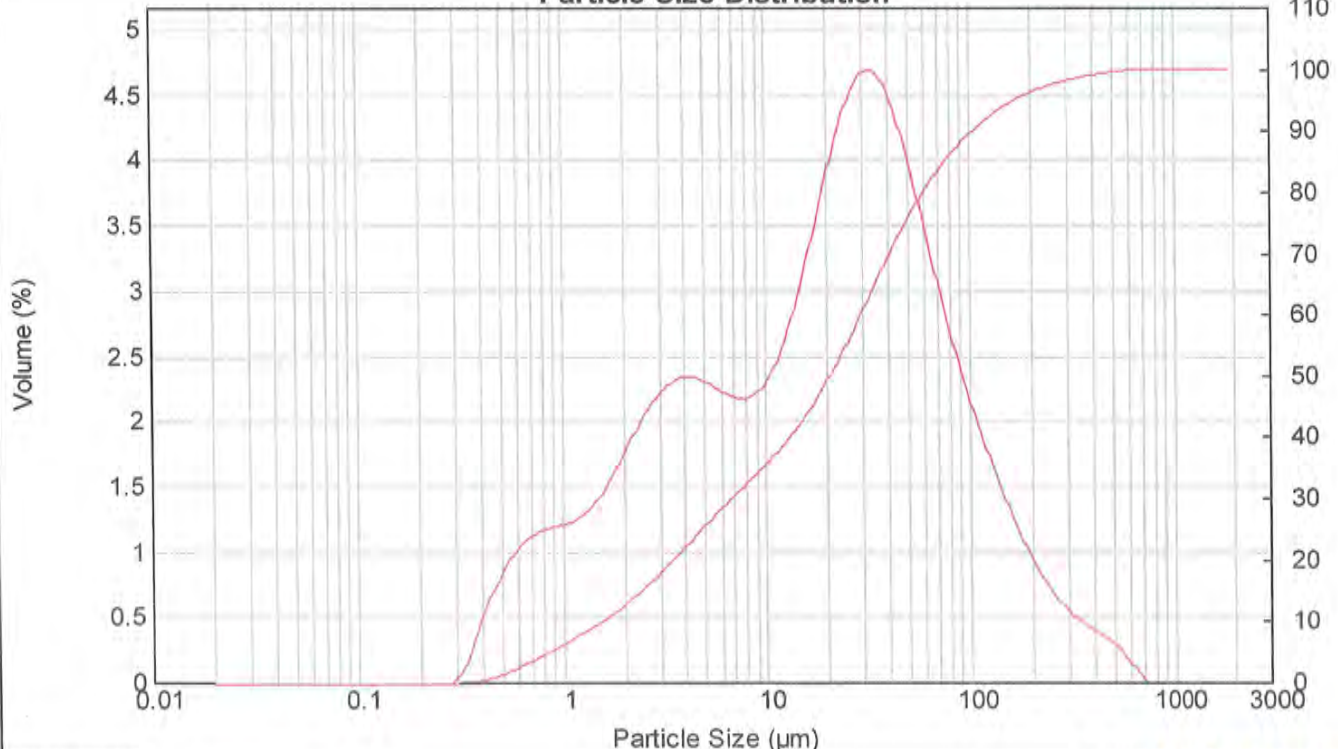
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 20.15 Residual (%) : 0.376
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0164 %Vol Specific Surface Area : 1.33 m²/g
Mean Diameters : D (0.1) : 1.56 um D (0.5) : 20.79 um D (0.9) : 104.19 um
D [4,3] : 43.36 um D [3,2] : 4.5 um Span : 4.937 Uniformity : 1.75

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.25	7.962	2.20	58.573	3.36	430.887	0.34
0.023	0.00	0.172	0.00	1.262	1.33	9.283	2.30	68.291	2.93	502.377	0.25
0.027	0.00	0.200	0.00	1.471	1.46	10.823	2.51	79.621	2.53	585.729	0.12
0.032	0.00	0.233	0.00	1.715	1.64	12.619	2.83	92.832	2.17	682.910	0.01
0.037	0.00	0.272	0.01	2.000	1.84	14.713	3.23	108.234	1.85	796.214	0.00
0.043	0.00	0.317	0.01	2.332	2.03	17.154	3.67	126.191	1.29	928.318	0.00
0.050	0.00	0.370	0.16	2.719	2.19	20.000	4.11	147.128	1.06	1082.339	0.00
0.059	0.00	0.431	0.48	3.170	2.30	23.318	4.46	171.539	0.86	1261.915	0.00
0.068	0.00	0.502	0.91	3.696	2.34	27.187	4.67	200.000	0.70	1471.285	0.00
0.080	0.00	0.586	1.05	4.309	2.28	31.698	4.54	233.183	0.48	1715.392	0.00
0.093	0.00	0.683	1.14	5.024	2.22	36.957	4.23	271.871	0.41	2000.000	0.00
0.108	0.00	0.796	1.18	5.857	2.18	43.089	3.82	316.979			
0.126	0.00	0.928	1.21	6.829		50.238		369.570			
0.147	0.00	1.082		7.962		58.573		430.887			

Particle Size Distribution



Result : Analysis Report

Attached page 29

Sample Details

Sample ID : MAWG-1D1_2

Measured : Monday, May 1, 2023 16:36:36

Sample File : C:\Users\001827\Desktop\501a\Technical service\Tetra
table\MTEC0859_66_151sam\MTEC0859_66_151sam_Tetrattech

Analysed : Monday, May 1, 2023 16:36:38

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

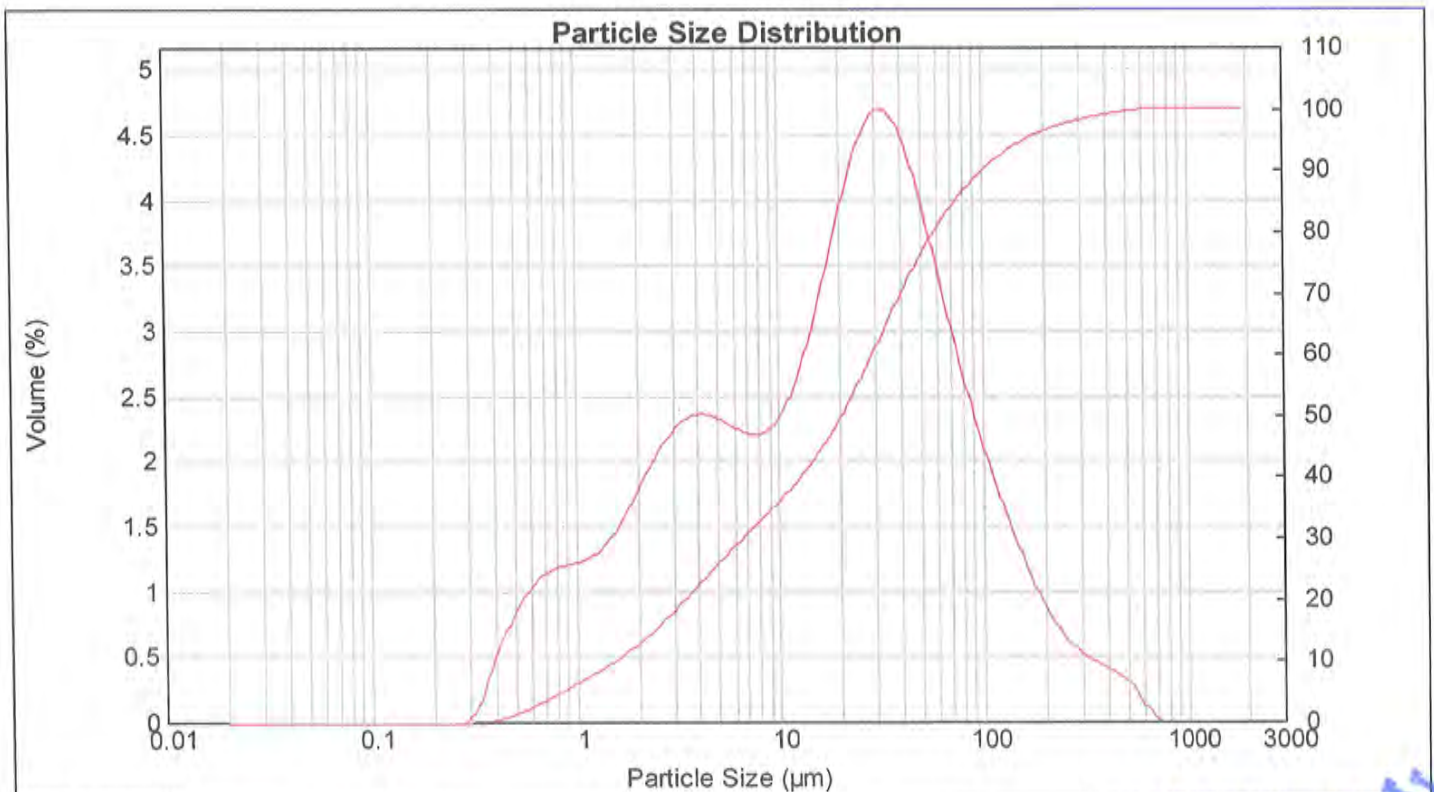
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.91 Residual (%) : 0.405
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0160 %Vol Specific Surface Area : 1.35 m²/g
Mean Diameters : D (0.1) : 1.55 um D (0.5) : 20.36 um D (0.9) : 101.35 um
D [4,3] : 42.6 um D [3,2] : 4.45 um Span : 4.902 Uniformity : 1.76

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.26	7.962	2.23	58.573	3.33	430.887	0.35
0.023	0.00	0.172	0.00	1.262	1.34	9.283	2.34	68.291	2.89	502.377	0.26
0.027	0.00	0.200	0.00	1.471	1.47	10.823	2.55	79.621	2.49	595.729	0.10
0.032	0.00	0.233	0.00	1.715	1.66	12.619	2.86	92.832	2.13	682.910	0.01
0.037	0.00	0.272	0.02	2.000	1.86	14.713	3.26	108.234	1.80	796.214	0.00
0.043	0.00	0.317	0.16	2.332	2.05	17.154	4.13	126.191	1.23	928.318	0.00
0.050	0.00	0.370	0.49	2.719	2.21	20.000	4.71	147.128	0.99	1082.339	0.00
0.059	0.00	0.431	0.72	3.170	2.32	23.318	4.48	171.539	0.80	1261.915	0.00
0.068	0.00	0.502	0.92	3.696	2.36	27.187	4.67	200.000	0.65	1471.285	0.00
0.080	0.00	0.586	1.06	4.309	2.31	31.698	4.52	233.183	0.47	1715.392	0.00
0.093	0.00	0.683	1.15	5.024	2.25	36.957	4.20	271.871	0.42	2000.000	0.00
0.108	0.00	0.796	1.20	5.857	2.21	43.089	3.79	316.979			
0.126	0.00	0.928	1.22	6.829		50.238		369.570			
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 30

Sample Details

Sample ID : MAWG-1D1_3

Measured : Monday, May 1, 2023 16:39:15

Sample File : C:\Users\001827\Desktop\501a\Technical service\Tetra
tech\006\MTEC0859_66_1_51nm\MTEC0859_66_51nm_Tetrat

Analysed : Monday, May 1, 2023 16:39:17

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

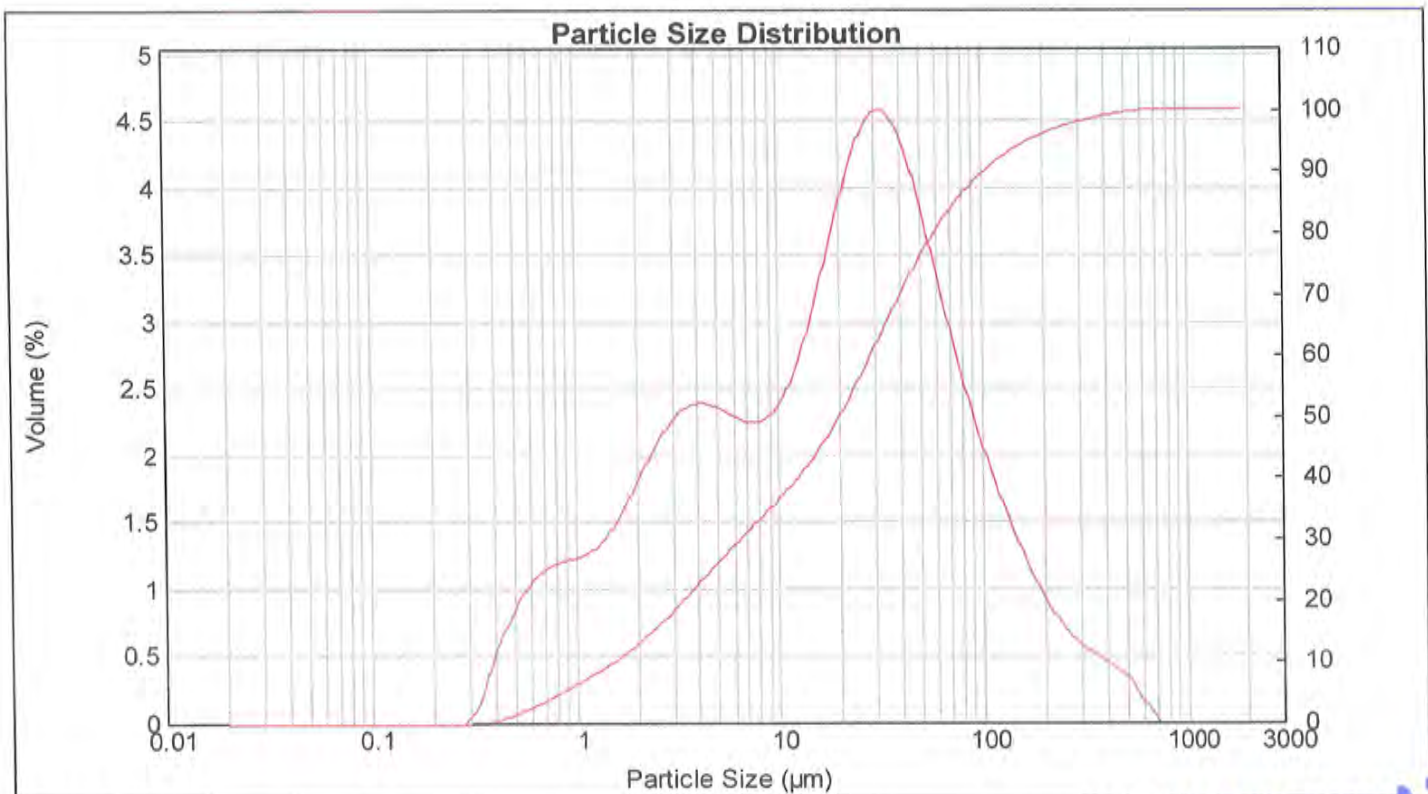
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.49 Residual (%) : 0.392
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0155 %Vol Specific Surface Area : 1.36 m²/g
Mean Diameters : D (0.1) : 1.53 um D (0.5) : 19.94 um D (0.9) : 104.7 um
D [4,3] : 43.64 um D [3,2] : 4.41 um Span : 5.173 Uniformity : 1.85

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.062	1.27	7.962	2.27	58.573	3.24	430.887	0.39
0.023	0.00	0.172	0.00	1.262	1.35	9.283	2.38	68.291	2.82	502.377	0.29
0.027	0.00	0.200	0.00	1.471	1.49	10.823	2.58	79.621	2.43	585.729	0.13
0.032	0.00	0.233	0.00	1.715	1.68	12.619	2.89	92.832	2.09	682.910	0.01
0.037	0.00	0.272	0.02	2.000	1.88	14.713	3.27	108.234	1.78	796.214	0.00
0.043	0.00	0.317	0.16	2.332	2.08	17.154	3.69	126.191	1.51	928.318	0.00
0.050	0.00	0.370	0.49	2.719	2.24	20.000	4.08	147.128	1.26	1082.339	0.00
0.059	0.00	0.431	0.72	3.170	2.35	23.318	4.39	171.539	1.04	1261.915	0.00
0.068	0.00	0.502	0.93	3.696	2.39	27.187	4.57	200.000	0.85	1471.285	0.00
0.080	0.00	0.586	1.07	4.309	2.39	31.698	4.40	233.183	0.71	1715.392	0.00
0.093	0.00	0.683	1.16	5.024	2.34	36.957	4.08	271.871	0.53	2000.000	0.00
0.108	0.00	0.796	1.21	5.857	2.29	43.089	3.68	316.979	0.47		
0.126	0.00	0.928	1.23	6.829	2.25	50.238		369.570			
0.147	0.00	1.062		7.962		58.573		430.887			



Result : Analysis Report

Attached page 31

Sample Details

Sample ID : MAWG-1D2_1

Measured : Monday, May 1, 2023 16:49:45

Sample File : C:\Users\001827\Desktop\ISO\Technical service\Tetra
tech\001MTEC0850 66 1 51nm\1MTEC0850 66 51nm Tetra

Analysed : Monday, May 1, 2023 16:49:47

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

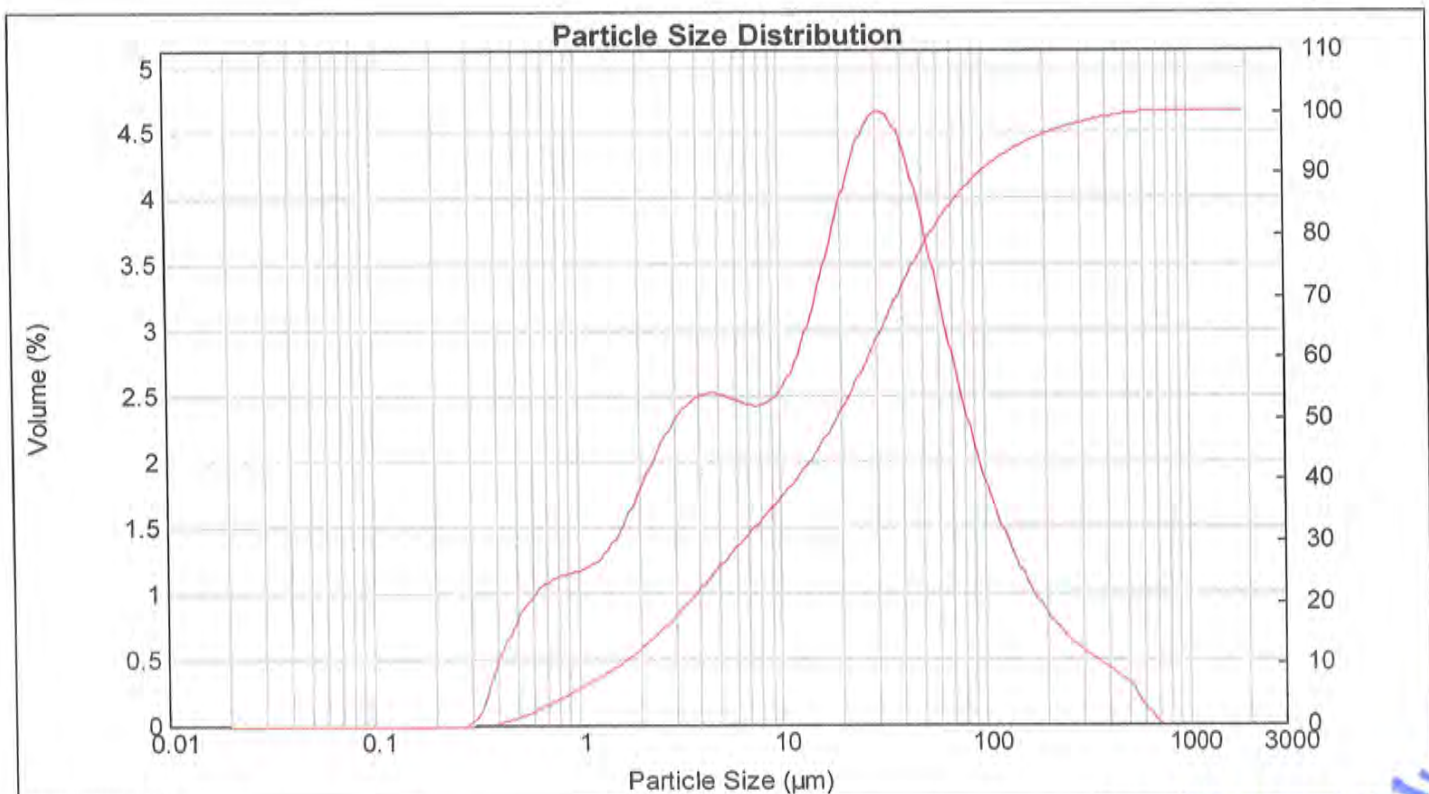
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.77 Residual (%) : 0.390
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0160 %Vol Specific Surface Area : 1.32 m²/g
Mean Diameters : D (0.1) : 1.63 um D (0.5) : 19.13 um D (0.9) : 97.45 um
D [4,3] : 41.67 um D [3,2] : 4.55 um Span : 5.010 Uniformity : 1.84

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.21	7.962	2.45	58.573	3.15	430.887	0.36
0.023	0.00	0.172	0.00	1.262	1.30	9.283	2.54	68.291	2.68	502.377	0.27
0.027	0.00	0.200	0.00	1.471	1.30	10.823	2.73	79.621	2.26	585.729	0.11
0.032	0.00	0.233	0.00	1.715	1.64	12.619	3.01	92.832	1.90	682.910	0.01
0.037	0.00	0.272	0.01	2.000	1.86	14.713	3.38	108.234	1.59	796.214	0.00
0.043	0.00	0.317	0.13	2.332	2.09	17.154	3.79	126.191	1.33	926.318	0.00
0.050	0.00	0.370	0.45	2.719	2.28	20.000	4.18	147.128	1.12	1062.339	0.00
0.059	0.00	0.431	0.67	3.170	2.42	23.318	4.49	171.539	0.94	1261.915	0.00
0.068	0.00	0.502	0.87	3.696	2.50	27.187	4.65	200.000	0.80	1471.285	0.00
0.080	0.00	0.586	1.01	4.309	2.53	31.698	4.64	233.183	0.68	1715.392	0.00
0.093	0.00	0.683	1.10	5.024	2.51	36.957	4.44	271.871	0.59	2000.000	0.00
0.108	0.00	0.796	1.14	5.857	2.47	43.089	4.09	316.979	0.51		
0.126	0.00	0.928	1.17	6.829	2.44	50.238	3.64	369.570	0.44		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 32

Sample Details

Sample ID : MAWG-1D2_2

Measured : Monday, May 1, 2023 16:52:24

Sample File : C:\Users\001827\Desktop\50'ã\Technical service\Tetra
tech\065\MTEC0950_66_1_51sam\MTEC0950_66_51sam_Tetrat

Analysed : Monday, May 1, 2023 16:52:25

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

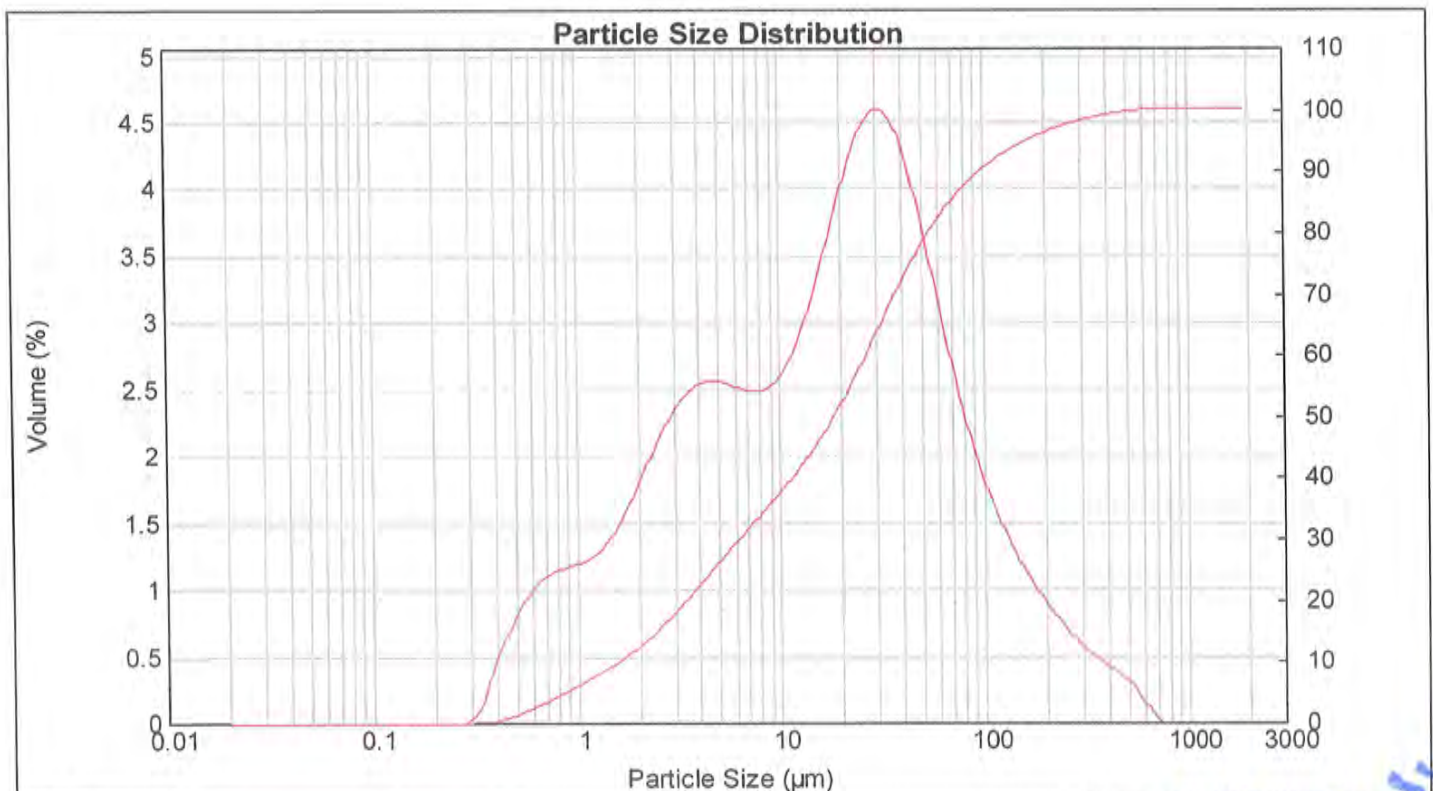
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.35 Residual (%) : 0.385
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0154 %Vol Specific Surface Area : 1.34 m²/g
Mean Diameters : D (0.1) : 1.6 um D (0.5) : 18.51 um D (0.9) : 97.74 um
D [4,3] : 41.32 um D [3,2] : 4.48 um Span : 5.194 Uniformity : 1.89

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.24	7.962	2.51	58.573	3.03	430.887	0.35
0.023	0.00	0.172	0.00	1.262	1.32	9.283	2.60	68.291	2.57	502.377	0.26
0.027	0.00	0.200	0.00	1.471	1.32	10.823	2.78	79.621	2.17	585.729	0.11
0.032	0.00	0.233	0.00	1.715	1.67	12.619	3.06	92.832	1.83	682.910	0.01
0.037	0.00	0.272	0.01	2.000	1.89	14.713	3.41	108.234	1.56	796.214	0.00
0.043	0.00	0.317	0.13	2.332	2.11	17.154	3.80	126.191	1.33	928.318	0.00
0.050	0.00	0.370	0.45	2.719	2.31	20.000	4.17	147.128	1.15	1082.339	0.00
0.059	0.00	0.431	0.68	3.170	2.45	23.318	4.46	171.539	0.98	1261.915	0.00
0.068	0.00	0.502	0.89	3.696	2.54	27.187	4.60	200.000	0.84	1471.285	0.00
0.080	0.00	0.586	1.03	4.309	2.57	31.698	4.55	233.183	0.70	1715.362	0.00
0.093	0.00	0.683	1.12	5.024	2.56	36.957	4.34	271.871	0.59	2000.000	0.00
0.108	0.00	0.796	1.16	5.857	2.52	43.089	3.96	316.979	0.50		
0.126	0.00	0.928	1.19	6.829	2.49	50.238	3.52	369.570	0.43		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 33

Sample Details

Sample ID : MAWG-1D2_3

Measured : Monday, May 1, 2023 16:58:00

Sample File : C:\Users\001827\Desktop\501a\Technical service\Tetra
tech\066\MTEC0850_55_1_51cm\MTEC0850_55_51cm_Tetra

Analysed : Monday, May 1, 2023 16:58:01

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

System Details

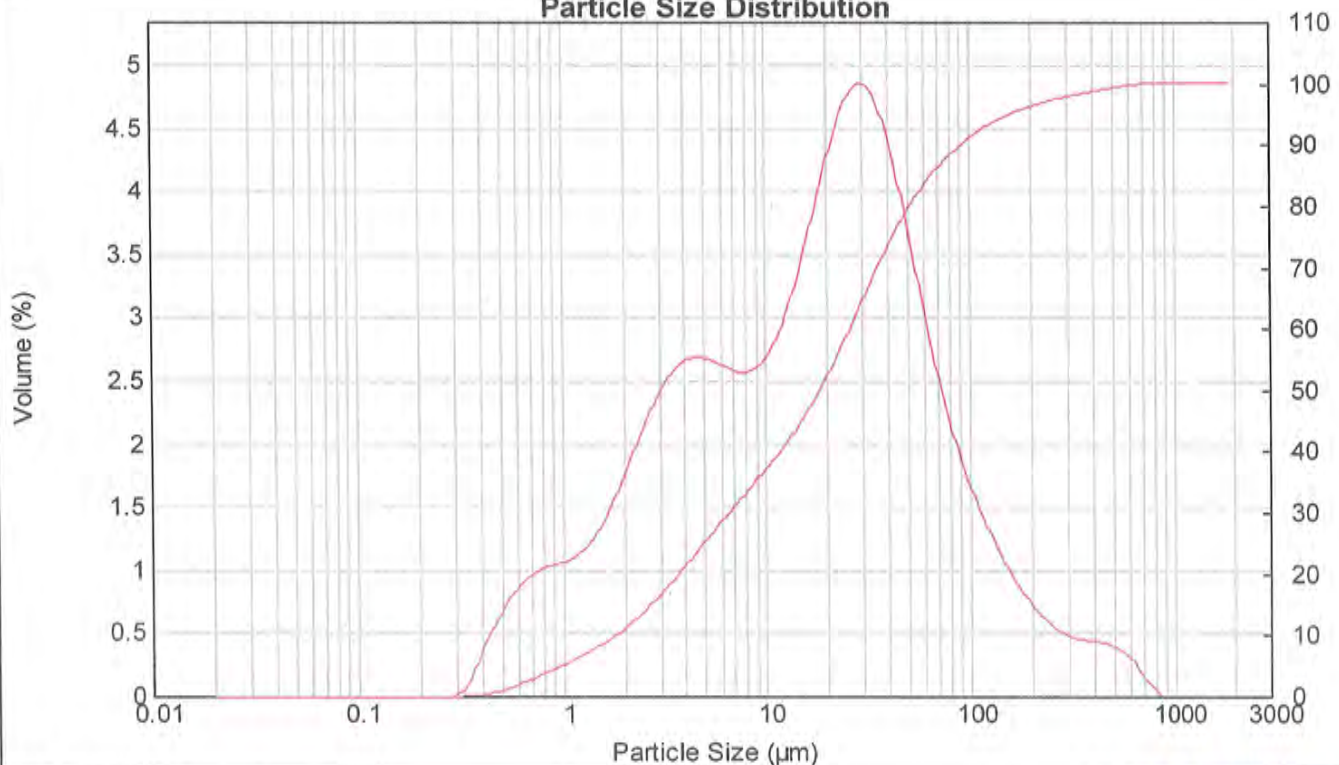
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 18.90 Residual (%) : 0.784
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0158 %Vol Specific Surface Area : 1.24 m²/g
Mean Diameters : D (0.1) : 1.82 um D (0.5) : 18.47 um D (0.9) : 91.61 um
D [4,3] : 41.87 um D [3,2] : 4.85 um Span : 4.861 Uniformity : 1.91

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.062	1.11	7.962	2.59	58.573	2.90	430.887	0.41
0.023	0.00	0.172	0.00	1.262	1.21	9.283	2.69	68.291	2.41	502.377	0.36
0.027	0.00	0.200	0.00	1.471	1.37	10.823	2.88	79.621	2.01	585.729	0.27
0.032	0.00	0.233	0.00	1.715	1.60	12.619	3.19	92.832	1.68	682.910	0.12
0.037	0.00	0.272	0.00	2.000	1.87	14.713	3.59	108.234	1.41	796.214	0.01
0.043	0.00	0.317	0.00	2.332	2.13	17.154	4.03	126.191	1.18	928.318	0.00
0.050	0.00	0.370	0.09	2.719	2.37	20.000	4.44	147.128	0.98	1082.339	0.00
0.059	0.00	0.431	0.34	3.170	2.55	23.318	4.74	171.539	0.81	1261.915	0.00
0.068	0.00	0.502	0.55	3.696	2.70	27.187	4.86	200.000	0.67	1471.285	0.00
0.080	0.00	0.586	0.75	4.309	2.62	31.698	3.99	233.183	0.45	1715.392	0.00
0.093	0.00	0.683	0.89	5.024	2.58	36.957	3.44	271.871	0.44	2000.000	0.00
0.108	0.00	0.796	0.98	5.857		43.089		316.979			
0.126	0.00	0.928	1.03	6.829		50.238		369.570			
0.147	0.00	1.062	1.07	7.962		58.573		430.887			

Particle Size Distribution



Result : Analysis Report

Attached page 34

Sample Details

Sample ID : MAWG-1D3_1

Measured : Monday, May 1, 2023 17:11:18

Sample File : C:\Users\001827\Desktop\501a\Technical service\Tetra
tech\066\MTEC0950_66_1_51sam\MTEC0950_66_51sam_Tetrat

Analysed : Monday, May 1, 2023 17:11:20

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic batch before
analysis and stirring at 2000 rpm during measurement.

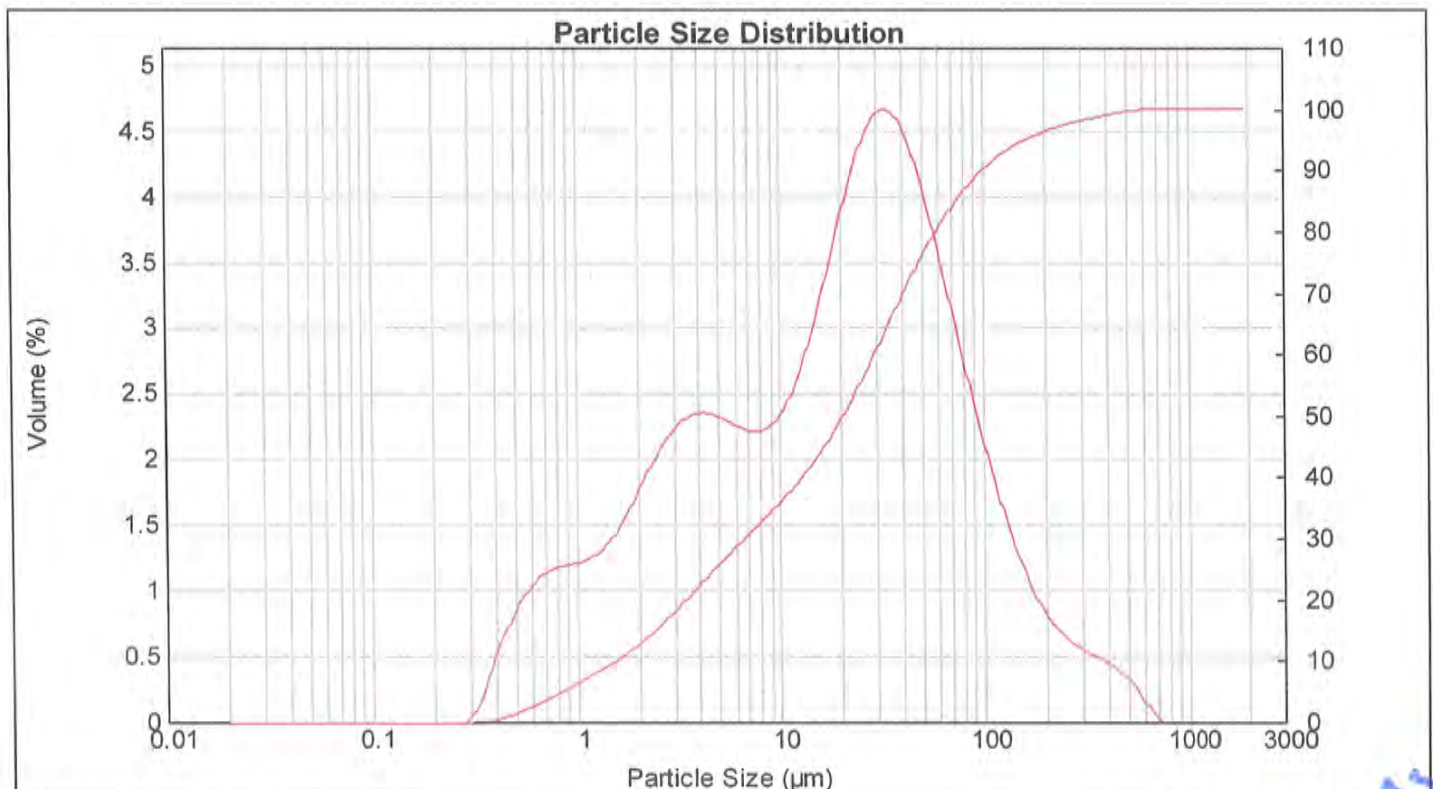
System Details

Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.93 Residual (%) : 0.380
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0161 %Vol Specific Surface Area : 1.35 m²/g
Mean Diameters : D (0.1) : 1.55 um D (0.5) : 20.48 um D (0.9) : 100.18 um
D [4,3] : 42.95 um D [3,2] : 4.45 um Span : 4.817 Uniformity : 1.76

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.25	7.962	2.24	58.573	3.45	430.887	0.38
0.023	0.00	0.172	0.00	1.262	1.33	9.283	2.34	68.291	3.00	502.377	0.28
0.027	0.00	0.200	0.00	1.471	1.46	10.823	2.54	79.621	2.57	585.729	0.12
0.032	0.00	0.233	0.00	1.715	1.64	12.619	2.84	92.832	2.16	682.910	0.01
0.037	0.00	0.272	0.02	2.000	1.85	14.713	3.22	108.234	1.78	796.214	0.00
0.043	0.00	0.317	0.17	2.332	2.05	17.154	3.65	126.191	1.43	926.318	0.00
0.050	0.00	0.370	0.49	2.719	2.21	20.000	4.07	147.128	1.14	1082.339	0.00
0.059	0.00	0.431	0.73	3.170	2.31	23.318	4.41	171.539	0.92	1261.915	0.00
0.068	0.00	0.502	0.93	3.696	2.36	27.187	4.62	200.000	0.75	1471.285	0.00
0.080	0.00	0.585	1.07	4.309	2.35	31.698	4.67	233.183	0.64	1715.362	0.00
0.093	0.00	0.683	1.15	5.024	2.31	36.957	4.54	271.871	0.56	2000.000	0.00
0.108	0.00	0.796	1.19	5.857	2.26	43.089	4.27	316.979	0.51		
0.126	0.00	0.928	1.22	6.829	2.22	50.238	3.88	369.570	0.45		
0.147	0.00	1.082		7.962		58.573		430.887			



Result : Analysis Report

Attached page 36

Sample Details

Sample ID : MAWG-1D3_3

Measured : Monday, May 1, 2023 17:14:45

Sample File : C:\Users\001827\Desktop\ISO\Technical service\Tetra
table\MTEC0859_66_51eam\MTEC0859_66_51eam_Tetratock

Analysed : Monday, May 1, 2023 17:14:46

Sample Notes : Dispersion medium : De-ionized water.
Treatment : Ultrasound 10 minutes with ultrasonic bath before
analysis and stirring at 2000 rpm during measurement.

System Details

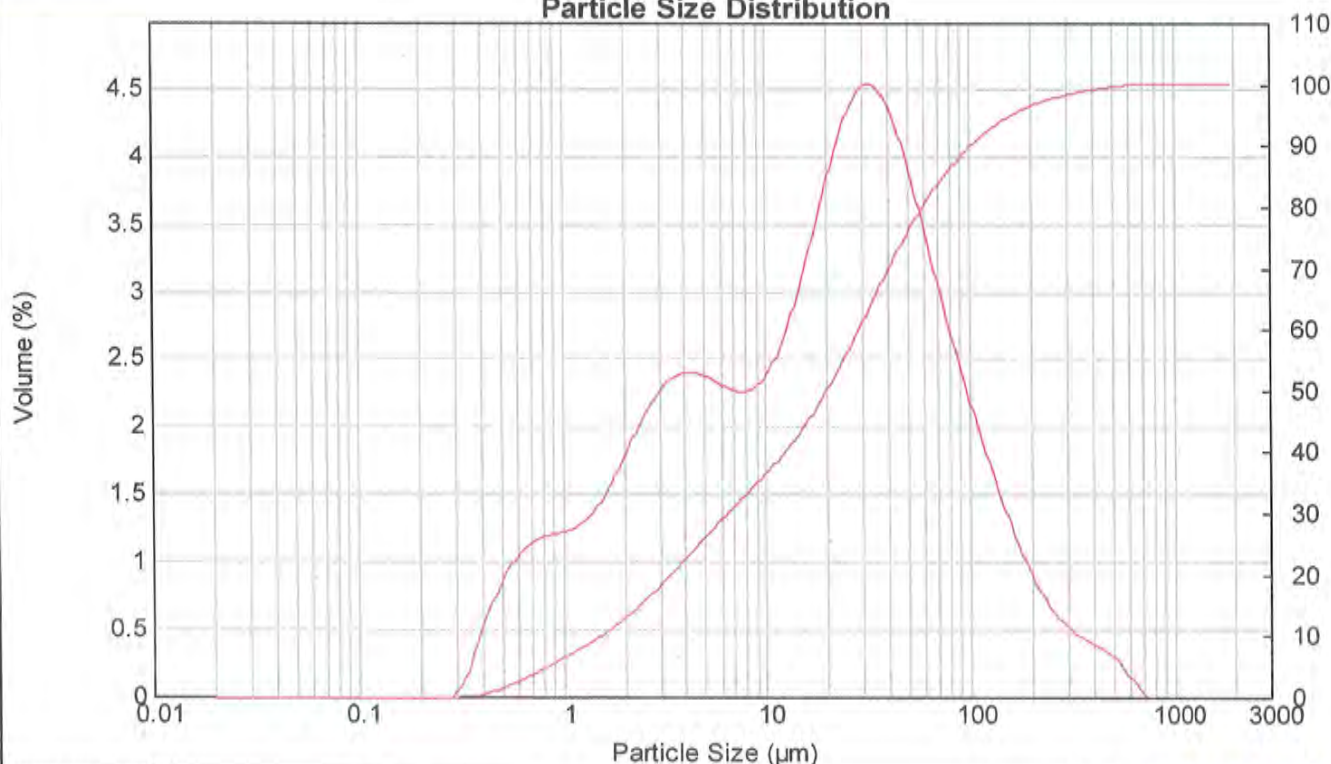
Accessory Name : Hydro 2000S (A) Beam Length (mm) : 2.35 Obscuration (%) : 19.44 Residual (%) : 0.386
Particle RI : 1.530 Absorption : 0.1 Dispersant Name : Water Dispersant RI : 1.330

Result Statistics

Distribution Type : Volume Concentration : 0.0155 %Vol Specific Surface Area : 1.36 m²/g
Mean Diameters : D (0.1) : 1.53 um D (0.5) : 20.03 um D (0.9) : 103.22 um
D [4,3] : 42.78 um D [3,2] : 4.41 um Span : 5.076 Uniformity : 1.8

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.147	0.00	1.082	1.26	7.962	2.28	58.573	3.34	430.887	0.34
0.023	0.00	0.172	0.00	1.262	1.34	9.283	2.38	68.291	2.94	502.377	0.26
0.027	0.00	0.200	0.00	1.471	1.48	10.823	2.57	79.621	2.57	585.729	0.12
0.032	0.00	0.233	0.00	1.715	1.66	12.619	2.86	92.832	2.22	682.910	0.01
0.037	0.00	0.272	0.02	2.000	1.87	14.713	3.22	108.234	1.86	796.214	0.00
0.043	0.00	0.317	0.02	2.332	1.87	17.154	3.63	126.191	1.57	928.318	0.00
0.050	0.00	0.370	0.50	2.719	2.07	20.000	4.01	147.128	1.28	1082.339	0.00
0.059	0.00	0.431	0.73	3.170	2.24	23.318	4.33	171.539	1.03	1261.915	0.00
0.068	0.00	0.502	0.94	3.696	2.35	27.187	4.51	200.000	0.82	1471.285	0.00
0.080	0.00	0.586	1.08	4.309	2.40	31.698	4.53	233.183	0.65	1715.392	0.00
0.093	0.00	0.683	1.16	5.024	2.36	36.957	4.39	271.871	0.54	2000.000	0.00
0.108	0.00	0.796	1.20	5.857	2.27	43.089	4.11	316.979	0.46		
0.126	0.00	0.928	1.23	6.829	2.27	50.238	3.74	369.570	0.40		
0.147	0.00	1.082		7.962		58.573		430.887			

Particle Size Distribution



APPENDIX B
SEAWATER ANALYTICAL LABORATORY REPORTS

ANALYTICAL REPORT

PREPARED FOR

Attn: Ted Donn
Tetra Tech, Inc.
3697 Mt. Diablo Blvd.
Suite 150
Lafayette, California 94549

Generated 6/30/2023 10:48:00 AM

JOB DESCRIPTION

Gulf of Thailand - 2023

JOB NUMBER

580-126685-2

Eurofins Seattle

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



Generated
6/30/2023 10:48:00 AM

Authorized for release by
Lilly-Anna LaCount, Project Manager
Lilly-Anna.Lacount@et.eurofinsus.com
(253)922-2310

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Case Narrative

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Job ID: 580-126685-2

Laboratory: Eurofins Seattle

Narrative

Job Narrative 580-126685-2

Comments

No additional comments.

Receipt

The samples were received on 5/2/2023 10:04 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 17 coolers at receipt time were -28.8° C, -23.9° C, -23.1° C, -20.8° C, -18.8° C, -18.8° C, -17.1° C, -16.9° C, -16.8° C, -16.0° C, -15.3° C, -14.9° C, -14.6° C, -10.8° C, -6.7° C, -2.9° C and 2.7° C.

Receipt Exceptions

One or more containers for the following samples were received broken or leaking: 126685-84 & 126685-187G443REF-SW-1 (580-126685-1), G443REF-SW-20 (580-126685-2), G443REF-SW-40 (580-126685-3), G443REF-SW-B (580-126685-4), LAWA-1C1-SW-1 (580-126685-5), LAWA-1C1-SW-20 (580-126685-6), LAWA-1C1-SW-40 (580-126685-7), LAWA-1C1-SW-B (580-126685-8), LAWA-1C1-SW-B-FD (580-126685-9), LAWA-1C2-SW-1 (580-126685-10), LAWA-1C2-SW-20 (580-126685-11), LAWA-1C2-SW-40 (580-126685-12), LAWA-1C2-SW-B (580-126685-13), LAWA-1C3X-SW-1 (580-126685-14), LAWA-1C3X-SW-20 (580-126685-15), LAWA-1C3X-SW-40 (580-126685-16), LAWA-1C3X-SW-B (580-126685-17), LAWA-1D1-SW-1 (580-126685-18), LAWA-1D1-SW-20 (580-126685-19), LAWA-1D1-SW-40 (580-126685-20), LAWA-1D1-SW-B (580-126685-21), LAWA-1D2-SW-1 (580-126685-22), LAWA-1D2-SW-1-FD (580-126685-23), LAWA-1D2-SW-20 (580-126685-24), LAWA-1D2-SW-40 (580-126685-25), LAWA-1D2-SW-B (580-126685-26), LAWA-1D3X-SW-1 (580-126685-27), LAWA-1D3X-SW-20 (580-126685-28), LAWA-1D3X-SW-40 (580-126685-29), LAWA-1D3X-SW-B (580-126685-30), LAWA-3C1-SW-1 (580-126685-31), LAWA-3C1-SW-20 (580-126685-32), LAWA-3C1-SW-40 (580-126685-33), LAWA-3C1-SW-B (580-126685-34), LAWA-3C2-SW-1 (580-126685-35), LAWA-3C2-SW-20 (580-126685-36), LAWA-3C2-SW-40 (580-126685-37), LAWA-3C2-SW-B (580-126685-38), LAWA-3C3-SW-1 (580-126685-39), LAWA-3C3-SW-20 (580-126685-40), LAWA-3C3-SW-40 (580-126685-41), LAWA-3C3-SW-B (580-126685-42), LAWA-3D1X-SW-1 (580-126685-43), LAWA-3D1X-SW-20 (580-126685-44), LAWA-3D1X-SW-40 (580-126685-45), LAWA-3D1X-SW-B (580-126685-46), LAWA-3D2-SW-1 (580-126685-47), LAWA-3D2-SW-1-FD (580-126685-48), LAWA-3D2-SW-20 (580-126685-49), LAWA-3D2-SW-40 (580-126685-50), LAWA-3D2-SW-B (580-126685-51), LAWA-3D3-SW-1 (580-126685-52), LAWA-3D3-SW-20 (580-126685-53), LAWA-3D3-SW-40 (580-126685-54), LAWA-3D3-SW-B (580-126685-55), LAWA-EQ (580-126685-56), LAWA-WB (580-126685-57), MAWA-1C2-SW-1 (580-126685-58), MAWA-1C2-SW-20 (580-126685-59), MAWA-1C2-SW-40 (580-126685-60), MAWA-1C2-SW-B (580-126685-61), MAWA-1CP2-SW-1 (580-126685-62), MAWA-1CP2-SW-20 (580-126685-63), MAWA-1CP2-SW-40 (580-126685-64), MAWA-1CP2-SW-B (580-126685-65), MAWA-2B2X-SW-1 (580-126685-66), MAWA-2B2X-SW-20 (580-126685-67), MAWA-2B2X-SW-40 (580-126685-68), MAWA-2B2X-SW-B (580-126685-69), MAWA-3B2-SW-1 (580-126685-70), MAWA-3B2-SW-20 (580-126685-71), MAWA-3B2-SW-20-FD (580-126685-72), MAWA-3B2-SW-40 (580-126685-73), MAWA-3B2-SW-B (580-126685-74), MAWA-3C2-SW-1 (580-126685-75), MAWA-3C2-SW-20 (580-126685-76), MAWA-3C2-SW-40 (580-126685-77), MAWA-3C2-SW-B (580-126685-78), MAWA-4B2X-SW-1 (580-126685-79), MAWA-4B2X-SW-20 (580-126685-80), MAWA-4B2X-SW-40 (580-126685-81), MAWA-4B2X-SW-B (580-126685-82), MAWA-EQ (580-126685-83), MAWA-WB (580-126685-84), MAWB-1B2X-SW-1 (580-126685-85), MAWB-1B2X-SW-1-FD (580-126685-86), MAWB-1B2X-SW-20 (580-126685-87), MAWB-1B2X-SW-40 (580-126685-88), MAWB-1B2X-SW-B (580-126685-89), MAWB-1C2X-SW-1 (580-126685-90), MAWB-1C2X-SW-20 (580-126685-91), MAWB-1C2X-SW-40 (580-126685-92), MAWB-1C2X-SW-B (580-126685-93), MAWB-2B2X-SW-1 (580-126685-94), MAWB-2B2X-SW-20 (580-126685-95), MAWB-2B2X-SW-20-FD (580-126685-96), MAWB-2B2X-SW-40 (580-126685-97), MAWB-2B2X-SW-B (580-126685-98), MAWB-3B2X-SW-1 (580-126685-99), MAWB-3B2X-SW-20 (580-126685-100), MAWB-3B2X-SW-40 (580-126685-101), MAWB-3B2X-SW-B (580-126685-102), MAWB-3C2-SW-1 (580-126685-103), MAWB-3C2-SW-20 (580-126685-104), MAWB-3C2-SW-40 (580-126685-105), MAWB-3C2-SW-B (580-126685-106), MAWB-4B2X-SW-1 (580-126685-107), MAWB-4B2X-SW-20 (580-126685-108), MAWB-4B2X-SW-40 (580-126685-109), MAWB-4B2X-SW-B (580-126685-110), MAWB-4B2X-SW-B-FD (580-126685-111), MAWC-1B2X-SW-1 (580-126685-112), MAWC-1B2X-SW-20 (580-126685-113), MAWC-1B2X-SW-40 (580-126685-114), MAWC-1B2X-SW-B (580-126685-115), MAWC-1C2-SW-1 (580-126685-116), MAWC-1C2-SW-20 (580-126685-117), MAWC-1C2-SW-40 (580-126685-118), MAWC-1C2-SW-B (580-126685-119), MAWC-2B2X-SW-1 (580-126685-120), MAWC-2B2X-SW-20 (580-126685-121), MAWC-2B2X-SW-40 (580-126685-122), MAWC-2B2X-SW-B (580-126685-123), MAWC-3B2X-SW-1 (580-126685-124), MAWC-3B2X-SW-20 (580-126685-125), MAWC-3B2X-SW-40 (580-126685-126), MAWC-3B2X-SW-B (580-126685-127), MAWC-3C2-SW-1 (580-126685-128), MAWC-3C2-SW-20 (580-126685-129), MAWC-3C2-SW-40 (580-126685-130), MAWC-3C2-SW-B (580-126685-131), MAWC-4B2X-SW-1 (580-126685-132), MAWC-4B2X-SW-20 (580-126685-133), MAWC-4B2X-SW-40 (580-126685-134), MAWC-4B2X-SW-B (580-126685-135), MAWC-4B2X-SW-B-FD (580-126685-136), MAWC-EQ (580-126685-137), MAWC-WB (580-126685-138), MAWD-1B2X-SW-1 (580-126685-139), MAWD-1B2X-SW-20 (580-126685-140), MAWD-1B2X-SW-40 (580-126685-141), MAWD-1B2X-SW-B (580-126685-142), MAWD-1C2-SW-1 (580-126685-143), MAWD-1C2-SW-20

Case Narrative

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Job ID: 580-126685-2 (Continued)

Laboratory: Eurofins Seattle (Continued)

(580-126685-144), MAWD-1C2-SW-40 (580-126685-145), MAWD-1C2-SW-B (580-126685-146), MAWD-2C2X-SW-1 (580-126685-147), MAWD-2C2X-SW-20 (580-126685-148), MAWD-2C2X-SW-40 (580-126685-149), MAWD-2C2X-SW-B (580-126685-150), MAWD-3B2-SW-1 (580-126685-151), MAWD-3B2-SW-20 (580-126685-152), MAWD-3B2-SW-40 (580-126685-153), MAWD-3B2-SW-B (580-126685-154), MAWD-3C2X-SW-1 (580-126685-155), MAWD-3C2X-SW-20 (580-126685-156), MAWD-3C2X-SW-40 (580-126685-157), MAWD-3C2X-SW-B (580-126685-158), MAWD-4B2X-SW-1 (580-126685-159), MAWD-4B2X-SW-20 (580-126685-160), MAWD-4B2X-SW-40 (580-126685-161), MAWD-4B2X-SW-B (580-126685-162), Control-3-SW-1 (580-126685-163), Control-3-SW-20 (580-126685-164), Control-3-SW-40 (580-126685-165), Control-3-SW-B (580-126685-166), MAWG-1B2X-SW-1 (580-126685-167), MAWG-1B2X-SW-20 (580-126685-168), MAWG-1B2X-SW-40 (580-126685-169), MAWG-1B2X-SW-B (580-126685-170), MAWG-3B2X-SW-1 (580-126685-171), MAWG-3B2X-SW-1-FD (580-126685-172), MAWG-3B2X-SW-20 (580-126685-173), MAWG-3B2X-SW-40 (580-126685-174), MAWG-3B2X-SW-B (580-126685-175), MAWG-EQ (580-126685-176), MAWG-WB (580-126685-177), TFPSO-1B2-SW-1 (580-126685-178), TFPSO-1B2-SW-20 (580-126685-179), TFPSO-1B2-SW-20-FD (580-126685-180), TFPSO-1B2-SW-40 (580-126685-181), TFPSO-1B2-SW-B (580-126685-182), TFPSO-3B2-SW-1 (580-126685-183), TFPSO-3B2-SW-20 (580-126685-184), TFPSO-3B2-SW-40 (580-126685-185), TFPSO-3B2-SW-B (580-126685-186), TFPSO-EQ (580-126685-187), TFPSO-WB (580-126685-188), YAREF-SW-1 (580-126685-189), YAREF-SW-20 (580-126685-190), YAREF-SW-40 (580-126685-191), YAREF-SW-B (580-126685-192), CBREF-SW-1 (580-126685-193), CBREF-SW-20 (580-126685-194), CBREF-SW-40 (580-126685-195), CBREF-SW-B (580-126685-196), YUWA-1B2X-SW-1 (580-126685-197), YUWA-1B2X-SW-20 (580-126685-198), YUWA-1B2X-SW-40 (580-126685-199), YUWA-1B2X-SW-40-FD (580-126685-200), YUWA-1B2X-SW-B (580-126685-201), YUWA-3B2X-SW-1 (580-126685-202), YUWA-3B2X-SW-20 (580-126685-203), YUWA-3B2X-SW-40 (580-126685-204), YUWA-3B2X-SW-B (580-126685-205), YUWA-EQ (580-126685-206) and YUWA-WB (580-126685-207). Splits were taken from the metals containers.

Metals

Method 1631E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 580-425970 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 1640: The continuing calibration blank (CCB) for analytical batch 580-430176 contained Barium above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Qualifiers

Metals

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-1C2-SW-1

Lab Sample ID: 580-126685-58

Date Collected: 03/22/23 05:30

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13	J	0.50	0.079	ng/L			05/10/23 16:54	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.4		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 14:17	1
Cadmium	0.016	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 14:17	1
Chromium	0.76	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 14:17	1
Copper	0.17	J	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 14:17	1
Lead	0.085		0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 14:17	1
Nickel	0.15	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 14:17	1
Zinc	0.12	J B	0.50	0.070	ug/L		05/15/23 00:00	05/16/23 14:17	1
Barium	8.6		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 14:17	1
Iron	1.6	J	2.0	1.1	ug/L		05/15/23 00:00	05/16/23 14:17	1
Manganese	1.1		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 14:17	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-1C2-SW-20

Lab Sample ID: 580-126685-59

Date Collected: 03/22/23 05:36

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.081	J	0.50	0.079	ng/L			05/10/23 16:58	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 14:31	1
Cadmium	0.012	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 14:31	1
Chromium	0.71	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 14:31	1
Copper	0.17	J	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 14:31	1
Lead	0.018	J	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 14:31	1
Nickel	0.14	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 14:31	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 00:00	05/16/23 14:31	1
Barium	8.3		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 14:31	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 14:31	1
Manganese	0.71		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 14:31	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-1C2-SW-40

Lab Sample ID: 580-126685-60

Date Collected: 03/22/23 05:46

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.094	J	0.50	0.079	ng/L			05/10/23 17:02	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 15:14	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 15:14	1
Chromium	0.67	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 15:14	1
Copper	0.13	J	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 15:14	1
Lead	0.19		0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 15:14	1
Nickel	0.14	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 15:14	1
Zinc	0.31	J B	0.50	0.070	ug/L		05/15/23 00:00	05/16/23 15:14	1
Barium	7.9		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 15:14	1
Iron	1.3	J	2.0	1.1	ug/L		05/15/23 00:00	05/16/23 15:14	1
Manganese	0.29		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 15:14	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-1C2-SW-B

Lab Sample ID: 580-126685-61

Date Collected: 03/22/23 05:57

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.25	J	0.50	0.079	ng/L			05/10/23 17:06	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.1		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 15:28	1
Cadmium	0.021	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 15:28	1
Chromium	0.74	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 15:28	1
Copper	0.16	J	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 15:28	1
Lead	0.061		0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 15:28	1
Nickel	0.18	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 15:28	1
Zinc	0.14	J B	0.50	0.070	ug/L		05/15/23 00:00	05/16/23 15:28	1
Barium	10		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 15:28	1
Iron	19		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 15:28	1
Manganese	1.5		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 15:28	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-1CP2-SW-1

Lab Sample ID: 580-126685-62

Date Collected: 03/22/23 12:26

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10	J	0.50	0.079	ng/L			05/10/23 17:11	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.4		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 15:42	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 15:42	1
Chromium	0.68	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 15:42	1
Copper	0.15	J	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 15:42	1
Lead	1.2		0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 15:42	1
Nickel	0.14	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 15:42	1
Zinc	0.080	J B	0.50	0.070	ug/L		05/15/23 00:00	05/16/23 15:42	1
Barium	8.0		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 15:42	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 15:42	1
Manganese	0.40		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 15:42	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-1CP2-SW-20

Lab Sample ID: 580-126685-63

Date Collected: 03/22/23 12:32

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 17:15	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 15:56	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 15:56	1
Chromium	0.65	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 15:56	1
Copper	0.15	J	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 15:56	1
Lead	0.020	J	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 15:56	1
Nickel	0.14	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 15:56	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 00:00	05/16/23 15:56	1
Barium	8.2		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 15:56	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 15:56	1
Manganese	0.33		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 15:56	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-1CP2-SW-40

Lab Sample ID: 580-126685-64

Date Collected: 03/22/23 12:41

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 17:19	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.8		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 16:11	1
Cadmium	0.014	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 16:11	1
Chromium	0.72	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 16:11	1
Copper	0.14	J	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 16:11	1
Lead	0.042	J	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 16:11	1
Nickel	0.15	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 16:11	1
Zinc	0.098	J B	0.50	0.070	ug/L		05/15/23 00:00	05/16/23 16:11	1
Barium	9.0		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 16:11	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 16:11	1
Manganese	0.25		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 16:11	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-1CP2-SW-B

Lab Sample ID: 580-126685-65

Date Collected: 03/22/23 12:52

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.16	J	0.50	0.079	ng/L			05/10/23 17:23	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.1		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 16:25	1
Cadmium	0.022	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 16:25	1
Chromium	0.77	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 16:25	1
Copper	0.14	J	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 16:25	1
Lead	0.031	J	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 16:25	1
Nickel	0.17	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 16:25	1
Zinc	0.073	J B	0.50	0.070	ug/L		05/15/23 00:00	05/16/23 16:25	1
Barium	10		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 16:25	1
Iron	13		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 16:25	1
Manganese	1.0		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 16:25	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-2B2X-SW-1

Lab Sample ID: 580-126685-66

Date Collected: 03/22/23 03:52

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13	J	0.50	0.079	ng/L			05/10/23 17:35	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.4		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 16:39	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 16:39	1
Chromium	0.73	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 16:39	1
Copper	0.16	J	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 16:39	1
Lead	0.017	J	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 16:39	1
Nickel	0.15	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 16:39	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 00:00	05/16/23 16:39	1
Barium	8.8		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 16:39	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 16:39	1
Manganese	1.0		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 16:39	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-2B2X-SW-20

Lab Sample ID: 580-126685-67

Date Collected: 03/22/23 03:58

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.099	J	0.50	0.079	ng/L			05/10/23 17:40	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 16:53	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 16:53	1
Chromium	0.74	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 16:53	1
Copper	0.49	J	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 16:53	1
Lead	0.014	J	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 16:53	1
Nickel	0.14	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 16:53	1
Zinc	0.31	J B	0.50	0.070	ug/L		05/15/23 00:00	05/16/23 16:53	1
Barium	8.1		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 16:53	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 16:53	1
Manganese	1.2		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 16:53	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-2B2X-SW-40

Lab Sample ID: 580-126685-68

Date Collected: 03/22/23 04:07

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 17:44	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 17:08	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 17:08	1
Chromium	0.74	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 17:08	1
Copper	0.13	J	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 17:08	1
Lead	0.013	J	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 17:08	1
Nickel	0.14	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 17:08	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 00:00	05/16/23 17:08	1
Barium	8.5		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 17:08	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 17:08	1
Manganese	0.55		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 17:08	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-2B2X-SW-B

Lab Sample ID: 580-126685-69

Date Collected: 03/22/23 04:19

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.22	J	0.50	0.079	ng/L			05/10/23 17:48	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.0		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 17:22	1
Cadmium	0.019	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 17:22	1
Chromium	0.74	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 17:22	1
Copper	0.16	J	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 17:22	1
Lead	0.036	J	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 17:22	1
Nickel	0.17	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 17:22	1
Zinc	0.13	J B	0.50	0.070	ug/L		05/15/23 00:00	05/16/23 17:22	1
Barium	9.3		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 17:22	1
Iron	15		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 17:22	1
Manganese	2.0		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 17:22	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-3B2-SW-1

Lab Sample ID: 580-126685-70

Date Collected: 03/22/23 02:12

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.081	J	0.50	0.079	ng/L			05/10/23 17:52	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 18:05	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 18:05	1
Chromium	0.73	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 18:05	1
Copper	0.16	J	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 18:05	1
Lead	0.013	J	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 18:05	1
Nickel	0.16	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 18:05	1
Zinc	0.11	J B	0.50	0.070	ug/L		05/15/23 00:00	05/16/23 18:05	1
Barium	9.0		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 18:05	1
Iron	1.2	J	2.0	1.1	ug/L		05/15/23 00:00	05/16/23 18:05	1
Manganese	1.6		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 18:05	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-3B2-SW-20

Lab Sample ID: 580-126685-71

Date Collected: 03/22/23 02:19

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 17:56	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.3		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 18:19	1
Cadmium	0.011	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 18:19	1
Chromium	0.65	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 18:19	1
Copper	0.15	J	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 18:19	1
Lead	0.014	J	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 18:19	1
Nickel	0.12	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 18:19	1
Zinc	0.074	J B	0.50	0.070	ug/L		05/15/23 00:00	05/16/23 18:19	1
Barium	7.3		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 18:19	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 18:19	1
Manganese	1.3		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 18:19	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-3B2-SW-20-FD

Lab Sample ID: 580-126685-72

Date Collected: 03/22/23 02:26

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.21	J	0.50	0.079	ng/L			05/10/23 17:42	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.3		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 18:33	1
Cadmium	0.011	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 18:33	1
Chromium	0.65	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 18:33	1
Copper	0.12	J	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 18:33	1
Lead	0.010	J	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 18:33	1
Nickel	0.12	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 18:33	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 00:00	05/16/23 18:33	1
Barium	6.9		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 18:33	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 18:33	1
Manganese	0.59		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 18:33	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-3B2-SW-40

Lab Sample ID: 580-126685-73

Date Collected: 03/22/23 02:35

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19	J	0.50	0.079	ng/L			05/10/23 17:46	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.8		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 18:47	1
Cadmium	0.014	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 18:47	1
Chromium	0.72	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 18:47	1
Copper	0.14	J	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 18:47	1
Lead	0.024	J	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 18:47	1
Nickel	0.15	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 18:47	1
Zinc	0.12	J B	0.50	0.070	ug/L		05/15/23 00:00	05/16/23 18:47	1
Barium	8.6		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 18:47	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 18:47	1
Manganese	0.74		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 18:47	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-3B2-SW-B

Lab Sample ID: 580-126685-74

Date Collected: 03/22/23 02:48

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.33	J	0.50	0.079	ng/L			05/10/23 17:51	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.2		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 19:02	1
Cadmium	0.021	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 19:02	1
Chromium	0.73	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 19:02	1
Copper	0.17	J	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 19:02	1
Lead	0.045	J	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 19:02	1
Nickel	0.18	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 19:02	1
Zinc	0.22	J B	0.50	0.070	ug/L		05/15/23 00:00	05/16/23 19:02	1
Barium	10		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 19:02	1
Iron	17		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 19:02	1
Manganese	1.9		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 19:02	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-3C2-SW-1

Lab Sample ID: 580-126685-75

Date Collected: 03/22/23 00:21

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17	J	0.50	0.079	ng/L			05/10/23 17:55	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 19:16	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/15/23 00:00	05/16/23 19:16	1
Chromium	0.74	B	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 19:16	1
Copper	0.15	J	1.0	0.020	ug/L		05/15/23 00:00	05/16/23 19:16	1
Lead	0.017	J	0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 19:16	1
Nickel	0.15	J	0.30	0.11	ug/L		05/15/23 00:00	05/16/23 19:16	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 00:00	05/16/23 19:16	1
Barium	9.3		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 19:16	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 19:16	1
Manganese	0.92		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 19:16	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-3C2-SW-20

Lab Sample ID: 580-126685-76

Date Collected: 03/22/23 00:27

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.21	J	0.50	0.079	ng/L			05/10/23 18:07	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6		0.60	0.42	ug/L		05/15/23 12:07	05/16/23 19:44	1
Cadmium	0.012	J	0.040	0.011	ug/L		05/15/23 12:07	05/16/23 19:44	1
Chromium	0.66	B	0.50	0.34	ug/L		05/15/23 12:07	05/16/23 19:44	1
Copper	0.15	J	1.0	0.020	ug/L		05/15/23 12:07	05/16/23 19:44	1
Lead	0.013	J	0.050	0.0040	ug/L		05/15/23 12:07	05/16/23 19:44	1
Nickel	0.14	J	0.30	0.11	ug/L		05/15/23 12:07	05/16/23 19:44	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 12:07	05/16/23 19:44	1
Barium	9.0		0.50	0.13	ug/L		05/15/23 12:07	05/16/23 19:44	1
Iron	ND		2.0	1.1	ug/L		05/15/23 12:07	05/16/23 19:44	1
Manganese	0.82		0.050	0.0080	ug/L		05/15/23 12:07	05/16/23 19:44	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-3C2-SW-40

Lab Sample ID: 580-126685-77

Date Collected: 03/22/23 00:36

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.14	J	0.50	0.079	ng/L			05/10/23 18:11	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.8		0.60	0.42	ug/L		05/15/23 12:07	05/16/23 19:59	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/15/23 12:07	05/16/23 19:59	1
Chromium	0.66	B	0.50	0.34	ug/L		05/15/23 12:07	05/16/23 19:59	1
Copper	0.20	J	1.0	0.020	ug/L		05/15/23 12:07	05/16/23 19:59	1
Lead	0.031	J	0.050	0.0040	ug/L		05/15/23 12:07	05/16/23 19:59	1
Nickel	0.15	J	0.30	0.11	ug/L		05/15/23 12:07	05/16/23 19:59	1
Zinc	0.14	J B	0.50	0.070	ug/L		05/15/23 12:07	05/16/23 19:59	1
Barium	8.8		0.50	0.13	ug/L		05/15/23 12:07	05/16/23 19:59	1
Iron	ND		2.0	1.1	ug/L		05/15/23 12:07	05/16/23 19:59	1
Manganese	0.97		0.050	0.0080	ug/L		05/15/23 12:07	05/16/23 19:59	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-3C2-SW-B

Lab Sample ID: 580-126685-78

Date Collected: 03/22/23 00:47

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.28	J	0.50	0.079	ng/L			05/10/23 18:16	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.0		0.60	0.42	ug/L		05/15/23 12:07	05/16/23 20:13	1
Cadmium	0.020	J	0.040	0.011	ug/L		05/15/23 12:07	05/16/23 20:13	1
Chromium	0.80	B	0.50	0.34	ug/L		05/15/23 12:07	05/16/23 20:13	1
Copper	0.13	J	1.0	0.020	ug/L		05/15/23 12:07	05/16/23 20:13	1
Lead	0.032	J	0.050	0.0040	ug/L		05/15/23 12:07	05/16/23 20:13	1
Nickel	0.17	J	0.30	0.11	ug/L		05/15/23 12:07	05/16/23 20:13	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 12:07	05/16/23 20:13	1
Barium	10		0.50	0.13	ug/L		05/15/23 12:07	05/16/23 20:13	1
Iron	15		2.0	1.1	ug/L		05/15/23 12:07	05/16/23 20:13	1
Manganese	1.6		0.050	0.0080	ug/L		05/15/23 12:07	05/16/23 20:13	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-4B2X-SW-1

Lab Sample ID: 580-126685-79

Date Collected: 03/21/23 21:43

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.24	J	0.50	0.079	ng/L			05/10/23 18:20	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6		0.60	0.42	ug/L		05/15/23 12:07	05/16/23 20:56	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/15/23 12:07	05/16/23 20:56	1
Chromium	0.67	B	0.50	0.34	ug/L		05/15/23 12:07	05/16/23 20:56	1
Copper	0.17	J	1.0	0.020	ug/L		05/15/23 12:07	05/16/23 20:56	1
Lead	0.11		0.050	0.0040	ug/L		05/15/23 12:07	05/16/23 20:56	1
Nickel	0.16	J	0.30	0.11	ug/L		05/15/23 12:07	05/16/23 20:56	1
Zinc	0.11	J B	0.50	0.070	ug/L		05/15/23 12:07	05/16/23 20:56	1
Barium	9.2		0.50	0.13	ug/L		05/15/23 12:07	05/16/23 20:56	1
Iron	1.4	J	2.0	1.1	ug/L		05/15/23 12:07	05/16/23 20:56	1
Manganese	1.0		0.050	0.0080	ug/L		05/15/23 12:07	05/16/23 20:56	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-4B2X-SW-20

Lab Sample ID: 580-126685-80

Date Collected: 03/21/23 21:49

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.22	J	0.50	0.079	ng/L			05/10/23 18:24	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		05/15/23 12:07	05/16/23 21:10	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/15/23 12:07	05/16/23 21:10	1
Chromium	0.66	B	0.50	0.34	ug/L		05/15/23 12:07	05/16/23 21:10	1
Copper	0.14	J	1.0	0.020	ug/L		05/15/23 12:07	05/16/23 21:10	1
Lead	0.012	J	0.050	0.0040	ug/L		05/15/23 12:07	05/16/23 21:10	1
Nickel	0.15	J	0.30	0.11	ug/L		05/15/23 12:07	05/16/23 21:10	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 12:07	05/16/23 21:10	1
Barium	9.0		0.50	0.13	ug/L		05/15/23 12:07	05/16/23 21:10	1
Iron	ND		2.0	1.1	ug/L		05/15/23 12:07	05/16/23 21:10	1
Manganese	0.95		0.050	0.0080	ug/L		05/15/23 12:07	05/16/23 21:10	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-4B2X-SW-40

Lab Sample ID: 580-126685-81

Date Collected: 03/21/23 21:57

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19	J	0.50	0.079	ng/L			05/10/23 18:28	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		05/15/23 12:07	05/16/23 21:24	1
Cadmium	0.014	J	0.040	0.011	ug/L		05/15/23 12:07	05/16/23 21:24	1
Chromium	0.67	B	0.50	0.34	ug/L		05/15/23 12:07	05/16/23 21:24	1
Copper	0.14	J	1.0	0.020	ug/L		05/15/23 12:07	05/16/23 21:24	1
Lead	0.014	J	0.050	0.0040	ug/L		05/15/23 12:07	05/16/23 21:24	1
Nickel	0.14	J	0.30	0.11	ug/L		05/15/23 12:07	05/16/23 21:24	1
Zinc	0.31	J B	0.50	0.070	ug/L		05/15/23 12:07	05/16/23 21:24	1
Barium	8.6		0.50	0.13	ug/L		05/15/23 12:07	05/16/23 21:24	1
Iron	ND		2.0	1.1	ug/L		05/15/23 12:07	05/16/23 21:24	1
Manganese	0.86		0.050	0.0080	ug/L		05/15/23 12:07	05/16/23 21:24	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-4B2X-SW-B

Lab Sample ID: 580-126685-82

Date Collected: 03/21/23 22:09

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.32	J	0.50	0.079	ng/L			05/10/23 18:32	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.0		0.60	0.42	ug/L		05/15/23 12:07	05/16/23 21:38	1
Cadmium	0.020	J	0.040	0.011	ug/L		05/15/23 12:07	05/16/23 21:38	1
Chromium	0.76	B	0.50	0.34	ug/L		05/15/23 12:07	05/16/23 21:38	1
Copper	0.13	J	1.0	0.020	ug/L		05/15/23 12:07	05/16/23 21:38	1
Lead	0.039	J	0.050	0.0040	ug/L		05/15/23 12:07	05/16/23 21:38	1
Nickel	0.17	J	0.30	0.11	ug/L		05/15/23 12:07	05/16/23 21:38	1
Zinc	1.3	B	0.50	0.070	ug/L		05/15/23 12:07	05/16/23 21:38	1
Barium	11		0.50	0.13	ug/L		05/15/23 12:07	05/16/23 21:38	1
Iron	15		2.0	1.1	ug/L		05/15/23 12:07	05/16/23 21:38	1
Manganese	2.1		0.050	0.0080	ug/L		05/15/23 12:07	05/16/23 21:38	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-EQ

Lab Sample ID: 580-126685-83

Date Collected: 03/21/23 21:33

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.26	J	0.50	0.079	ng/L			05/10/23 18:36	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/15/23 12:07	05/16/23 21:53	1
Cadmium	ND		0.040	0.011	ug/L		05/15/23 12:07	05/16/23 21:53	1
Chromium	ND		0.50	0.34	ug/L		05/15/23 12:07	05/16/23 21:53	1
Copper	0.27	J	1.0	0.020	ug/L		05/15/23 12:07	05/16/23 21:53	1
Lead	0.11		0.050	0.0040	ug/L		05/15/23 12:07	05/16/23 21:53	1
Nickel	ND		0.30	0.11	ug/L		05/15/23 12:07	05/16/23 21:53	1
Zinc	1.6	B	0.50	0.070	ug/L		05/15/23 12:07	05/16/23 21:53	1
Barium	0.27	J	0.50	0.13	ug/L		05/15/23 12:07	05/16/23 21:53	1
Iron	1.2	J	2.0	1.1	ug/L		05/15/23 12:07	05/16/23 21:53	1
Manganese	1.6		0.050	0.0080	ug/L		05/15/23 12:07	05/16/23 21:53	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-WB

Lab Sample ID: 580-126685-84

Date Collected: 03/21/23 21:28

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 18:41	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 18:20	1
Cadmium	ND		0.040	0.011	ug/L		05/25/23 00:00	05/27/23 18:20	1
Chromium	ND		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 18:20	1
Copper	0.11	J	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 18:20	1
Lead	0.011	J	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 18:20	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 18:20	1
Zinc	0.54		0.50	0.070	ug/L		05/25/23 00:00	05/27/23 18:20	1
Barium	ND		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 18:20	1
Iron	2.4		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 18:20	1
Manganese	3.7		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 18:20	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-1B2X-SW-1

Lab Sample ID: 580-126685-85

Date Collected: 03/21/23 03:08

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.26	J	0.50	0.079	ng/L			05/11/23 15:24	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.4		0.60	0.42	ug/L		05/17/23 00:00	05/19/23 00:42	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/17/23 00:00	05/19/23 00:42	1
Chromium	1.3		0.50	0.34	ug/L		05/17/23 00:00	05/19/23 00:42	1
Copper	0.22		0.10	0.020	ug/L		05/17/23 00:00	05/19/23 00:42	1
Lead	0.18		0.025	0.0040	ug/L		05/17/23 00:00	05/19/23 00:42	1
Nickel	0.17	J	0.30	0.11	ug/L		05/17/23 00:00	05/19/23 00:42	1
Zinc	0.28	J	0.50	0.070	ug/L		05/17/23 00:00	05/19/23 00:42	1
Barium	8.7		0.20	0.13	ug/L		05/17/23 00:00	05/19/23 00:42	1
Iron	ND		2.0	1.1	ug/L		05/17/23 00:00	05/19/23 00:42	1
Manganese	0.41		0.050	0.0080	ug/L		05/17/23 00:00	05/19/23 00:42	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-1B2X-SW-1-FD

Lab Sample ID: 580-126685-86

Date Collected: 03/21/23 03:13

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.35	J	0.50	0.079	ng/L			05/11/23 15:28	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.4		0.60	0.42	ug/L		05/17/23 00:00	05/19/23 01:53	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/17/23 00:00	05/19/23 01:53	1
Chromium	1.3		0.50	0.34	ug/L		05/17/23 00:00	05/19/23 01:53	1
Copper	0.16		0.10	0.020	ug/L		05/17/23 00:00	05/19/23 01:53	1
Lead	0.017	J	0.025	0.0040	ug/L		05/17/23 00:00	05/19/23 01:53	1
Nickel	0.17	J	0.30	0.11	ug/L		05/17/23 00:00	05/19/23 01:53	1
Zinc	0.19	J	0.50	0.070	ug/L		05/17/23 00:00	05/19/23 01:53	1
Barium	8.8		0.20	0.13	ug/L		05/17/23 00:00	05/19/23 01:53	1
Iron	ND		2.0	1.1	ug/L		05/17/23 00:00	05/19/23 01:53	1
Manganese	0.39		0.050	0.0080	ug/L		05/17/23 00:00	05/19/23 01:53	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-1B2X-SW-20

Lab Sample ID: 580-126685-87

Date Collected: 03/21/23 03:19

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.26	J	0.50	0.079	ng/L			05/11/23 15:32	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6		0.60	0.42	ug/L		05/17/23 00:00	05/19/23 02:36	1
Cadmium	0.012	J	0.040	0.011	ug/L		05/17/23 00:00	05/19/23 02:36	1
Chromium	1.3		0.50	0.34	ug/L		05/17/23 00:00	05/19/23 02:36	1
Copper	0.21		0.10	0.020	ug/L		05/17/23 00:00	05/19/23 02:36	1
Lead	0.017	J	0.025	0.0040	ug/L		05/17/23 00:00	05/19/23 02:36	1
Nickel	0.17	J	0.30	0.11	ug/L		05/17/23 00:00	05/19/23 02:36	1
Zinc	ND		0.50	0.070	ug/L		05/17/23 00:00	05/19/23 02:36	1
Barium	8.9		0.20	0.13	ug/L		05/17/23 00:00	05/19/23 02:36	1
Iron	ND		2.0	1.1	ug/L		05/17/23 00:00	05/19/23 02:36	1
Manganese	0.39		0.050	0.0080	ug/L		05/17/23 00:00	05/19/23 02:36	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-1B2X-SW-40

Lab Sample ID: 580-126685-88

Date Collected: 03/21/23 03:27

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.16	J	0.50	0.079	ng/L			05/11/23 15:36	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.5		0.60	0.42	ug/L		05/17/23 00:00	05/19/23 03:19	1
Cadmium	0.012	J	0.040	0.011	ug/L		05/17/23 00:00	05/19/23 03:19	1
Chromium	1.5		0.50	0.34	ug/L		05/17/23 00:00	05/19/23 03:19	1
Copper	0.16		0.10	0.020	ug/L		05/17/23 00:00	05/19/23 03:19	1
Lead	0.014	J	0.025	0.0040	ug/L		05/17/23 00:00	05/19/23 03:19	1
Nickel	0.17	J	0.30	0.11	ug/L		05/17/23 00:00	05/19/23 03:19	1
Zinc	ND		0.50	0.070	ug/L		05/17/23 00:00	05/19/23 03:19	1
Barium	9.2		0.20	0.13	ug/L		05/17/23 00:00	05/19/23 03:19	1
Iron	ND		2.0	1.1	ug/L		05/17/23 00:00	05/19/23 03:19	1
Manganese	0.41		0.050	0.0080	ug/L		05/17/23 00:00	05/19/23 03:19	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-1B2X-SW-B

Lab Sample ID: 580-126685-89

Date Collected: 03/21/23 03:38

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.32	J	0.50	0.079	ng/L			05/11/23 15:40	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.2		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 18:34	1
Cadmium	0.019	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 18:34	1
Chromium	1.8		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 18:34	1
Copper	0.15	J	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 18:34	1
Lead	0.045	J	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 18:34	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 18:34	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/27/23 18:34	1
Barium	9.5		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 18:34	1
Iron	16		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 18:34	1
Manganese	1.6		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 18:34	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-1C2X-SW-1

Lab Sample ID: 580-126685-90

Date Collected: 03/20/23 16:42

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.26	J	0.50	0.079	ng/L			05/11/23 15:44	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 22:22	1
Cadmium	0.012	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 22:22	1
Chromium	1.8		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 22:22	1
Copper	0.18	J	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 22:22	1
Lead	0.034	J	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 22:22	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 22:22	1
Zinc	0.43	J	0.50	0.070	ug/L		05/25/23 00:00	05/27/23 22:22	1
Barium	8.5		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 22:22	1
Iron	1.2	J	2.0	1.1	ug/L		05/25/23 00:00	05/27/23 22:22	1
Manganese	0.39		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 22:22	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-1C2X-SW-20

Lab Sample ID: 580-126685-91

Date Collected: 03/20/23 16:48

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.38	J	0.50	0.079	ng/L			05/11/23 15:49	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 22:36	1
Cadmium	0.011	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 22:36	1
Chromium	1.9		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 22:36	1
Copper	0.15	J	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 22:36	1
Lead	0.026	J	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 22:36	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 22:36	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/27/23 22:36	1
Barium	8.4		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 22:36	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 22:36	1
Manganese	0.36		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 22:36	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-1C2X-SW-40

Lab Sample ID: 580-126685-92

Date Collected: 03/20/23 16:59

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	J	0.50	0.079	ng/L			05/11/23 16:01	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.8		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 22:50	1
Cadmium	0.012	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 22:50	1
Chromium	1.8		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 22:50	1
Copper	0.18	J	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 22:50	1
Lead	0.023	J	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 22:50	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 22:50	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/27/23 22:50	1
Barium	8.5		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 22:50	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 22:50	1
Manganese	0.36		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 22:50	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-1C2X-SW-B

Lab Sample ID: 580-126685-93

Date Collected: 03/20/23 17:11

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.38	J	0.50	0.079	ng/L			05/11/23 16:05	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.0		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 23:33	1
Cadmium	0.020	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 23:33	1
Chromium	1.8		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 23:33	1
Copper	0.17	J	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 23:33	1
Lead	0.049	J	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 23:33	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 23:33	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/27/23 23:33	1
Barium	9.8		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 23:33	1
Iron	18		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 23:33	1
Manganese	1.7		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 23:33	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-2B2X-SW-1

Lab Sample ID: 580-126685-94

Date Collected: 03/21/23 01:06

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.28	J	0.50	0.079	ng/L			05/11/23 16:09	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.4		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 23:47	1
Cadmium	0.011	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 23:47	1
Chromium	1.6		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 23:47	1
Copper	0.14	J	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 23:47	1
Lead	2.0		0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 23:47	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 23:47	1
Zinc	0.33	J	0.50	0.070	ug/L		05/25/23 00:00	05/27/23 23:47	1
Barium	7.9		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 23:47	1
Iron	3.6		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 23:47	1
Manganese	0.58		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 23:47	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-2B2X-SW-20

Lab Sample ID: 580-126685-95

Date Collected: 03/21/23 01:11

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.28	J	0.50	0.079	ng/L			05/11/23 16:14	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.8		0.60	0.42	ug/L		05/25/23 00:00	05/28/23 00:02	1
Cadmium	0.012	J	0.040	0.011	ug/L		05/25/23 00:00	05/28/23 00:02	1
Chromium	1.7		0.50	0.34	ug/L		05/25/23 00:00	05/28/23 00:02	1
Copper	0.18	J	1.0	0.020	ug/L		05/25/23 00:00	05/28/23 00:02	1
Lead	0.021	J	0.050	0.0040	ug/L		05/25/23 00:00	05/28/23 00:02	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/28/23 00:02	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/28/23 00:02	1
Barium	8.2		0.50	0.13	ug/L		05/25/23 00:00	05/28/23 00:02	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/28/23 00:02	1
Manganese	0.35		0.050	0.0080	ug/L		05/25/23 00:00	05/28/23 00:02	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-2B2X-SW-20-FD

Lab Sample ID: 580-126685-96

Date Collected: 03/21/23 01:18

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.45	J	0.50	0.079	ng/L			05/11/23 16:18	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.8		0.60	0.42	ug/L		05/25/23 00:00	05/28/23 00:16	1
Cadmium	0.012	J	0.040	0.011	ug/L		05/25/23 00:00	05/28/23 00:16	1
Chromium	1.8		0.50	0.34	ug/L		05/25/23 00:00	05/28/23 00:16	1
Copper	0.17	J	1.0	0.020	ug/L		05/25/23 00:00	05/28/23 00:16	1
Lead	0.022	J	0.050	0.0040	ug/L		05/25/23 00:00	05/28/23 00:16	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/28/23 00:16	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/28/23 00:16	1
Barium	8.4		0.50	0.13	ug/L		05/25/23 00:00	05/28/23 00:16	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/28/23 00:16	1
Manganese	0.37		0.050	0.0080	ug/L		05/25/23 00:00	05/28/23 00:16	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-2B2X-SW-40

Lab Sample ID: 580-126685-97

Date Collected: 03/21/23 01:26

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.47	J	0.50	0.079	ng/L			05/11/23 16:22	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.9		0.60	0.42	ug/L		05/25/23 00:00	05/28/23 00:30	1
Cadmium	0.011	J	0.040	0.011	ug/L		05/25/23 00:00	05/28/23 00:30	1
Chromium	1.8		0.50	0.34	ug/L		05/25/23 00:00	05/28/23 00:30	1
Copper	0.13	J	1.0	0.020	ug/L		05/25/23 00:00	05/28/23 00:30	1
Lead	0.017	J	0.050	0.0040	ug/L		05/25/23 00:00	05/28/23 00:30	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/28/23 00:30	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/28/23 00:30	1
Barium	8.7		0.50	0.13	ug/L		05/25/23 00:00	05/28/23 00:30	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/28/23 00:30	1
Manganese	0.41		0.050	0.0080	ug/L		05/25/23 00:00	05/28/23 00:30	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-2B2X-SW-B

Lab Sample ID: 580-126685-98

Date Collected: 03/21/23 01:37

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.27	J	0.50	0.079	ng/L			05/11/23 16:26	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.1		0.60	0.42	ug/L		05/25/23 00:00	05/28/23 00:45	1
Cadmium	0.019	J	0.040	0.011	ug/L		05/25/23 00:00	05/28/23 00:45	1
Chromium	1.9		0.50	0.34	ug/L		05/25/23 00:00	05/28/23 00:45	1
Copper	0.18	J	1.0	0.020	ug/L		05/25/23 00:00	05/28/23 00:45	1
Lead	0.045	J	0.050	0.0040	ug/L		05/25/23 00:00	05/28/23 00:45	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/28/23 00:45	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/28/23 00:45	1
Barium	9.7		0.50	0.13	ug/L		05/25/23 00:00	05/28/23 00:45	1
Iron	16		2.0	1.1	ug/L		05/25/23 00:00	05/28/23 00:45	1
Manganese	1.6		0.050	0.0080	ug/L		05/25/23 00:00	05/28/23 00:45	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-3B2X-SW-1

Lab Sample ID: 580-126685-99

Date Collected: 03/20/23 19:17

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.22	J	0.50	0.079	ng/L			05/11/23 16:30	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.5		0.60	0.42	ug/L		05/25/23 00:00	05/28/23 00:59	1
Cadmium	0.012	J	0.040	0.011	ug/L		05/25/23 00:00	05/28/23 00:59	1
Chromium	1.9		0.50	0.34	ug/L		05/25/23 00:00	05/28/23 00:59	1
Copper	0.17	J	1.0	0.020	ug/L		05/25/23 00:00	05/28/23 00:59	1
Lead	0.020	J	0.050	0.0040	ug/L		05/25/23 00:00	05/28/23 00:59	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/28/23 00:59	1
Zinc	0.087	J	0.50	0.070	ug/L		05/25/23 00:00	05/28/23 00:59	1
Barium	8.1		0.50	0.13	ug/L		05/25/23 00:00	05/28/23 00:59	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/28/23 00:59	1
Manganese	0.37		0.050	0.0080	ug/L		05/25/23 00:00	05/28/23 00:59	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-3B2X-SW-20

Lab Sample ID: 580-126685-100

Date Collected: 03/20/23 19:23

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.22	J	0.50	0.079	ng/L			05/11/23 16:34	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6		0.60	0.42	ug/L		05/25/23 00:00	05/28/23 01:13	1
Cadmium	0.012	J	0.040	0.011	ug/L		05/25/23 00:00	05/28/23 01:13	1
Chromium	1.8		0.50	0.34	ug/L		05/25/23 00:00	05/28/23 01:13	1
Copper	0.15	J	1.0	0.020	ug/L		05/25/23 00:00	05/28/23 01:13	1
Lead	0.021	J	0.050	0.0040	ug/L		05/25/23 00:00	05/28/23 01:13	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/28/23 01:13	1
Zinc	0.10	J	0.50	0.070	ug/L		05/25/23 00:00	05/28/23 01:13	1
Barium	8.4		0.50	0.13	ug/L		05/25/23 00:00	05/28/23 01:13	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/28/23 01:13	1
Manganese	0.36		0.050	0.0080	ug/L		05/25/23 00:00	05/28/23 01:13	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-3B2X-SW-40

Lab Sample ID: 580-126685-101

Date Collected: 03/20/23 19:31

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19	J	0.50	0.079	ng/L			05/11/23 16:39	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 07:42	1
Cadmium	0.013	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 07:42	1
Chromium	0.62		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 07:42	1
Copper	0.18	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 07:42	1
Lead	0.018	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 07:42	1
Nickel	0.20	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 07:42	1
Zinc	ND		0.50	0.070	ug/L		06/26/23 00:00	06/27/23 07:42	1
Barium	10	B	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 07:42	1
Iron	ND		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 07:42	1
Manganese	0.34	B	0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 07:42	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-3B2X-SW-B

Lab Sample ID: 580-126685-102

Date Collected: 03/20/23 19:43

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.62		0.50	0.079	ng/L			05/11/23 17:04	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.0		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 07:56	1
Cadmium	0.022	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 07:56	1
Chromium	0.71		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 07:56	1
Copper	0.16	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 07:56	1
Lead	0.042	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 07:56	1
Nickel	0.20	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 07:56	1
Zinc	0.079	J	0.50	0.070	ug/L		06/26/23 00:00	06/27/23 07:56	1
Barium	15	B	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 07:56	1
Iron	23		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 07:56	1
Manganese	1.5	B	0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 07:56	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-3C2-SW-1

Lab Sample ID: 580-126685-103

Date Collected: 03/20/23 10:55

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10	J B	0.50	0.079	ng/L			05/11/23 14:41	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 04:22	1
Cadmium	0.016	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 04:22	1
Chromium	0.72		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 04:22	1
Copper	0.24	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 04:22	1
Lead	0.043	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 04:22	1
Nickel	0.21	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 04:22	1
Zinc	0.23	J	0.50	0.070	ug/L		06/26/23 00:00	06/27/23 04:22	1
Barium	9.4	B	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 04:22	1
Iron	1.7	J	2.0	1.1	ug/L		06/26/23 00:00	06/27/23 04:22	1
Manganese	0.35	B	0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 09:36	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-3C2-SW-20

Lab Sample ID: 580-126685-104

Date Collected: 03/20/23 11:00

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17	J B	0.50	0.079	ng/L			05/11/23 14:45	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 05:05	1
Cadmium	0.017	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 05:05	1
Chromium	0.66		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 05:05	1
Copper	0.22	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 05:05	1
Lead	0.023	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 05:05	1
Nickel	0.22	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 05:05	1
Zinc	0.092	J	0.50	0.070	ug/L		06/26/23 00:00	06/27/23 05:05	1
Barium	9.8	B	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 05:05	1
Iron	ND		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 05:05	1
Manganese	0.38	B	0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 05:05	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-3C2-SW-40

Lab Sample ID: 580-126685-105

Date Collected: 03/20/23 11:13

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.21	J B	0.50	0.079	ng/L			05/11/23 14:50	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.8		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 08:11	1
Cadmium	0.014	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 08:11	1
Chromium	0.67		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 08:11	1
Copper	0.17	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 08:11	1
Lead	0.017	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 08:11	1
Nickel	0.15	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 08:11	1
Zinc	ND		0.50	0.070	ug/L		06/26/23 00:00	06/27/23 08:11	1
Barium	10	B	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 08:11	1
Iron	ND		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 08:11	1
Manganese	0.32	B	0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 08:11	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-3C2-SW-B

Lab Sample ID: 580-126685-106

Date Collected: 03/20/23 11:24

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.30	J B	0.50	0.079	ng/L			05/11/23 14:54	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.0		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 08:25	1
Cadmium	0.021	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 08:25	1
Chromium	0.68		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 08:25	1
Copper	0.15	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 08:25	1
Lead	0.039	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 08:25	1
Nickel	0.19	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 08:25	1
Zinc	0.095	J	0.50	0.070	ug/L		06/26/23 00:00	06/27/23 08:25	1
Barium	13	B	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 08:25	1
Iron	22		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 08:25	1
Manganese	1.5	B	0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 08:25	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-4B2X-SW-1

Lab Sample ID: 580-126685-107

Date Collected: 03/20/23 20:25

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.11	J B	0.50	0.079	ng/L			05/11/23 14:58	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.4		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 08:39	1
Cadmium	0.014	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 08:39	1
Chromium	0.64		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 08:39	1
Copper	0.16	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 08:39	1
Lead	0.39		0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 08:39	1
Nickel	0.15	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 08:39	1
Zinc	ND		0.50	0.070	ug/L		06/26/23 00:00	06/27/23 08:39	1
Barium	10	B	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 08:39	1
Iron	ND		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 08:39	1
Manganese	0.32	B	0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 08:39	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-4B2X-SW-20

Lab Sample ID: 580-126685-108

Date Collected: 03/20/23 20:30

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10	J B	0.50	0.079	ng/L			05/11/23 15:02	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.5		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 08:53	1
Cadmium	0.013	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 08:53	1
Chromium	0.65		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 08:53	1
Copper	0.16	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 08:53	1
Lead	0.011	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 08:53	1
Nickel	0.15	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 08:53	1
Zinc	ND		0.50	0.070	ug/L		06/26/23 00:00	06/27/23 08:53	1
Barium	9.9	B	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 08:53	1
Iron	ND		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 08:53	1
Manganese	0.31	B	0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 08:53	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-4B2X-SW-40

Lab Sample ID: 580-126685-109

Date Collected: 03/20/23 20:39

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/11/23 15:06	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.8		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 10:19	1
Cadmium	0.014	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 10:19	1
Chromium	0.62		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 10:19	1
Copper	0.18	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 10:19	1
Lead	0.017	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 10:19	1
Nickel	0.18	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 10:19	1
Zinc	ND		0.50	0.070	ug/L		06/26/23 00:00	06/27/23 10:19	1
Barium	12	B ^2	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 10:19	1
Iron	ND		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 10:19	1
Manganese	0.34	B	0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 10:19	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-4B2X-SW-B

Lab Sample ID: 580-126685-110

Date Collected: 03/20/23 20:50

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17	J B	0.50	0.079	ng/L			05/11/23 15:10	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.9		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 10:33	1
Cadmium	0.021	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 10:33	1
Chromium	0.74		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 10:33	1
Copper	0.81	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 10:33	1
Lead	0.039	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 10:33	1
Nickel	0.19	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 10:33	1
Zinc	0.081	J	0.50	0.070	ug/L		06/26/23 00:00	06/27/23 10:33	1
Barium	13	B ^2	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 10:33	1
Iron	19		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 10:33	1
Manganese	1.3	B	0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 10:33	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-4B2X-SW-B-FD

Lab Sample ID: 580-126685-111

Date Collected: 03/20/23 21:03

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.21	J B	0.50	0.079	ng/L			05/11/23 15:27	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.0		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 10:47	1
Cadmium	0.021	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 10:47	1
Chromium	0.71		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 10:47	1
Copper	0.23	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 10:47	1
Lead	0.032	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 10:47	1
Nickel	0.19	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 10:47	1
Zinc	0.085	J	0.50	0.070	ug/L		06/26/23 00:00	06/27/23 10:47	1
Barium	13	B ^2	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 10:47	1
Iron	19		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 10:47	1
Manganese	1.4	B	0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 10:47	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-1B2X-SW-1

Lab Sample ID: 580-126685-112

Date Collected: 03/20/23 02:37

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.096	J B	0.50	0.079	ng/L			05/11/23 15:31	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 11:02	1
Cadmium	0.014	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 11:02	1
Chromium	0.69		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 11:02	1
Copper	0.19	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 11:02	1
Lead	0.015	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 11:02	1
Nickel	0.15	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 11:02	1
Zinc	0.10	J	0.50	0.070	ug/L		06/26/23 00:00	06/27/23 11:02	1
Barium	11	B ^2	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 11:02	1
Iron	ND		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 11:02	1
Manganese	0.33	B	0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 11:02	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-1B2X-SW-20

Lab Sample ID: 580-126685-113

Date Collected: 03/20/23 02:43

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	J B	0.50	0.079	ng/L			05/11/23 15:35	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.8		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 11:16	1
Cadmium	0.014	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 11:16	1
Chromium	0.69		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 11:16	1
Copper	0.19	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 11:16	1
Lead	0.016	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 11:16	1
Nickel	0.15	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 11:16	1
Zinc	ND		0.50	0.070	ug/L		06/26/23 00:00	06/27/23 11:16	1
Barium	11	B ^2	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 11:16	1
Iron	ND		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 11:16	1
Manganese	0.33	B	0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 11:16	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-1B2X-SW-40

Lab Sample ID: 580-126685-114

Date Collected: 03/20/23 02:52

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/11/23 15:39	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 11:30	1
Cadmium	0.014	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 11:30	1
Chromium	0.69		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 11:30	1
Copper	0.21	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 11:30	1
Lead	0.014	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 11:30	1
Nickel	0.15	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 11:30	1
Zinc	0.17	J	0.50	0.070	ug/L		06/26/23 00:00	06/27/23 11:30	1
Barium	11	B ^2	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 11:30	1
Iron	ND		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 11:30	1
Manganese	0.32	B	0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 11:30	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-1B2X-SW-B

Lab Sample ID: 580-126685-115

Date Collected: 03/20/23 03:04

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.18	J B	0.50	0.079	ng/L			05/11/23 15:43	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.9		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 11:45	1
Cadmium	0.021	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 11:45	1
Chromium	0.75		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 11:45	1
Copper	0.16	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 11:45	1
Lead	0.035	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 11:45	1
Nickel	0.18	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 11:45	1
Zinc	0.071	J	0.50	0.070	ug/L		06/26/23 00:00	06/27/23 11:45	1
Barium	13	B ^2	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 11:45	1
Iron	21		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 11:45	1
Manganese	1.5	B	0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 11:45	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-1C2-SW-1

Lab Sample ID: 580-126685-116

Date Collected: 03/20/23 04:37

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10	J B	0.50	0.079	ng/L			05/11/23 15:48	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 12:27	1
Cadmium	0.015	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 12:27	1
Chromium	0.66		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 12:27	1
Copper	0.24	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 12:27	1
Lead	0.025	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 12:27	1
Nickel	0.16	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 12:27	1
Zinc	0.11	J	0.50	0.070	ug/L		06/26/23 00:00	06/27/23 12:27	1
Barium	11	B ^2	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 12:27	1
Iron	1.3	J	2.0	1.1	ug/L		06/26/23 00:00	06/27/23 12:27	1
Manganese	0.37	B	0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 12:27	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-1C2-SW-20

Lab Sample ID: 580-126685-117

Date Collected: 03/20/23 04:43

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	J B	0.50	0.079	ng/L			05/11/23 15:52	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 12:42	1
Cadmium	0.015	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 12:42	1
Chromium	0.65		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 12:42	1
Copper	0.18	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 12:42	1
Lead	0.030	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 12:42	1
Nickel	0.15	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 12:42	1
Zinc	ND		0.50	0.070	ug/L		06/26/23 00:00	06/27/23 12:42	1
Barium	11	B ^2	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 12:42	1
Iron	ND		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 12:42	1
Manganese	0.34	B	0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 12:42	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-1C2-SW-40

Lab Sample ID: 580-126685-118

Date Collected: 03/20/23 04:52

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.14	J B	0.50	0.079	ng/L			05/11/23 15:56	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 12:56	1
Cadmium	0.014	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 12:56	1
Chromium	0.68		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 12:56	1
Copper	0.14	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 12:56	1
Lead	0.015	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 12:56	1
Nickel	0.15	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 12:56	1
Zinc	ND		0.50	0.070	ug/L		06/26/23 00:00	06/27/23 12:56	1
Barium	11	B ^2	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 12:56	1
Iron	ND		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 12:56	1
Manganese	0.33	B	0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 12:56	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-1C2-SW-B

Lab Sample ID: 580-126685-119

Date Collected: 03/20/23 05:04

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.15	J B	0.50	0.079	ng/L			05/11/23 16:00	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.1		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 13:10	1
Cadmium	0.022	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 13:10	1
Chromium	0.71		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 13:10	1
Copper	0.15	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 13:10	1
Lead	0.035	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 13:10	1
Nickel	0.18	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 13:10	1
Zinc	0.088	J	0.50	0.070	ug/L		06/26/23 00:00	06/27/23 13:10	1
Barium	13	B ^2	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 13:10	1
Iron	20		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 13:10	1
Manganese	1.4	B	0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 13:10	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-2B2X-SW-1

Lab Sample ID: 580-126685-120

Date Collected: 03/20/23 01:02

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.18	J B	0.50	0.079	ng/L			05/11/23 16:12	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 13:24	1
Cadmium	0.014	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 13:24	1
Chromium	0.66		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 13:24	1
Copper	0.18	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 13:24	1
Lead	0.019	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 13:24	1
Nickel	0.15	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 13:24	1
Zinc	0.084	J	0.50	0.070	ug/L		06/26/23 00:00	06/27/23 13:24	1
Barium	11	B ^2	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 13:24	1
Iron	ND		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 13:24	1
Manganese	0.36	B	0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 13:24	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-2B2X-SW-20

Lab Sample ID: 580-126685-121

Date Collected: 03/20/23 01:08

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	J	0.50	0.079	ng/L			05/11/23 17:08	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.8		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 13:39	1
Cadmium	0.016	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 13:39	1
Chromium	0.67		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 13:39	1
Copper	0.16	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 13:39	1
Lead	0.013	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 13:39	1
Nickel	0.15	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 13:39	1
Zinc	ND		0.50	0.070	ug/L		06/26/23 00:00	06/27/23 13:39	1
Barium	11	B ^2	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 13:39	1
Iron	ND		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 13:39	1
Manganese	0.33		0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 13:39	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-2B2X-SW-40

Lab Sample ID: 580-126685-122

Date Collected: 03/20/23 01:17

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.21	J	0.50	0.079	ng/L			05/11/23 17:12	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 13:53	1
Cadmium	0.013	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 13:53	1
Chromium	0.68		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 13:53	1
Copper	0.13	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 13:53	1
Lead	0.016	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 13:53	1
Nickel	0.14	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 13:53	1
Zinc	ND		0.50	0.070	ug/L		06/26/23 00:00	06/27/23 13:53	1
Barium	11	B ^2	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 13:53	1
Iron	ND		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 13:53	1
Manganese	0.28		0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 13:53	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-2B2X-SW-B

Lab Sample ID: 580-126685-123

Date Collected: 03/20/23 01:28

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.28	J	0.50	0.079	ng/L			05/11/23 17:16	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.9		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 05:48	1
Cadmium	0.022	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 05:48	1
Chromium	0.72		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 05:48	1
Copper	0.22	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 05:48	1
Lead	0.046	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 05:48	1
Nickel	0.23	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 05:48	1
Zinc	0.10	J	0.50	0.070	ug/L		06/26/23 00:00	06/27/23 05:48	1
Barium	12	B	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 05:48	1
Iron	24		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 05:48	1
Manganese	1.6		0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 05:48	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-3B2X-SW-1

Lab Sample ID: 580-126685-124

Date Collected: 03/19/23 20:13

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	J	0.50	0.079	ng/L			05/11/23 12:49	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 06:59	1
Cadmium	0.015	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 06:59	1
Chromium	0.62		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 06:59	1
Copper	0.17	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 06:59	1
Lead	0.017	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 06:59	1
Nickel	0.17	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 06:59	1
Zinc	0.10	J	0.50	0.070	ug/L		06/26/23 00:00	06/27/23 06:59	1
Barium	10	B	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 06:59	1
Iron	ND		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 06:59	1
Manganese	0.33		0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 06:59	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-3B2X-SW-20

Lab Sample ID: 580-126685-125

Date Collected: 03/19/23 20:23

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.15	J	0.50	0.079	ng/L			05/11/23 12:54	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.0		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 14:07	1
Cadmium	0.014	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 14:07	1
Chromium	0.69		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 14:07	1
Copper	0.16	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 14:07	1
Lead	0.024	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 14:07	1
Nickel	0.15	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 14:07	1
Zinc	ND		0.50	0.070	ug/L		06/26/23 00:00	06/27/23 14:07	1
Barium	11	B ^2	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 14:07	1
Iron	ND		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 14:07	1
Manganese	0.34		0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 14:07	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-3B2X-SW-40

Lab Sample ID: 580-126685-126

Date Collected: 03/19/23 20:32

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/11/23 12:53	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 14:21	1
Cadmium	0.014	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 14:21	1
Chromium	0.68		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 14:21	1
Copper	0.16	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 14:21	1
Lead	0.015	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 14:21	1
Nickel	0.15	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 14:21	1
Zinc	ND		0.50	0.070	ug/L		06/26/23 00:00	06/27/23 14:21	1
Barium	11	B ^2	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 14:21	1
Iron	ND		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 14:21	1
Manganese	0.32		0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 14:21	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-3B2X-SW-B

Lab Sample ID: 580-126685-127

Date Collected: 03/19/23 20:43

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.11	J F1 B	0.50	0.079	ng/L			05/11/23 12:57	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.0		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 14:36	1
Cadmium	0.022	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 14:36	1
Chromium	0.72		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 14:36	1
Copper	0.23	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 14:36	1
Lead	0.033	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 14:36	1
Nickel	0.18	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 14:36	1
Zinc	0.071	J	0.50	0.070	ug/L		06/26/23 00:00	06/27/23 14:36	1
Barium	13	B ^2	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 14:36	1
Iron	18		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 14:36	1
Manganese	1.4		0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 14:36	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-3C2-SW-1

Lab Sample ID: 580-126685-128

Date Collected: 03/19/23 19:09

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	J	0.50	0.079	ng/L			05/11/23 12:58	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 15:18	1
Cadmium	0.015	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 15:18	1
Chromium	0.68		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 15:18	1
Copper	0.19	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 15:18	1
Lead	0.031	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 15:18	1
Nickel	0.16	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 15:18	1
Zinc	0.20	J	0.50	0.070	ug/L		06/26/23 00:00	06/27/23 15:18	1
Barium	11	B	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 15:18	1
Iron	1.7	J	2.0	1.1	ug/L		06/26/23 00:00	06/27/23 15:18	1
Manganese	0.38		0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 15:18	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-3C2-SW-20

Lab Sample ID: 580-126685-129

Date Collected: 03/19/23 19:26

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10	J	0.50	0.079	ng/L			05/11/23 13:02	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.8		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 15:33	1
Cadmium	0.014	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 15:33	1
Chromium	0.63		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 15:33	1
Copper	0.21	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 15:33	1
Lead	0.024	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 15:33	1
Nickel	0.15	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 15:33	1
Zinc	0.096	J	0.50	0.070	ug/L		06/26/23 00:00	06/27/23 15:33	1
Barium	11	B	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 15:33	1
Iron	ND		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 15:33	1
Manganese	0.36		0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 15:33	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-3C2-SW-40

Lab Sample ID: 580-126685-130

Date Collected: 03/19/23 19:04

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	J	0.50	0.079	ng/L			05/11/23 17:20	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 15:47	1
Cadmium	0.013	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 15:47	1
Chromium	0.66		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 15:47	1
Copper	0.16	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 15:47	1
Lead	0.014	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 15:47	1
Nickel	0.14	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 15:47	1
Zinc	0.085	J	0.50	0.070	ug/L		06/26/23 00:00	06/27/23 15:47	1
Barium	11	B	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 15:47	1
Iron	ND		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 15:47	1
Manganese	0.32		0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 15:47	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-3C2-SW-B

Lab Sample ID: 580-126685-131

Date Collected: 03/19/23 19:46

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.35	J	0.50	0.079	ng/L			05/11/23 17:24	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.9		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 16:01	1
Cadmium	0.021	J	0.040	0.011	ug/L		06/26/23 00:00	06/27/23 16:01	1
Chromium	0.72		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 16:01	1
Copper	0.19	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 16:01	1
Lead	0.052		0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 16:01	1
Nickel	0.18	J	0.30	0.11	ug/L		06/26/23 00:00	06/27/23 16:01	1
Zinc	0.11	J	0.50	0.070	ug/L		06/26/23 00:00	06/27/23 16:01	1
Barium	13	B	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 16:01	1
Iron	20		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 16:01	1
Manganese	1.6		0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 16:01	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-4B2X-SW-1

Lab Sample ID: 580-126685-132

Date Collected: 03/19/23 21:02

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.25	J	0.50	0.079	ng/L			05/11/23 17:29	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.95		0.60	0.42	ug/L		06/16/23 00:00	06/17/23 03:00	1
Cadmium	0.011	J	0.040	0.011	ug/L		06/16/23 00:00	06/17/23 03:00	1
Chromium	0.49	J	0.50	0.34	ug/L		06/16/23 00:00	06/17/23 03:00	1
Copper	0.34	J	1.0	0.020	ug/L		06/16/23 00:00	06/17/23 03:00	1
Lead	0.016	J	0.050	0.0040	ug/L		06/16/23 00:00	06/17/23 03:00	1
Nickel	0.23	J	0.30	0.11	ug/L		06/16/23 00:00	06/17/23 03:00	1
Zinc	ND		0.50	0.070	ug/L		06/16/23 00:00	06/17/23 03:00	1
Barium	9.6		0.50	0.13	ug/L		06/16/23 00:00	06/17/23 03:00	1
Iron	1.2	J	2.0	1.1	ug/L		06/16/23 00:00	06/17/23 03:00	1
Manganese	0.50		0.050	0.0080	ug/L		06/16/23 00:00	06/17/23 03:00	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-4B2X-SW-20

Lab Sample ID: 580-126685-133

Date Collected: 03/19/23 21:52

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.25	J	0.50	0.079	ng/L			05/11/23 17:41	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.97		0.60	0.42	ug/L		06/16/23 00:00	06/17/23 03:15	1
Cadmium	ND		0.040	0.011	ug/L		06/16/23 00:00	06/17/23 03:15	1
Chromium	0.48	J	0.50	0.34	ug/L		06/16/23 00:00	06/17/23 03:15	1
Copper	0.20	J	1.0	0.020	ug/L		06/16/23 00:00	06/17/23 03:15	1
Lead	0.014	J	0.050	0.0040	ug/L		06/16/23 00:00	06/17/23 03:15	1
Nickel	0.20	J	0.30	0.11	ug/L		06/16/23 00:00	06/17/23 03:15	1
Zinc	ND		0.50	0.070	ug/L		06/16/23 00:00	06/17/23 03:15	1
Barium	9.6		0.50	0.13	ug/L		06/16/23 00:00	06/17/23 03:15	1
Iron	ND		2.0	1.1	ug/L		06/16/23 00:00	06/17/23 03:15	1
Manganese	0.48		0.050	0.0080	ug/L		06/16/23 00:00	06/17/23 03:15	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-4B2X-SW-40

Lab Sample ID: 580-126685-134

Date Collected: 03/19/23 22:01

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13	J	0.50	0.079	ng/L			05/11/23 17:45	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.90		0.60	0.42	ug/L		06/16/23 00:00	06/17/23 01:06	1
Cadmium	0.015	J	0.040	0.011	ug/L		06/16/23 00:00	06/17/23 01:06	1
Chromium	0.55		0.50	0.34	ug/L		06/16/23 00:00	06/17/23 01:06	1
Copper	0.33	J	1.0	0.020	ug/L		06/16/23 00:00	06/17/23 01:06	1
Lead	0.029	J	0.050	0.0040	ug/L		06/16/23 00:00	06/17/23 01:06	1
Nickel	0.29	J	0.30	0.11	ug/L		06/16/23 00:00	06/17/23 01:06	1
Zinc	0.11	J	0.50	0.070	ug/L		06/16/23 00:00	06/17/23 01:06	1
Barium	9.5		0.50	0.13	ug/L		06/16/23 00:00	06/17/23 01:06	1
Iron	2.2		2.0	1.1	ug/L		06/16/23 00:00	06/17/23 01:06	1
Manganese	0.51		0.050	0.0080	ug/L		06/16/23 00:00	06/17/23 01:06	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-4B2X-SW-B

Lab Sample ID: 580-126685-135

Date Collected: 03/19/23 22:12

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.34	J	0.50	0.079	ng/L			05/11/23 17:49	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.2		0.60	0.42	ug/L		06/16/23 00:00	06/17/23 01:49	1
Cadmium	0.019	J	0.040	0.011	ug/L		06/16/23 00:00	06/17/23 01:49	1
Chromium	0.61		0.50	0.34	ug/L		06/16/23 00:00	06/17/23 01:49	1
Copper	0.22	J	1.0	0.020	ug/L		06/16/23 00:00	06/17/23 01:49	1
Lead	0.041	J	0.050	0.0040	ug/L		06/16/23 00:00	06/17/23 01:49	1
Nickel	0.28	J	0.30	0.11	ug/L		06/16/23 00:00	06/17/23 01:49	1
Zinc	ND		0.50	0.070	ug/L		06/16/23 00:00	06/17/23 01:49	1
Barium	11		0.50	0.13	ug/L		06/16/23 00:00	06/17/23 01:49	1
Iron	30		2.0	1.1	ug/L		06/16/23 00:00	06/17/23 01:49	1
Manganese	2.5		0.050	0.0080	ug/L		06/16/23 00:00	06/17/23 01:49	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-4B2X-SW-B-FD

Lab Sample ID: 580-126685-136

Date Collected: 03/19/23 22:25

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.30	J	0.50	0.079	ng/L			05/11/23 17:54	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.2		0.60	0.42	ug/L		06/16/23 00:00	06/17/23 03:29	1
Cadmium	0.018	J	0.040	0.011	ug/L		06/16/23 00:00	06/17/23 03:29	1
Chromium	0.54		0.50	0.34	ug/L		06/16/23 00:00	06/17/23 03:29	1
Copper	0.23	J	1.0	0.020	ug/L		06/16/23 00:00	06/17/23 03:29	1
Lead	0.035	J	0.050	0.0040	ug/L		06/16/23 00:00	06/17/23 03:29	1
Nickel	0.24	J	0.30	0.11	ug/L		06/16/23 00:00	06/17/23 03:29	1
Zinc	ND		0.50	0.070	ug/L		06/16/23 00:00	06/17/23 03:29	1
Barium	11		0.50	0.13	ug/L		06/16/23 00:00	06/17/23 03:29	1
Iron	28		2.0	1.1	ug/L		06/16/23 00:00	06/17/23 03:29	1
Manganese	2.3		0.050	0.0080	ug/L		06/16/23 00:00	06/17/23 03:29	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-EQ

Lab Sample ID: 580-126685-137

Date Collected: 03/19/23 09:07

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.18	J	0.50	0.079	ng/L			05/11/23 17:58	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 16:44	1
Cadmium	ND		0.040	0.011	ug/L		06/26/23 00:00	06/27/23 16:44	1
Chromium	ND		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 16:44	1
Copper	0.083	J	1.0	0.020	ug/L		06/26/23 00:00	06/27/23 16:44	1
Lead	0.0041	J	0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 16:44	1
Nickel	ND		0.30	0.11	ug/L		06/26/23 00:00	06/27/23 16:44	1
Zinc	0.25	J	0.50	0.070	ug/L		06/26/23 00:00	06/27/23 16:44	1
Barium	0.65	B	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 16:44	1
Iron	ND		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 16:44	1
Manganese	0.047	J	0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 16:44	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-WB

Lab Sample ID: 580-126685-138

Date Collected: 03/19/23 19:00

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/11/23 18:02	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 16:58	1
Cadmium	ND		0.040	0.011	ug/L		06/26/23 00:00	06/27/23 16:58	1
Chromium	ND		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 16:58	1
Copper	ND		1.0	0.020	ug/L		06/26/23 00:00	06/27/23 16:58	1
Lead	ND		0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 16:58	1
Nickel	ND		0.30	0.11	ug/L		06/26/23 00:00	06/27/23 16:58	1
Zinc	ND		0.50	0.070	ug/L		06/26/23 00:00	06/27/23 16:58	1
Barium	0.48	J B	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 16:58	1
Iron	ND		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 16:58	1
Manganese	0.024	J	0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 16:58	1

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 580-425969/17
Matrix: Water
Analysis Batch: 425969

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/11/23 13:06	1

Lab Sample ID: MB 580-425969/18
Matrix: Water
Analysis Batch: 425969

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/11/23 13:10	1

Lab Sample ID: MB 580-425969/19
Matrix: Water
Analysis Batch: 425969

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/11/23 13:14	1

Lab Sample ID: MB 580-425969/20
Matrix: Water
Analysis Batch: 425969

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/11/23 13:19	1

Lab Sample ID: MB 580-425969/23
Matrix: Water
Analysis Batch: 425969

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/11/23 13:31	1

Lab Sample ID: MB 580-425969/24
Matrix: Water
Analysis Batch: 425969

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/11/23 13:35	1

Lab Sample ID: MB 580-425969/25
Matrix: Water
Analysis Batch: 425969

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/11/23 13:39	1

Lab Sample ID: MB 580-425969/26
Matrix: Water
Analysis Batch: 425969

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.108	J	0.50	0.079	ng/L			05/11/23 13:44	1

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 580-425969/27

Matrix: Water

Analysis Batch: 425969

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.133	J	0.50	0.079	ng/L			05/11/23 13:48	1

Lab Sample ID: LCS 580-425969/28

Matrix: Water

Analysis Batch: 425969

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.10		ng/L		102	77 - 123

Lab Sample ID: LCS 580-425969/30

Matrix: Water

Analysis Batch: 425969

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.04		ng/L		101	77 - 123

Lab Sample ID: LCS 580-425969/32

Matrix: Water

Analysis Batch: 425969

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.01		ng/L		100	77 - 123

Lab Sample ID: LCSD 580-425969/29

Matrix: Water

Analysis Batch: 425969

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	4.99		ng/L		100	77 - 123	2	24

Lab Sample ID: LCSD 580-425969/31

Matrix: Water

Analysis Batch: 425969

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	5.00		ng/L		100	77 - 123	1	24

Lab Sample ID: LCSD 580-425969/35

Matrix: Water

Analysis Batch: 425969

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	4.96		ng/L		99	77 - 123	1	24

Lab Sample ID: 580-126685-124 MS

Matrix: Water

Analysis Batch: 425969

Client Sample ID: MAWC-3B2X-SW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.20	J	5.00	4.48		ng/L		86	71 - 125

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: 580-126685-124 MSD

Matrix: Water

Analysis Batch: 425969

Client Sample ID: MAWC-3B2X-SW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.20	J	5.00	4.34		ng/L		83	71 - 125	3	24

Lab Sample ID: 580-126685-125 MS

Matrix: Water

Analysis Batch: 425969

Client Sample ID: MAWC-3B2X-SW-20

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.15	J	5.00	4.63		ng/L		90	71 - 125		

Lab Sample ID: 580-126685-125 MSD

Matrix: Water

Analysis Batch: 425969

Client Sample ID: MAWC-3B2X-SW-20

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.15	J	5.00	4.34		ng/L		84	71 - 125	6	24

Lab Sample ID: 580-126685-128 MS

Matrix: Water

Analysis Batch: 425969

Client Sample ID: MAWC-3C2-SW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.12	J	5.00	4.44		ng/L		86	71 - 125		

Lab Sample ID: 580-126685-128 MSD

Matrix: Water

Analysis Batch: 425969

Client Sample ID: MAWC-3C2-SW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.12	J	5.00	4.38		ng/L		85	71 - 125	1	24

Lab Sample ID: 580-126685-129 MS

Matrix: Water

Analysis Batch: 425969

Client Sample ID: MAWC-3C2-SW-20

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.10	J	5.00	4.47		ng/L		87	71 - 125		

Lab Sample ID: 580-126685-129 MSD

Matrix: Water

Analysis Batch: 425969

Client Sample ID: MAWC-3C2-SW-20

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.10	J	5.00	4.43		ng/L		86	71 - 125	1	24

Lab Sample ID: MB 580-425970/18

Matrix: Water

Analysis Batch: 425970

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/11/23 13:10	1

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 580-425970/19

Matrix: Water

Analysis Batch: 425970

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/11/23 13:14	1

Lab Sample ID: MB 580-425970/20

Matrix: Water

Analysis Batch: 425970

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.106	J	0.50	0.079	ng/L			05/11/23 13:18	1

Lab Sample ID: LCS 580-425970/26

Matrix: Water

Analysis Batch: 425970

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.48		ng/L		90	77 - 123

Lab Sample ID: LCSD 580-425970/27

Matrix: Water

Analysis Batch: 425970

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	4.49		ng/L		90	77 - 123	0	24

Lab Sample ID: 580-126685-126 MS

Matrix: Water

Analysis Batch: 425970

Client Sample ID: MAWC-3B2X-SW-40

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		5.00	3.66		ng/L		73	71 - 125

Lab Sample ID: 580-126685-126 MSD

Matrix: Water

Analysis Batch: 425970

Client Sample ID: MAWC-3B2X-SW-40

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		5.00	3.68		ng/L		74	71 - 125	1	24

Lab Sample ID: 580-126685-127 MS

Matrix: Water

Analysis Batch: 425970

Client Sample ID: MAWC-3B2X-SW-B

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.11	J F1 B	5.00	3.43	F1	ng/L		66	71 - 125

Lab Sample ID: 580-126685-127 MSD

Matrix: Water

Analysis Batch: 425970

Client Sample ID: MAWC-3B2X-SW-B

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.11	J F1 B	5.00	3.87		ng/L		75	71 - 125	12	24

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 580-425972/20

Matrix: Water

Analysis Batch: 425972

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 13:43	1

Lab Sample ID: MB 580-425972/23

Matrix: Water

Analysis Batch: 425972

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 13:56	1

Lab Sample ID: MB 580-425972/24

Matrix: Water

Analysis Batch: 425972

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 14:00	1

Lab Sample ID: LCS 580-425972/30

Matrix: Water

Analysis Batch: 425972

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.26		ng/L		105	77 - 123

Lab Sample ID: LCSD 580-425972/31

Matrix: Water

Analysis Batch: 425972

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	5.39		ng/L		108	77 - 123	2	24

Lab Sample ID: MB 580-426164/22

Matrix: Water

Analysis Batch: 426164

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 12:37	1

Lab Sample ID: MB 580-426164/23

Matrix: Water

Analysis Batch: 426164

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 12:41	1

Lab Sample ID: MB 580-426164/24

Matrix: Water

Analysis Batch: 426164

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 12:45	1

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: LCS 580-426164/30
Matrix: Water
Analysis Batch: 426164

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.05		ng/L		101	77 - 123

Lab Sample ID: LCSD 580-426164/31
Matrix: Water
Analysis Batch: 426164

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	4.94		ng/L		99	77 - 123	2	24

Method: 1640 - Metals (ICPMS)

Lab Sample ID: MB 580-425976/1-A
Matrix: Water
Analysis Batch: 426380

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 425976

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 01:26	1
Cadmium	ND		0.040	0.011	ug/L		05/15/23 00:00	05/16/23 01:26	1
Chromium	ND		0.50	0.34	ug/L		05/15/23 00:00	05/16/23 01:26	1
Copper	ND		1.0	0.020	ug/L		05/15/23 00:00	05/16/23 01:26	1
Lead	ND		0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 01:26	1
Nickel	ND		0.30	0.11	ug/L		05/15/23 00:00	05/16/23 01:26	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 00:00	05/16/23 01:26	1
Barium	ND		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 01:26	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 01:26	1
Manganese	ND		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 01:26	1

Lab Sample ID: MB 580-425976/2-A
Matrix: Water
Analysis Batch: 426380

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 425976

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/15/23 00:00	05/16/23 01:41	1
Cadmium	ND		0.040	0.011	ug/L		05/15/23 00:00	05/16/23 01:41	1
Chromium	0.360	J	0.50	0.34	ug/L		05/15/23 00:00	05/16/23 01:41	1
Copper	ND		1.0	0.020	ug/L		05/15/23 00:00	05/16/23 01:41	1
Lead	ND		0.050	0.0040	ug/L		05/15/23 00:00	05/16/23 01:41	1
Nickel	ND		0.30	0.11	ug/L		05/15/23 00:00	05/16/23 01:41	1
Zinc	0.102	J	0.50	0.070	ug/L		05/15/23 00:00	05/16/23 01:41	1
Barium	ND		0.50	0.13	ug/L		05/15/23 00:00	05/16/23 01:41	1
Iron	ND		2.0	1.1	ug/L		05/15/23 00:00	05/16/23 01:41	1
Manganese	ND		0.050	0.0080	ug/L		05/15/23 00:00	05/16/23 01:41	1

Lab Sample ID: LCS 580-425976/3-A
Matrix: Water
Analysis Batch: 426380

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 425976

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	12.5	12.4		ug/L		99	70 - 130
Cadmium	1.25	1.24		ug/L		99	70 - 130

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: LCS 580-425976/3-A

Matrix: Water

Analysis Batch: 426380

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 425976

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium	12.5	12.9		ug/L		103	70 - 130
Copper	12.5	12.6		ug/L		101	70 - 130
Lead	2.50	2.43		ug/L		97	70 - 130
Nickel	12.5	12.8		ug/L		103	70 - 130
Zinc	12.5	12.4		ug/L		99	70 - 130
Barium	12.5	12.3		ug/L		99	70 - 130
Iron	62.5	63.4		ug/L		101	70 - 130
Manganese	12.5	12.5		ug/L		100	70 - 130

Lab Sample ID: LCSD 580-425976/4-A

Matrix: Water

Analysis Batch: 426380

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 425976

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	12.5	13.0		ug/L		104	70 - 130	5	20
Cadmium	1.25	1.24		ug/L		99	70 - 130	0	20
Chromium	12.5	12.4		ug/L		99	70 - 130	4	20
Copper	12.5	12.5		ug/L		100	70 - 130	1	20
Lead	2.50	2.51		ug/L		100	70 - 130	3	20
Nickel	12.5	12.7		ug/L		102	70 - 130	1	20
Zinc	12.5	12.5		ug/L		100	70 - 130	1	20
Barium	12.5	12.0		ug/L		96	70 - 130	2	20
Iron	62.5	63.5		ug/L		102	70 - 130	0	20
Manganese	12.5	12.8		ug/L		102	70 - 130	2	20

Lab Sample ID: MB 580-425977/1-A

Matrix: Water

Analysis Batch: 426380

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 425977

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/15/23 12:07	05/16/23 01:55	1
Cadmium	ND		0.040	0.011	ug/L		05/15/23 12:07	05/16/23 01:55	1
Chromium	ND		0.50	0.34	ug/L		05/15/23 12:07	05/16/23 01:55	1
Copper	ND		1.0	0.020	ug/L		05/15/23 12:07	05/16/23 01:55	1
Lead	ND		0.050	0.0040	ug/L		05/15/23 12:07	05/16/23 01:55	1
Nickel	ND		0.30	0.11	ug/L		05/15/23 12:07	05/16/23 01:55	1
Zinc	ND		0.50	0.070	ug/L		05/15/23 12:07	05/16/23 01:55	1
Barium	ND		0.50	0.13	ug/L		05/15/23 12:07	05/16/23 01:55	1
Iron	ND		2.0	1.1	ug/L		05/15/23 12:07	05/16/23 01:55	1
Manganese	ND		0.050	0.0080	ug/L		05/15/23 12:07	05/16/23 01:55	1

Lab Sample ID: MB 580-425977/2-A

Matrix: Water

Analysis Batch: 426380

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 425977

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/15/23 12:07	05/16/23 02:09	1
Cadmium	ND		0.040	0.011	ug/L		05/15/23 12:07	05/16/23 02:09	1
Chromium	0.361	J	0.50	0.34	ug/L		05/15/23 12:07	05/16/23 02:09	1

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: MB 580-425977/2-A

Matrix: Water

Analysis Batch: 426380

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 425977

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		1.0	0.020	ug/L		05/15/23 12:07	05/16/23 02:09	1
Lead	ND		0.050	0.0040	ug/L		05/15/23 12:07	05/16/23 02:09	1
Nickel	ND		0.30	0.11	ug/L		05/15/23 12:07	05/16/23 02:09	1
Zinc	0.0966	J	0.50	0.070	ug/L		05/15/23 12:07	05/16/23 02:09	1
Barium	ND		0.50	0.13	ug/L		05/15/23 12:07	05/16/23 02:09	1
Iron	ND		2.0	1.1	ug/L		05/15/23 12:07	05/16/23 02:09	1
Manganese	ND		0.050	0.0080	ug/L		05/15/23 12:07	05/16/23 02:09	1

Lab Sample ID: LCS 580-425977/3-A

Matrix: Water

Analysis Batch: 426380

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 425977

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	12.5	13.7		ug/L		109	70 - 130
Cadmium	1.25	1.22		ug/L		97	70 - 130
Chromium	12.5	12.6		ug/L		101	70 - 130
Copper	12.5	12.6		ug/L		100	70 - 130
Lead	2.50	2.46		ug/L		98	70 - 130
Nickel	12.5	12.8		ug/L		102	70 - 130
Zinc	12.5	12.4		ug/L		99	70 - 130
Barium	12.5	12.4		ug/L		100	70 - 130
Iron	62.5	62.6		ug/L		100	70 - 130
Manganese	12.5	12.5		ug/L		100	70 - 130

Lab Sample ID: LCSD 580-425977/4-A

Matrix: Water

Analysis Batch: 426380

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 425977

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	12.5	13.1		ug/L		105	70 - 130	4	20
Cadmium	1.25	1.25		ug/L		100	70 - 130	3	20
Chromium	12.5	12.5		ug/L		100	70 - 130	1	20
Copper	12.5	12.5		ug/L		100	70 - 130	0	20
Lead	2.50	2.47		ug/L		99	70 - 130	0	20
Nickel	12.5	12.8		ug/L		102	70 - 130	0	20
Zinc	12.5	12.3		ug/L		99	70 - 130	1	20
Barium	12.5	12.5		ug/L		100	70 - 130	1	20
Iron	62.5	63.9		ug/L		102	70 - 130	2	20
Manganese	12.5	12.7		ug/L		101	70 - 130	1	20

Lab Sample ID: MB 580-426148/1-A

Matrix: Water

Analysis Batch: 426551

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 426148

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/17/23 00:00	05/18/23 19:57	1
Cadmium	ND		0.040	0.011	ug/L		05/17/23 00:00	05/18/23 19:57	1
Chromium	ND		0.50	0.34	ug/L		05/17/23 00:00	05/18/23 19:57	1
Copper	ND		0.10	0.020	ug/L		05/17/23 00:00	05/18/23 19:57	1

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: MB 580-426148/1-A

Matrix: Water

Analysis Batch: 426551

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 426148

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.025	0.0040	ug/L		05/17/23 00:00	05/18/23 19:57	1
Nickel	ND		0.30	0.11	ug/L		05/17/23 00:00	05/18/23 19:57	1
Zinc	ND		0.50	0.070	ug/L		05/17/23 00:00	05/18/23 19:57	1
Barium	ND		0.20	0.13	ug/L		05/17/23 00:00	05/18/23 19:57	1
Iron	ND		2.0	1.1	ug/L		05/17/23 00:00	05/18/23 19:57	1
Manganese	ND		0.050	0.0080	ug/L		05/17/23 00:00	05/18/23 19:57	1

Lab Sample ID: MB 580-426148/2-A

Matrix: Water

Analysis Batch: 426551

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 426148

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/17/23 00:00	05/18/23 20:11	1
Cadmium	ND		0.040	0.011	ug/L		05/17/23 00:00	05/18/23 20:11	1
Chromium	ND		0.50	0.34	ug/L		05/17/23 00:00	05/18/23 20:11	1
Copper	ND		0.10	0.020	ug/L		05/17/23 00:00	05/18/23 20:11	1
Lead	ND		0.025	0.0040	ug/L		05/17/23 00:00	05/18/23 20:11	1
Nickel	ND		0.30	0.11	ug/L		05/17/23 00:00	05/18/23 20:11	1
Zinc	ND		0.50	0.070	ug/L		05/17/23 00:00	05/18/23 20:11	1
Barium	ND		0.20	0.13	ug/L		05/17/23 00:00	05/18/23 20:11	1
Iron	ND		2.0	1.1	ug/L		05/17/23 00:00	05/18/23 20:11	1
Manganese	ND		0.050	0.0080	ug/L		05/17/23 00:00	05/18/23 20:11	1

Lab Sample ID: LCS 580-426148/3-A

Matrix: Water

Analysis Batch: 426551

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 426148

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	12.5	11.6		ug/L		93	70 - 130
Cadmium	1.25	1.21		ug/L		96	70 - 130
Chromium	12.5	12.8		ug/L		102	70 - 130
Copper	12.5	12.4		ug/L		99	70 - 130
Lead	2.50	2.41		ug/L		97	70 - 130
Nickel	12.5	12.0		ug/L		96	70 - 130
Zinc	12.5	12.6		ug/L		101	70 - 130
Barium	12.5	12.5		ug/L		100	70 - 130
Iron	62.5	59.2		ug/L		95	70 - 130
Manganese	12.5	12.5		ug/L		100	70 - 130

Lab Sample ID: LCSD 580-426148/4-A

Matrix: Water

Analysis Batch: 426551

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 426148

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	12.5	12.0		ug/L		96	70 - 130	3	20
Cadmium	1.25	1.20		ug/L		96	70 - 130	0	20
Chromium	12.5	12.9		ug/L		103	70 - 130	1	20
Copper	12.5	12.4		ug/L		99	70 - 130	0	20
Lead	2.50	2.46		ug/L		98	70 - 130	2	20

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: LCSD 580-426148/4-A

Matrix: Water

Analysis Batch: 426551

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 426148

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nickel	12.5	12.0		ug/L		96	70 - 130	0	20
Zinc	12.5	12.5		ug/L		100	70 - 130	1	20
Barium	12.5	12.5		ug/L		100	70 - 130	0	20
Iron	62.5	60.3		ug/L		96	70 - 130	2	20
Manganese	12.5	12.4		ug/L		99	70 - 130	1	20

Lab Sample ID: 580-126685-85 MS

Matrix: Water

Analysis Batch: 426551

Client Sample ID: MAWB-1B2X-SW-1

Prep Type: Total/NA

Prep Batch: 426148

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.4		12.5	16.2		ug/L		118	50 - 150		
Cadmium	0.013	J	1.25	1.21		ug/L		95	50 - 150		
Chromium	1.3		12.5	14.1		ug/L		102	50 - 150		
Copper	0.22		12.5	12.2		ug/L		96	50 - 150		
Lead	0.18		2.50	2.59		ug/L		96	50 - 150		
Nickel	0.17	J	12.5	12.0		ug/L		95	50 - 150		
Zinc	0.28	J	12.5	12.4		ug/L		97	50 - 150		
Barium	8.7		12.5	21.4		ug/L		101	50 - 150		
Iron	ND		62.5	62.4		ug/L		100	50 - 150		
Manganese	0.41		12.5	13.7		ug/L		106	50 - 150		

Lab Sample ID: 580-126685-85 MSD

Matrix: Water

Analysis Batch: 426551

Client Sample ID: MAWB-1B2X-SW-1

Prep Type: Total/NA

Prep Batch: 426148

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.4		12.5	16.4		ug/L		120	50 - 150	1	20
Cadmium	0.013	J	1.25	1.23		ug/L		97	50 - 150	2	20
Chromium	1.3		12.5	14.1		ug/L		102	50 - 150	0	20
Copper	0.22		12.5	12.7		ug/L		99	50 - 150	4	20
Lead	0.18		2.50	2.55		ug/L		95	50 - 150	2	20
Nickel	0.17	J	12.5	12.6		ug/L		99	50 - 150	4	20
Zinc	0.28	J	12.5	12.9		ug/L		101	50 - 150	4	20
Barium	8.7		12.5	22.3		ug/L		108	50 - 150	4	20
Iron	ND		62.5	64.0		ug/L		102	50 - 150	3	20
Manganese	0.41		12.5	14.0		ug/L		109	50 - 150	2	20

Lab Sample ID: 580-126685-86 MS

Matrix: Water

Analysis Batch: 426551

Client Sample ID: MAWB-1B2X-SW-1-FD

Prep Type: Total/NA

Prep Batch: 426148

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.4		12.5	15.1		ug/L		110	50 - 150		
Cadmium	0.013	J	1.25	1.18		ug/L		93	50 - 150		
Chromium	1.3		12.5	14.2		ug/L		103	50 - 150		
Copper	0.16		12.5	12.6		ug/L		99	50 - 150		
Lead	0.017	J	2.50	2.45		ug/L		97	50 - 150		
Nickel	0.17	J	12.5	12.4		ug/L		98	50 - 150		

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: 580-126685-86 MS

Matrix: Water

Analysis Batch: 426551

Client Sample ID: MAWB-1B2X-SW-1-FD

Prep Type: Total/NA

Prep Batch: 426148

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	0.19	J	12.5	12.7		ug/L		100	50 - 150
Barium	8.8		12.5	22.1		ug/L		107	50 - 150
Iron	ND		62.5	63.1		ug/L		101	50 - 150
Manganese	0.39		12.5	13.7		ug/L		106	50 - 150

Lab Sample ID: 580-126685-86 MSD

Matrix: Water

Analysis Batch: 426551

Client Sample ID: MAWB-1B2X-SW-1-FD

Prep Type: Total/NA

Prep Batch: 426148

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.4		12.5	14.6		ug/L		106	50 - 150	4	20
Cadmium	0.013	J	1.25	1.21		ug/L		96	50 - 150	2	20
Chromium	1.3		12.5	14.4		ug/L		105	50 - 150	2	20
Copper	0.16		12.5	12.4		ug/L		98	50 - 150	2	20
Lead	0.017	J	2.50	2.38		ug/L		95	50 - 150	3	20
Nickel	0.17	J	12.5	12.3		ug/L		97	50 - 150	1	20
Zinc	0.19	J	12.5	12.7		ug/L		100	50 - 150	0	20
Barium	8.8		12.5	22.1		ug/L		106	50 - 150	0	20
Iron	ND		62.5	63.9		ug/L		102	50 - 150	1	20
Manganese	0.39		12.5	13.8		ug/L		107	50 - 150	1	20

Lab Sample ID: 580-126685-87 MS

Matrix: Water

Analysis Batch: 426551

Client Sample ID: MAWB-1B2X-SW-20

Prep Type: Total/NA

Prep Batch: 426148

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.6		12.5	16.0		ug/L		115	50 - 150
Cadmium	0.012	J	1.25	1.18		ug/L		94	50 - 150
Chromium	1.3		12.5	14.5		ug/L		105	50 - 150
Copper	0.21		12.5	12.3		ug/L		97	50 - 150
Lead	0.017	J	2.50	2.50		ug/L		99	50 - 150
Nickel	0.17	J	12.5	12.4		ug/L		98	50 - 150
Zinc	ND		12.5	12.4		ug/L		99	50 - 150
Barium	8.9		12.5	22.3		ug/L		107	50 - 150
Iron	ND		62.5	62.6		ug/L		100	50 - 150
Manganese	0.39		12.5	13.6		ug/L		106	50 - 150

Lab Sample ID: 580-126685-87 MSD

Matrix: Water

Analysis Batch: 426551

Client Sample ID: MAWB-1B2X-SW-20

Prep Type: Total/NA

Prep Batch: 426148

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.6		12.5	15.7		ug/L		113	50 - 150	2	20
Cadmium	0.012	J	1.25	1.17		ug/L		93	50 - 150	1	20
Chromium	1.3		12.5	14.5		ug/L		105	50 - 150	0	20
Copper	0.21		12.5	12.4		ug/L		97	50 - 150	0	20
Lead	0.017	J	2.50	2.40		ug/L		95	50 - 150	4	20
Nickel	0.17	J	12.5	12.4		ug/L		98	50 - 150	0	20
Zinc	ND		12.5	12.6		ug/L		100	50 - 150	1	20

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: 580-126685-87 MSD

Matrix: Water

Analysis Batch: 426551

Client Sample ID: MAWB-1B2X-SW-20

Prep Type: Total/NA

Prep Batch: 426148

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Barium	8.9		12.5	22.6		ug/L		109	50 - 150	1	20
Iron	ND		62.5	63.5		ug/L		102	50 - 150	1	20
Manganese	0.39		12.5	13.7		ug/L		107	50 - 150	1	20

Lab Sample ID: 580-126685-88 MS

Matrix: Water

Analysis Batch: 426551

Client Sample ID: MAWB-1B2X-SW-40

Prep Type: Total/NA

Prep Batch: 426148

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.5		12.5	15.7		ug/L		114	50 - 150		
Cadmium	0.012	J	1.25	1.21		ug/L		96	50 - 150		
Chromium	1.5		12.5	14.6		ug/L		105	50 - 150		
Copper	0.16		12.5	12.4		ug/L		98	50 - 150		
Lead	0.014	J	2.50	2.43		ug/L		97	50 - 150		
Nickel	0.17	J	12.5	12.3		ug/L		97	50 - 150		
Zinc	ND		12.5	12.3		ug/L		98	50 - 150		
Barium	9.2		12.5	22.9		ug/L		110	50 - 150		
Iron	ND		62.5	62.7		ug/L		100	50 - 150		
Manganese	0.41		12.5	13.6		ug/L		106	50 - 150		

Lab Sample ID: 580-126685-88 MSD

Matrix: Water

Analysis Batch: 426551

Client Sample ID: MAWB-1B2X-SW-40

Prep Type: Total/NA

Prep Batch: 426148

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.5		12.5	17.0		ug/L		124	50 - 150	8	20
Cadmium	0.012	J	1.25	1.19		ug/L		94	50 - 150	2	20
Chromium	1.5		12.5	14.5		ug/L		104	50 - 150	1	20
Copper	0.16		12.5	12.5		ug/L		98	50 - 150	1	20
Lead	0.014	J	2.50	2.43		ug/L		96	50 - 150	0	20
Nickel	0.17	J	12.5	12.5		ug/L		98	50 - 150	2	20
Zinc	ND		12.5	12.5		ug/L		100	50 - 150	2	20
Barium	9.2		12.5	22.9		ug/L		110	50 - 150	0	20
Iron	ND		62.5	63.8		ug/L		102	50 - 150	2	20
Manganese	0.41		12.5	13.8		ug/L		107	50 - 150	1	20

Lab Sample ID: MB 580-426511/1-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 426511

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/25/23 00:00	05/26/23 19:59	1
Cadmium	ND		0.040	0.011	ug/L		05/25/23 00:00	05/26/23 19:59	1
Chromium	ND		0.50	0.34	ug/L		05/25/23 00:00	05/26/23 19:59	1
Copper	ND		1.0	0.020	ug/L		05/25/23 00:00	05/26/23 19:59	1
Lead	ND		0.050	0.0040	ug/L		05/25/23 00:00	05/26/23 19:59	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/26/23 19:59	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/26/23 19:59	1
Barium	ND		0.50	0.13	ug/L		05/25/23 00:00	05/26/23 19:59	1

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: MB 580-426511/1-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 426511

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/26/23 19:59	1
Manganese	ND		0.050	0.0080	ug/L		05/25/23 00:00	05/26/23 19:59	1

Lab Sample ID: MB 580-426511/2-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 426511

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/25/23 00:00	05/26/23 20:14	1
Cadmium	ND		0.040	0.011	ug/L		05/25/23 00:00	05/26/23 20:14	1
Chromium	ND		0.50	0.34	ug/L		05/25/23 00:00	05/26/23 20:14	1
Copper	ND		1.0	0.020	ug/L		05/25/23 00:00	05/26/23 20:14	1
Lead	ND		0.050	0.0040	ug/L		05/25/23 00:00	05/26/23 20:14	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/26/23 20:14	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/26/23 20:14	1
Barium	ND		0.50	0.13	ug/L		05/25/23 00:00	05/26/23 20:14	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/26/23 20:14	1
Manganese	ND		0.050	0.0080	ug/L		05/25/23 00:00	05/26/23 20:14	1

Lab Sample ID: LCS 580-426511/3-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 426511

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	12.5	13.7		ug/L		110	70 - 130
Cadmium	1.25	1.29		ug/L		103	70 - 130
Chromium	12.5	13.6		ug/L		108	70 - 130
Copper	12.5	12.6		ug/L		101	70 - 130
Lead	2.50	3.06		ug/L		123	70 - 130
Nickel	12.5	12.6		ug/L		101	70 - 130
Zinc	12.5	13.1		ug/L		105	70 - 130
Barium	12.5	10.6		ug/L		85	70 - 130
Iron	62.5	65.5		ug/L		105	70 - 130
Manganese	12.5	13.5		ug/L		108	70 - 130

Lab Sample ID: LCSD 580-426511/4-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 426511

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	12.5	13.0		ug/L		104	70 - 130	5	20
Cadmium	1.25	1.27		ug/L		102	70 - 130	2	20
Chromium	12.5	13.3		ug/L		107	70 - 130	2	20
Copper	12.5	12.4		ug/L		99	70 - 130	2	20
Lead	2.50	3.08		ug/L		123	70 - 130	1	20
Nickel	12.5	12.8		ug/L		103	70 - 130	2	20
Zinc	12.5	13.5		ug/L		108	70 - 130	3	20
Barium	12.5	10.5		ug/L		84	70 - 130	1	20
Iron	62.5	64.6		ug/L		103	70 - 130	1	20

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: LCSD 580-426511/4-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 426511

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Manganese	12.5	13.2		ug/L		106	70 - 130	2	20

Lab Sample ID: MB 580-426512/1-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 426512

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/25/23 00:00	05/26/23 20:28	1
Cadmium	ND		0.040	0.011	ug/L		05/25/23 00:00	05/26/23 20:28	1
Chromium	ND		0.50	0.34	ug/L		05/25/23 00:00	05/26/23 20:28	1
Copper	ND		1.0	0.020	ug/L		05/25/23 00:00	05/26/23 20:28	1
Lead	ND		0.050	0.0040	ug/L		05/25/23 00:00	05/26/23 20:28	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/26/23 20:28	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/26/23 20:28	1
Barium	ND		0.50	0.13	ug/L		05/25/23 00:00	05/26/23 20:28	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/26/23 20:28	1
Manganese	ND		0.050	0.0080	ug/L		05/25/23 00:00	05/26/23 20:28	1

Lab Sample ID: MB 580-426512/2-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 426512

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/25/23 00:00	05/26/23 20:42	1
Cadmium	ND		0.040	0.011	ug/L		05/25/23 00:00	05/26/23 20:42	1
Chromium	ND		0.50	0.34	ug/L		05/25/23 00:00	05/26/23 20:42	1
Copper	ND		1.0	0.020	ug/L		05/25/23 00:00	05/26/23 20:42	1
Lead	ND		0.050	0.0040	ug/L		05/25/23 00:00	05/26/23 20:42	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/26/23 20:42	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/26/23 20:42	1
Barium	ND		0.50	0.13	ug/L		05/25/23 00:00	05/26/23 20:42	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/26/23 20:42	1
Manganese	ND		0.050	0.0080	ug/L		05/25/23 00:00	05/26/23 20:42	1

Lab Sample ID: LCS 580-426512/3-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 426512

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	12.5	15.1		ug/L		121	70 - 130
Cadmium	1.25	1.24		ug/L		99	70 - 130
Chromium	12.5	13.4		ug/L		107	70 - 130
Copper	12.5	12.0		ug/L		96	70 - 130
Lead	2.50	2.88		ug/L		115	70 - 130
Nickel	12.5	12.7		ug/L		101	70 - 130
Zinc	12.5	13.2		ug/L		106	70 - 130
Barium	12.5	11.1		ug/L		89	70 - 130
Iron	62.5	65.6		ug/L		105	70 - 130
Manganese	12.5	13.2		ug/L		105	70 - 130

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: LCSD 580-426512/4-A
Matrix: Water
Analysis Batch: 427365

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 426512

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits			
Arsenic	12.5	13.8		ug/L		110	70 - 130		9	20
Cadmium	1.25	1.33		ug/L		107	70 - 130		8	20
Chromium	12.5	13.4		ug/L		107	70 - 130		0	20
Copper	12.5	12.4		ug/L		99	70 - 130		3	20
Lead	2.50	3.07		ug/L		123	70 - 130		6	20
Nickel	12.5	12.3		ug/L		99	70 - 130		3	20
Zinc	12.5	13.4		ug/L		108	70 - 130		2	20
Barium	12.5	11.1		ug/L		89	70 - 130		1	20
Iron	62.5	67.7		ug/L		108	70 - 130		3	20
Manganese	12.5	13.4		ug/L		107	70 - 130		2	20

Lab Sample ID: MB 580-429118/1-A
Matrix: Water
Analysis Batch: 429429

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 429118

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		06/16/23 00:00	06/16/23 23:55	1
Cadmium	ND		0.040	0.011	ug/L		06/16/23 00:00	06/16/23 23:55	1
Chromium	ND		0.50	0.34	ug/L		06/16/23 00:00	06/16/23 23:55	1
Copper	ND		1.0	0.020	ug/L		06/16/23 00:00	06/16/23 23:55	1
Lead	ND		0.050	0.0040	ug/L		06/16/23 00:00	06/16/23 23:55	1
Nickel	ND		0.30	0.11	ug/L		06/16/23 00:00	06/16/23 23:55	1
Zinc	ND		0.50	0.070	ug/L		06/16/23 00:00	06/16/23 23:55	1
Barium	ND		0.50	0.13	ug/L		06/16/23 00:00	06/16/23 23:55	1
Iron	ND		2.0	1.1	ug/L		06/16/23 00:00	06/16/23 23:55	1
Manganese	ND		0.050	0.0080	ug/L		06/16/23 00:00	06/16/23 23:55	1

Lab Sample ID: MB 580-429118/2-A
Matrix: Water
Analysis Batch: 429429

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 429118

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		06/16/23 00:00	06/17/23 00:09	1
Cadmium	ND		0.040	0.011	ug/L		06/16/23 00:00	06/17/23 00:09	1
Chromium	ND		0.50	0.34	ug/L		06/16/23 00:00	06/17/23 00:09	1
Copper	ND		1.0	0.020	ug/L		06/16/23 00:00	06/17/23 00:09	1
Lead	ND		0.050	0.0040	ug/L		06/16/23 00:00	06/17/23 00:09	1
Nickel	ND		0.30	0.11	ug/L		06/16/23 00:00	06/17/23 00:09	1
Zinc	ND		0.50	0.070	ug/L		06/16/23 00:00	06/17/23 00:09	1
Barium	ND		0.50	0.13	ug/L		06/16/23 00:00	06/17/23 00:09	1
Iron	ND		2.0	1.1	ug/L		06/16/23 00:00	06/17/23 00:09	1
Manganese	ND		0.050	0.0080	ug/L		06/16/23 00:00	06/17/23 00:09	1

Lab Sample ID: LCS 580-429118/3-A
Matrix: Water
Analysis Batch: 429429

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 429118

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Arsenic	12.5	12.3		ug/L		98	70 - 130	

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: LCS 580-429118/3-A

Matrix: Water

Analysis Batch: 429429

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 429118

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	1.25	1.25		ug/L		100	70 - 130
Chromium	12.5	12.7		ug/L		102	70 - 130
Copper	12.5	12.8		ug/L		102	70 - 130
Lead	2.50	2.52		ug/L		101	70 - 130
Nickel	12.5	12.8		ug/L		102	70 - 130
Zinc	12.5	13.1		ug/L		105	70 - 130
Barium	12.5	12.9		ug/L		103	70 - 130
Iron	62.5	63.4		ug/L		101	70 - 130
Manganese	12.5	12.9		ug/L		103	70 - 130

Lab Sample ID: LCSD 580-429118/4-A

Matrix: Water

Analysis Batch: 429429

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 429118

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	12.5	12.6		ug/L		101	70 - 130	3	20
Cadmium	1.25	1.29		ug/L		103	70 - 130	3	20
Chromium	12.5	12.7		ug/L		102	70 - 130	0	20
Copper	12.5	12.0		ug/L		96	70 - 130	6	20
Lead	2.50	2.50		ug/L		100	70 - 130	1	20
Nickel	12.5	12.3		ug/L		99	70 - 130	4	20
Zinc	12.5	12.1		ug/L		97	70 - 130	8	20
Barium	12.5	13.1		ug/L		105	70 - 130	1	20
Iron	62.5	61.2		ug/L		98	70 - 130	3	20
Manganese	12.5	12.2		ug/L		98	70 - 130	5	20

Lab Sample ID: 580-126685-134 MS

Matrix: Water

Analysis Batch: 429429

Client Sample ID: MAWC-4B2X-SW-40

Prep Type: Total/NA

Prep Batch: 429118

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.90		12.5	10.4		ug/L		76	50 - 150
Cadmium	0.015	J	1.25	1.20		ug/L		94	50 - 150
Chromium	0.55		12.5	14.2		ug/L		109	50 - 150
Copper	0.33	J	12.5	17.3		ug/L		136	50 - 150
Lead	0.029	J	2.50	2.46		ug/L		97	50 - 150
Nickel	0.29	J	12.5	17.5		ug/L		138	50 - 150
Zinc	0.11	J	12.5	17.4		ug/L		138	50 - 150
Barium	9.5		12.5	23.6		ug/L		113	50 - 150
Iron	2.2		62.5	90.7		ug/L		142	50 - 150
Manganese	0.51		12.5	18.2		ug/L		142	50 - 150

Lab Sample ID: 580-126685-134 MSD

Matrix: Water

Analysis Batch: 429429

Client Sample ID: MAWC-4B2X-SW-40

Prep Type: Total/NA

Prep Batch: 429118

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	0.90		12.5	11.0		ug/L		81	50 - 150	6	20
Cadmium	0.015	J	1.25	1.21		ug/L		96	50 - 150	1	20

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: 580-126685-134 MSD

Matrix: Water

Analysis Batch: 429429

Client Sample ID: MAWC-4B2X-SW-40

Prep Type: Total/NA

Prep Batch: 429118

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium	0.55		12.5	14.2		ug/L		109	50 - 150	0	20
Copper	0.33	J	12.5	16.6		ug/L		130	50 - 150	4	20
Lead	0.029	J	2.50	2.39		ug/L		95	50 - 150	3	20
Nickel	0.29	J	12.5	16.8		ug/L		132	50 - 150	4	20
Zinc	0.11	J	12.5	17.1		ug/L		136	50 - 150	2	20
Barium	9.5		12.5	23.7		ug/L		113	50 - 150	0	20
Iron	2.2		62.5	87.6		ug/L		137	50 - 150	4	20
Manganese	0.51		12.5	17.5		ug/L		136	50 - 150	4	20

Lab Sample ID: 580-126685-135 MS

Matrix: Water

Analysis Batch: 429429

Client Sample ID: MAWC-4B2X-SW-B

Prep Type: Total/NA

Prep Batch: 429118

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Arsenic	1.2		12.5	10.4		ug/L		74	50 - 150		
Cadmium	0.019	J	1.25	1.20		ug/L		95	50 - 150		
Chromium	0.61		12.5	14.1		ug/L		108	50 - 150		
Copper	0.22	J	12.5	15.8		ug/L		125	50 - 150		
Lead	0.041	J	2.50	2.52		ug/L		99	50 - 150		
Nickel	0.28	J	12.5	16.0		ug/L		126	50 - 150		
Zinc	ND		12.5	16.2		ug/L		130	50 - 150		
Barium	11		12.5	24.9		ug/L		110	50 - 150		
Iron	30		62.5	112		ug/L		131	50 - 150		
Manganese	2.5		12.5	18.8		ug/L		131	50 - 150		

Lab Sample ID: 580-126685-135 MSD

Matrix: Water

Analysis Batch: 429429

Client Sample ID: MAWC-4B2X-SW-B

Prep Type: Total/NA

Prep Batch: 429118

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.2		12.5	9.76		ug/L		69	50 - 150	7	20
Cadmium	0.019	J	1.25	1.22		ug/L		96	50 - 150	1	20
Chromium	0.61		12.5	14.0		ug/L		107	50 - 150	1	20
Copper	0.22	J	12.5	16.9		ug/L		133	50 - 150	6	20
Lead	0.041	J	2.50	2.45		ug/L		96	50 - 150	3	20
Nickel	0.28	J	12.5	16.9		ug/L		133	50 - 150	6	20
Zinc	ND		12.5	17.3		ug/L		139	50 - 150	7	20
Barium	11		12.5	25.0		ug/L		111	50 - 150	0	20
Iron	30		62.5	120		ug/L		143	50 - 150	7	20
Manganese	2.5		12.5	19.6		ug/L		137	50 - 150	4	20

Lab Sample ID: MB 580-429941/1-A

Matrix: Water

Analysis Batch: 430176

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 429941

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 01:03	1
Cadmium	ND		0.040	0.011	ug/L		06/26/23 00:00	06/27/23 01:03	1
Chromium	ND		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 01:03	1

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: MB 580-429941/1-A

Matrix: Water

Analysis Batch: 430176

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 429941

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		1.0	0.020	ug/L		06/26/23 00:00	06/27/23 01:03	1
Lead	ND		0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 01:03	1
Nickel	ND		0.30	0.11	ug/L		06/26/23 00:00	06/27/23 01:03	1
Zinc	ND		0.50	0.070	ug/L		06/26/23 00:00	06/27/23 01:03	1
Barium	ND		0.50	0.13	ug/L		06/26/23 00:00	06/27/23 01:03	1
Iron	ND		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 01:03	1
Manganese	0.00892	J	0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 01:03	1

Lab Sample ID: MB 580-429941/2-A

Matrix: Water

Analysis Batch: 430176

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 429941

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 01:17	1
Cadmium	ND		0.040	0.011	ug/L		06/26/23 00:00	06/27/23 01:17	1
Chromium	ND		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 01:17	1
Copper	ND		1.0	0.020	ug/L		06/26/23 00:00	06/27/23 01:17	1
Lead	ND		0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 01:17	1
Nickel	ND		0.30	0.11	ug/L		06/26/23 00:00	06/27/23 01:17	1
Zinc	ND		0.50	0.070	ug/L		06/26/23 00:00	06/27/23 01:17	1
Barium	0.147	J	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 01:17	1
Iron	ND		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 01:17	1
Manganese	ND		0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 01:17	1

Lab Sample ID: LCS 580-429941/3-A

Matrix: Water

Analysis Batch: 430176

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 429941

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	12.5	12.4		ug/L		99	70 - 130
Cadmium	1.25	1.24		ug/L		99	70 - 130
Chromium	12.5	12.5		ug/L		100	70 - 130
Copper	12.5	13.0		ug/L		104	70 - 130
Lead	2.50	2.48		ug/L		99	70 - 130
Nickel	12.5	13.1		ug/L		105	70 - 130
Zinc	12.5	13.2		ug/L		105	70 - 130
Barium	12.5	12.8		ug/L		102	70 - 130
Iron	62.5	64.4		ug/L		103	70 - 130
Manganese	12.5	13.1		ug/L		105	70 - 130

Lab Sample ID: LCSD 580-429941/4-A

Matrix: Water

Analysis Batch: 430176

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 429941

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	12.5	12.4		ug/L		99	70 - 130	0	20
Cadmium	1.25	1.23		ug/L		99	70 - 130	0	20
Chromium	12.5	12.5		ug/L		100	70 - 130	0	20
Copper	12.5	13.1		ug/L		105	70 - 130	0	20

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: LCSD 580-429941/4-A

Matrix: Water

Analysis Batch: 430176

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 429941

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	2.50	2.50		ug/L		100	70 - 130	1	20
Nickel	12.5	13.0		ug/L		104	70 - 130	1	20
Zinc	12.5	13.1		ug/L		105	70 - 130	0	20
Barium	12.5	12.6		ug/L		101	70 - 130	1	20
Iron	62.5	64.8		ug/L		104	70 - 130	1	20
Manganese	12.5	13.1		ug/L		105	70 - 130	0	20

Lab Sample ID: 580-126685-103 MS

Matrix: Water

Analysis Batch: 430176

Client Sample ID: MAWB-3C2-SW-1

Prep Type: Total/NA

Prep Batch: 429941

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.6		12.5	17.6		ug/L		128	50 - 150		
Cadmium	0.014	J	1.25	1.21		ug/L		96	50 - 150		
Chromium	0.60		12.5	14.5		ug/L		111	50 - 150		
Copper	0.21	J	12.5	13.5		ug/L		106	50 - 150		
Lead	0.030	J	2.50	2.56		ug/L		101	50 - 150		
Nickel	0.16	J	12.5	13.4		ug/L		106	50 - 150		
Zinc	0.20	J	12.5	13.3		ug/L		105	50 - 150		
Barium	11	B ^2	12.5	23.6		ug/L		102	50 - 150		
Iron	ND		62.5	67.9		ug/L		109	50 - 150		

Lab Sample ID: 580-126685-103 MS

Matrix: Water

Analysis Batch: 430176

Client Sample ID: MAWB-3C2-SW-1

Prep Type: Total/NA

Prep Batch: 429941

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Manganese	0.35	B	12.5	12.0		ug/L		93	50 - 150		

Lab Sample ID: 580-126685-103 MSD

Matrix: Water

Analysis Batch: 430176

Client Sample ID: MAWB-3C2-SW-1

Prep Type: Total/NA

Prep Batch: 429941

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.6		12.5	18.2		ug/L		133	50 - 150	3	20
Cadmium	0.014	J	1.25	1.18		ug/L		94	50 - 150	2	20
Chromium	0.60		12.5	14.6		ug/L		112	50 - 150	1	20
Copper	0.21	J	12.5	13.2		ug/L		104	50 - 150	2	20
Lead	0.030	J	2.50	2.53		ug/L		100	50 - 150	1	20
Nickel	0.16	J	12.5	13.3		ug/L		105	50 - 150	1	20
Zinc	0.20	J	12.5	13.1		ug/L		103	50 - 150	2	20
Barium	11	B ^2	12.5	24.3		ug/L		107	50 - 150	3	20
Iron	ND		62.5	66.6		ug/L		107	50 - 150	2	20

Lab Sample ID: 580-126685-103 MSD

Matrix: Water

Analysis Batch: 430176

Client Sample ID: MAWB-3C2-SW-1

Prep Type: Total/NA

Prep Batch: 429941

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Manganese	0.35	B	12.5	11.6		ug/L		90	50 - 150	3	20

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Method: 1640 - Metals (ICPMS)

Lab Sample ID: 580-126685-104 MS

Matrix: Water

Analysis Batch: 430176

Client Sample ID: MAWB-3C2-SW-20

Prep Type: Total/NA

Prep Batch: 429941

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.7		12.5	18.0		ug/L		130	50 - 150
Cadmium	0.017	J	1.25	1.23		ug/L		97	50 - 150
Chromium	0.66		12.5	14.5		ug/L		111	50 - 150
Copper	0.22	J	12.5	13.2		ug/L		104	50 - 150
Lead	0.023	J	2.50	2.63		ug/L		104	50 - 150
Nickel	0.22	J	12.5	13.4		ug/L		105	50 - 150
Zinc	0.092	J	12.5	12.9		ug/L		103	50 - 150
Barium	9.8	B	12.5	24.1		ug/L		115	50 - 150
Iron	ND		62.5	66.8		ug/L		107	50 - 150
Manganese	0.38	B	12.5	12.2		ug/L		95	50 - 150

Lab Sample ID: 580-126685-104 MSD

Matrix: Water

Analysis Batch: 430176

Client Sample ID: MAWB-3C2-SW-20

Prep Type: Total/NA

Prep Batch: 429941

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.7		12.5	17.9		ug/L		129	50 - 150	1	20
Cadmium	0.017	J	1.25	1.20		ug/L		95	50 - 150	2	20
Chromium	0.66		12.5	14.6		ug/L		111	50 - 150	0	20
Copper	0.22	J	12.5	12.8		ug/L		101	50 - 150	3	20
Lead	0.023	J	2.50	2.42		ug/L		96	50 - 150	9	20
Nickel	0.22	J	12.5	12.9		ug/L		101	50 - 150	4	20
Zinc	0.092	J	12.5	12.7		ug/L		101	50 - 150	1	20
Barium	9.8	B	12.5	24.1		ug/L		115	50 - 150	0	20
Iron	ND		62.5	64.8		ug/L		104	50 - 150	3	20
Manganese	0.38	B	12.5	12.0		ug/L		93	50 - 150	2	20

Lab Sample ID: MB 580-429942/1-A

Matrix: Water

Analysis Batch: 430176

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 429942

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 01:31	1
Cadmium	ND		0.040	0.011	ug/L		06/26/23 00:00	06/27/23 01:31	1
Chromium	ND		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 01:31	1
Copper	ND		1.0	0.020	ug/L		06/26/23 00:00	06/27/23 01:31	1
Lead	ND		0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 01:31	1
Nickel	ND		0.30	0.11	ug/L		06/26/23 00:00	06/27/23 01:31	1
Zinc	ND		0.50	0.070	ug/L		06/26/23 00:00	06/27/23 01:31	1
Barium	0.265	J	0.50	0.13	ug/L		06/26/23 00:00	06/27/23 01:31	1
Iron	ND		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 01:31	1
Manganese	ND		0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 01:31	1

Lab Sample ID: MB 580-429942/2-A

Matrix: Water

Analysis Batch: 430176

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 429942

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		06/26/23 00:00	06/27/23 01:45	1

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: MB 580-429942/2-A

Matrix: Water

Analysis Batch: 430176

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 429942

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.040	0.011	ug/L		06/26/23 00:00	06/27/23 01:45	1
Chromium	ND		0.50	0.34	ug/L		06/26/23 00:00	06/27/23 01:45	1
Copper	ND		1.0	0.020	ug/L		06/26/23 00:00	06/27/23 01:45	1
Lead	ND		0.050	0.0040	ug/L		06/26/23 00:00	06/27/23 01:45	1
Nickel	ND		0.30	0.11	ug/L		06/26/23 00:00	06/27/23 01:45	1
Zinc	ND		0.50	0.070	ug/L		06/26/23 00:00	06/27/23 01:45	1
Barium	ND		0.50	0.13	ug/L		06/26/23 00:00	06/27/23 01:45	1
Iron	ND		2.0	1.1	ug/L		06/26/23 00:00	06/27/23 01:45	1
Manganese	ND		0.050	0.0080	ug/L		06/26/23 00:00	06/27/23 01:45	1

Lab Sample ID: LCS 580-429942/3-A

Matrix: Water

Analysis Batch: 430176

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 429942

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	12.5	12.3		ug/L		98	70 - 130
Cadmium	1.25	1.24		ug/L		99	70 - 130
Chromium	12.5	12.7		ug/L		101	70 - 130
Copper	12.5	13.0		ug/L		104	70 - 130
Lead	2.50	2.50		ug/L		100	70 - 130
Nickel	12.5	12.9		ug/L		103	70 - 130
Zinc	12.5	13.2		ug/L		106	70 - 130
Barium	12.5	12.7		ug/L		102	70 - 130
Iron	62.5	64.3		ug/L		103	70 - 130
Manganese	12.5	13.0		ug/L		104	70 - 130

Lab Sample ID: LCSD 580-429942/4-A

Matrix: Water

Analysis Batch: 430176

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 429942

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	12.5	12.8		ug/L		102	70 - 130	4	20
Cadmium	1.25	1.20		ug/L		96	70 - 130	3	20
Chromium	12.5	12.7		ug/L		101	70 - 130	0	20
Copper	12.5	12.9		ug/L		103	70 - 130	1	20
Lead	2.50	2.46		ug/L		98	70 - 130	2	20
Nickel	12.5	12.9		ug/L		103	70 - 130	0	20
Zinc	12.5	13.1		ug/L		104	70 - 130	1	20
Barium	12.5	12.5		ug/L		100	70 - 130	2	20
Iron	62.5	64.4		ug/L		103	70 - 130	0	20
Manganese	12.5	13.0		ug/L		104	70 - 130	0	20

Lab Sample ID: 580-126685-123 MS

Matrix: Water

Analysis Batch: 430176

Client Sample ID: MAWC-2B2X-SW-B

Prep Type: Total/NA

Prep Batch: 429942

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.9		12.5	17.8		ug/L		127	50 - 150
Cadmium	0.022	J	1.25	1.20		ug/L		94	50 - 150

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: 580-126685-123 MS

Matrix: Water

Analysis Batch: 430176

Client Sample ID: MAWC-2B2X-SW-B

Prep Type: Total/NA

Prep Batch: 429942

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium	0.72		12.5	14.4		ug/L		110	50 - 150
Copper	0.22	J	12.5	12.7		ug/L		100	50 - 150
Lead	0.046	J	2.50	2.43		ug/L		95	50 - 150
Nickel	0.23	J	12.5	12.5		ug/L		98	50 - 150
Zinc	0.10	J	12.5	12.7		ug/L		101	50 - 150
Barium	12	B	12.5	26.0		ug/L		115	50 - 150
Iron	24		62.5	86.6		ug/L		100	50 - 150
Manganese	1.6		12.5	12.8		ug/L		90	50 - 150

Lab Sample ID: 580-126685-123 MSD

Matrix: Water

Analysis Batch: 430176

Client Sample ID: MAWC-2B2X-SW-B

Prep Type: Total/NA

Prep Batch: 429942

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.9		12.5	17.8		ug/L		127	50 - 150	0	20
Cadmium	0.022	J	1.25	1.23		ug/L		97	50 - 150	3	20
Chromium	0.72		12.5	14.4		ug/L		109	50 - 150	1	20
Copper	0.22	J	12.5	13.1		ug/L		103	50 - 150	3	20
Lead	0.046	J	2.50	2.52		ug/L		99	50 - 150	4	20
Nickel	0.23	J	12.5	13.0		ug/L		102	50 - 150	4	20
Zinc	0.10	J	12.5	13.1		ug/L		104	50 - 150	3	20
Barium	12	B	12.5	25.9		ug/L		115	50 - 150	0	20
Iron	24		62.5	88.8		ug/L		103	50 - 150	2	20
Manganese	1.6		12.5	13.5		ug/L		95	50 - 150	5	20

Lab Sample ID: 580-126685-124 MS

Matrix: Water

Analysis Batch: 430176

Client Sample ID: MAWC-3B2X-SW-1

Prep Type: Total/NA

Prep Batch: 429942

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.6		12.5	17.6		ug/L		128	50 - 150
Cadmium	0.015	J	1.25	1.15		ug/L		90	50 - 150
Chromium	0.62		12.5	14.2		ug/L		109	50 - 150
Copper	0.17	J	12.5	12.6		ug/L		99	50 - 150
Lead	0.017	J	2.50	2.46		ug/L		98	50 - 150
Nickel	0.17	J	12.5	12.5		ug/L		99	50 - 150
Zinc	0.10	J	12.5	12.6		ug/L		100	50 - 150
Barium	10	B	12.5	24.3		ug/L		113	50 - 150
Iron	ND		62.5	63.4		ug/L		101	50 - 150
Manganese	0.33		12.5	11.9		ug/L		93	50 - 150

Lab Sample ID: 580-126685-124 MSD

Matrix: Water

Analysis Batch: 430176

Client Sample ID: MAWC-3B2X-SW-1

Prep Type: Total/NA

Prep Batch: 429942

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.6		12.5	17.4		ug/L		126	50 - 150	1	20
Cadmium	0.015	J	1.25	1.17		ug/L		92	50 - 150	2	20
Chromium	0.62		12.5	14.2		ug/L		109	50 - 150	0	20

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: 580-126685-124 MSD

Matrix: Water

Analysis Batch: 430176

Client Sample ID: MAWC-3B2X-SW-1

Prep Type: Total/NA

Prep Batch: 429942

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Copper	0.17	J	12.5	12.8		ug/L		101	50 - 150	2	20
Lead	0.017	J	2.50	2.36		ug/L		94	50 - 150	4	20
Nickel	0.17	J	12.5	12.5		ug/L		98	50 - 150	0	20
Zinc	0.10	J	12.5	12.8		ug/L		101	50 - 150	2	20
Barium	10	B	12.5	24.5		ug/L		115	50 - 150	1	20
Iron	ND		62.5	63.3		ug/L		101	50 - 150	0	20
Manganese	0.33		12.5	11.8		ug/L		92	50 - 150	1	20

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-1C2-SW-1

Lab Sample ID: 580-126685-58

Date Collected: 03/22/23 05:30

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 16:54
Total/NA	Prep	1640			425976	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 14:17

Client Sample ID: MAWA-1C2-SW-20

Lab Sample ID: 580-126685-59

Date Collected: 03/22/23 05:36

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 16:58
Total/NA	Prep	1640			425976	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 14:31

Client Sample ID: MAWA-1C2-SW-40

Lab Sample ID: 580-126685-60

Date Collected: 03/22/23 05:46

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 17:02
Total/NA	Prep	1640			425976	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 15:14

Client Sample ID: MAWA-1C2-SW-B

Lab Sample ID: 580-126685-61

Date Collected: 03/22/23 05:57

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 17:06
Total/NA	Prep	1640			425976	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 15:28

Client Sample ID: MAWA-1CP2-SW-1

Lab Sample ID: 580-126685-62

Date Collected: 03/22/23 12:26

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 17:11
Total/NA	Prep	1640			425976	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 15:42

Client Sample ID: MAWA-1CP2-SW-20

Lab Sample ID: 580-126685-63

Date Collected: 03/22/23 12:32

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 17:15

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-1CP2-SW-20

Lab Sample ID: 580-126685-63

Date Collected: 03/22/23 12:32

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			425976	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 15:56

Client Sample ID: MAWA-1CP2-SW-40

Lab Sample ID: 580-126685-64

Date Collected: 03/22/23 12:41

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 17:19
Total/NA	Prep	1640			425976	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 16:11

Client Sample ID: MAWA-1CP2-SW-B

Lab Sample ID: 580-126685-65

Date Collected: 03/22/23 12:52

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 17:23
Total/NA	Prep	1640			425976	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 16:25

Client Sample ID: MAWA-2B2X-SW-1

Lab Sample ID: 580-126685-66

Date Collected: 03/22/23 03:52

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 17:35
Total/NA	Prep	1640			425976	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 16:39

Client Sample ID: MAWA-2B2X-SW-20

Lab Sample ID: 580-126685-67

Date Collected: 03/22/23 03:58

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 17:40
Total/NA	Prep	1640			425976	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 16:53

Client Sample ID: MAWA-2B2X-SW-40

Lab Sample ID: 580-126685-68

Date Collected: 03/22/23 04:07

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 17:44

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-2B2X-SW-40

Lab Sample ID: 580-126685-68

Date Collected: 03/22/23 04:07

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			425976	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 17:08

Client Sample ID: MAWA-2B2X-SW-B

Lab Sample ID: 580-126685-69

Date Collected: 03/22/23 04:19

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 17:48
Total/NA	Prep	1640			425976	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 17:22

Client Sample ID: MAWA-3B2-SW-1

Lab Sample ID: 580-126685-70

Date Collected: 03/22/23 02:12

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 17:52
Total/NA	Prep	1640			425976	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 18:05

Client Sample ID: MAWA-3B2-SW-20

Lab Sample ID: 580-126685-71

Date Collected: 03/22/23 02:19

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	426164	COW	EET SEA	05/10/23 17:56
Total/NA	Prep	1640			425976	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 18:19

Client Sample ID: MAWA-3B2-SW-20-FD

Lab Sample ID: 580-126685-72

Date Collected: 03/22/23 02:26

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 17:42
Total/NA	Prep	1640			425976	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 18:33

Client Sample ID: MAWA-3B2-SW-40

Lab Sample ID: 580-126685-73

Date Collected: 03/22/23 02:35

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 17:46

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-3B2-SW-40

Lab Sample ID: 580-126685-73

Date Collected: 03/22/23 02:35

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			425976	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 18:47

Client Sample ID: MAWA-3B2-SW-B

Lab Sample ID: 580-126685-74

Date Collected: 03/22/23 02:48

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 17:51
Total/NA	Prep	1640			425976	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 19:02

Client Sample ID: MAWA-3C2-SW-1

Lab Sample ID: 580-126685-75

Date Collected: 03/22/23 00:21

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 17:55
Total/NA	Prep	1640			425976	V1R	EET SEA	05/15/23 00:00
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 19:16

Client Sample ID: MAWA-3C2-SW-20

Lab Sample ID: 580-126685-76

Date Collected: 03/22/23 00:27

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 18:07
Total/NA	Prep	1640			425977	V1R	EET SEA	05/15/23 12:07
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 19:44

Client Sample ID: MAWA-3C2-SW-40

Lab Sample ID: 580-126685-77

Date Collected: 03/22/23 00:36

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 18:11
Total/NA	Prep	1640			425977	V1R	EET SEA	05/15/23 12:07
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 19:59

Client Sample ID: MAWA-3C2-SW-B

Lab Sample ID: 580-126685-78

Date Collected: 03/22/23 00:47

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 18:16

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-3C2-SW-B

Lab Sample ID: 580-126685-78

Date Collected: 03/22/23 00:47

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			425977	V1R	EET SEA	05/15/23 12:07
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 20:13

Client Sample ID: MAWA-4B2X-SW-1

Lab Sample ID: 580-126685-79

Date Collected: 03/21/23 21:43

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 18:20
Total/NA	Prep	1640			425977	V1R	EET SEA	05/15/23 12:07
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 20:56

Client Sample ID: MAWA-4B2X-SW-20

Lab Sample ID: 580-126685-80

Date Collected: 03/21/23 21:49

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 18:24
Total/NA	Prep	1640			425977	V1R	EET SEA	05/15/23 12:07
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 21:10

Client Sample ID: MAWA-4B2X-SW-40

Lab Sample ID: 580-126685-81

Date Collected: 03/21/23 21:57

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 18:28
Total/NA	Prep	1640			425977	V1R	EET SEA	05/15/23 12:07
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 21:24

Client Sample ID: MAWA-4B2X-SW-B

Lab Sample ID: 580-126685-82

Date Collected: 03/21/23 22:09

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 18:32
Total/NA	Prep	1640			425977	V1R	EET SEA	05/15/23 12:07
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 21:38

Client Sample ID: MAWA-EQ

Lab Sample ID: 580-126685-83

Date Collected: 03/21/23 21:33

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 18:36

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWA-EQ

Lab Sample ID: 580-126685-83

Date Collected: 03/21/23 21:33

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			425977	V1R	EET SEA	05/15/23 12:07
Total/NA	Analysis	1640		1	426380	V1R	EET SEA	05/16/23 21:53

Client Sample ID: MAWA-WB

Lab Sample ID: 580-126685-84

Date Collected: 03/21/23 21:28

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 18:41
Total/NA	Prep	1640			426511	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 18:20

Client Sample ID: MAWB-1B2X-SW-1

Lab Sample ID: 580-126685-85

Date Collected: 03/21/23 03:08

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 15:24
Total/NA	Prep	1640			426148	V1R	EET SEA	05/17/23 00:00
Total/NA	Analysis	1640		1	426551	V1R	EET SEA	05/19/23 00:42

Client Sample ID: MAWB-1B2X-SW-1-FD

Lab Sample ID: 580-126685-86

Date Collected: 03/21/23 03:13

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 15:28
Total/NA	Prep	1640			426148	V1R	EET SEA	05/17/23 00:00
Total/NA	Analysis	1640		1	426551	V1R	EET SEA	05/19/23 01:53

Client Sample ID: MAWB-1B2X-SW-20

Lab Sample ID: 580-126685-87

Date Collected: 03/21/23 03:19

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 15:32
Total/NA	Prep	1640			426148	V1R	EET SEA	05/17/23 00:00
Total/NA	Analysis	1640		1	426551	V1R	EET SEA	05/19/23 02:36

Client Sample ID: MAWB-1B2X-SW-40

Lab Sample ID: 580-126685-88

Date Collected: 03/21/23 03:27

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 15:36

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-1B2X-SW-40

Lab Sample ID: 580-126685-88

Date Collected: 03/21/23 03:27

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			426148	V1R	EET SEA	05/17/23 00:00
Total/NA	Analysis	1640		1	426551	V1R	EET SEA	05/19/23 03:19

Client Sample ID: MAWB-1B2X-SW-B

Lab Sample ID: 580-126685-89

Date Collected: 03/21/23 03:38

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 15:40
Total/NA	Prep	1640			426511	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 18:34

Client Sample ID: MAWB-1C2X-SW-1

Lab Sample ID: 580-126685-90

Date Collected: 03/20/23 16:42

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 15:44
Total/NA	Prep	1640			426512	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 22:22

Client Sample ID: MAWB-1C2X-SW-20

Lab Sample ID: 580-126685-91

Date Collected: 03/20/23 16:48

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 15:49
Total/NA	Prep	1640			426512	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 22:36

Client Sample ID: MAWB-1C2X-SW-40

Lab Sample ID: 580-126685-92

Date Collected: 03/20/23 16:59

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 16:01
Total/NA	Prep	1640			426512	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 22:50

Client Sample ID: MAWB-1C2X-SW-B

Lab Sample ID: 580-126685-93

Date Collected: 03/20/23 17:11

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 16:05

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-1C2X-SW-B

Lab Sample ID: 580-126685-93

Date Collected: 03/20/23 17:11

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			426512	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 23:33

Client Sample ID: MAWB-2B2X-SW-1

Lab Sample ID: 580-126685-94

Date Collected: 03/21/23 01:06

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 16:09
Total/NA	Prep	1640			426512	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 23:47

Client Sample ID: MAWB-2B2X-SW-20

Lab Sample ID: 580-126685-95

Date Collected: 03/21/23 01:11

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 16:14
Total/NA	Prep	1640			426512	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/28/23 00:02

Client Sample ID: MAWB-2B2X-SW-20-FD

Lab Sample ID: 580-126685-96

Date Collected: 03/21/23 01:18

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 16:18
Total/NA	Prep	1640			426512	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/28/23 00:16

Client Sample ID: MAWB-2B2X-SW-40

Lab Sample ID: 580-126685-97

Date Collected: 03/21/23 01:26

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 16:22
Total/NA	Prep	1640			426512	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/28/23 00:30

Client Sample ID: MAWB-2B2X-SW-B

Lab Sample ID: 580-126685-98

Date Collected: 03/21/23 01:37

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 16:26

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-2B2X-SW-B

Lab Sample ID: 580-126685-98

Date Collected: 03/21/23 01:37

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			426512	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/28/23 00:45

Client Sample ID: MAWB-3B2X-SW-1

Lab Sample ID: 580-126685-99

Date Collected: 03/20/23 19:17

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 16:30
Total/NA	Prep	1640			426512	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/28/23 00:59

Client Sample ID: MAWB-3B2X-SW-20

Lab Sample ID: 580-126685-100

Date Collected: 03/20/23 19:23

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 16:34
Total/NA	Prep	1640			426512	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/28/23 01:13

Client Sample ID: MAWB-3B2X-SW-40

Lab Sample ID: 580-126685-101

Date Collected: 03/20/23 19:31

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 16:39
Total/NA	Prep	1640			429941	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 07:42

Client Sample ID: MAWB-3B2X-SW-B

Lab Sample ID: 580-126685-102

Date Collected: 03/20/23 19:43

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 17:04
Total/NA	Prep	1640			429941	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 07:56

Client Sample ID: MAWB-3C2-SW-1

Lab Sample ID: 580-126685-103

Date Collected: 03/20/23 10:55

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425970	COW	EET SEA	05/11/23 14:41

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-3C2-SW-1

Lab Sample ID: 580-126685-103

Date Collected: 03/20/23 10:55

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			429941	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 04:22
Total/NA	Prep	1640			429941	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 09:36

Client Sample ID: MAWB-3C2-SW-20

Lab Sample ID: 580-126685-104

Date Collected: 03/20/23 11:00

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425970	COW	EET SEA	05/11/23 14:45
Total/NA	Prep	1640			429941	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 05:05

Client Sample ID: MAWB-3C2-SW-40

Lab Sample ID: 580-126685-105

Date Collected: 03/20/23 11:13

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425970	COW	EET SEA	05/11/23 14:50
Total/NA	Prep	1640			429941	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 08:11

Client Sample ID: MAWB-3C2-SW-B

Lab Sample ID: 580-126685-106

Date Collected: 03/20/23 11:24

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425970	COW	EET SEA	05/11/23 14:54
Total/NA	Prep	1640			429941	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 08:25

Client Sample ID: MAWB-4B2X-SW-1

Lab Sample ID: 580-126685-107

Date Collected: 03/20/23 20:25

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425970	COW	EET SEA	05/11/23 14:58
Total/NA	Prep	1640			429941	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 08:39

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWB-4B2X-SW-20

Lab Sample ID: 580-126685-108

Date Collected: 03/20/23 20:30

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425970	COW	EET SEA	05/11/23 15:02
Total/NA	Prep	1640			429941	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 08:53

Client Sample ID: MAWB-4B2X-SW-40

Lab Sample ID: 580-126685-109

Date Collected: 03/20/23 20:39

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425970	COW	EET SEA	05/11/23 15:06
Total/NA	Prep	1640			429941	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 10:19

Client Sample ID: MAWB-4B2X-SW-B

Lab Sample ID: 580-126685-110

Date Collected: 03/20/23 20:50

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425970	COW	EET SEA	05/11/23 15:10
Total/NA	Prep	1640			429941	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 10:33

Client Sample ID: MAWB-4B2X-SW-B-FD

Lab Sample ID: 580-126685-111

Date Collected: 03/20/23 21:03

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425970	COW	EET SEA	05/11/23 15:27
Total/NA	Prep	1640			429941	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 10:47

Client Sample ID: MAWC-1B2X-SW-1

Lab Sample ID: 580-126685-112

Date Collected: 03/20/23 02:37

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425970	COW	EET SEA	05/11/23 15:31
Total/NA	Prep	1640			429941	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 11:02

Client Sample ID: MAWC-1B2X-SW-20

Lab Sample ID: 580-126685-113

Date Collected: 03/20/23 02:43

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425970	COW	EET SEA	05/11/23 15:35

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-1B2X-SW-20

Lab Sample ID: 580-126685-113

Date Collected: 03/20/23 02:43

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			429941	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 11:16

Client Sample ID: MAWC-1B2X-SW-40

Lab Sample ID: 580-126685-114

Date Collected: 03/20/23 02:52

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425970	COW	EET SEA	05/11/23 15:39
Total/NA	Prep	1640			429941	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 11:30

Client Sample ID: MAWC-1B2X-SW-B

Lab Sample ID: 580-126685-115

Date Collected: 03/20/23 03:04

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425970	COW	EET SEA	05/11/23 15:43
Total/NA	Prep	1640			429941	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 11:45

Client Sample ID: MAWC-1C2-SW-1

Lab Sample ID: 580-126685-116

Date Collected: 03/20/23 04:37

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425970	COW	EET SEA	05/11/23 15:48
Total/NA	Prep	1640			429941	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 12:27

Client Sample ID: MAWC-1C2-SW-20

Lab Sample ID: 580-126685-117

Date Collected: 03/20/23 04:52

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425970	COW	EET SEA	05/11/23 15:52
Total/NA	Prep	1640			429941	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 12:42

Client Sample ID: MAWC-1C2-SW-40

Lab Sample ID: 580-126685-118

Date Collected: 03/20/23 04:52

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425970	COW	EET SEA	05/11/23 15:56

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-1C2-SW-40

Lab Sample ID: 580-126685-118

Date Collected: 03/20/23 04:52

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			429941	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 12:56

Client Sample ID: MAWC-1C2-SW-B

Lab Sample ID: 580-126685-119

Date Collected: 03/20/23 05:04

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425970	COW	EET SEA	05/11/23 16:00
Total/NA	Prep	1640			429941	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 13:10

Client Sample ID: MAWC-2B2X-SW-1

Lab Sample ID: 580-126685-120

Date Collected: 03/20/23 01:02

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425970	COW	EET SEA	05/11/23 16:12
Total/NA	Prep	1640			429941	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 13:24

Client Sample ID: MAWC-2B2X-SW-20

Lab Sample ID: 580-126685-121

Date Collected: 03/20/23 01:08

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 17:08
Total/NA	Prep	1640			429942	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 13:39

Client Sample ID: MAWC-2B2X-SW-40

Lab Sample ID: 580-126685-122

Date Collected: 03/20/23 01:17

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 17:12
Total/NA	Prep	1640			429942	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 13:53

Client Sample ID: MAWC-2B2X-SW-B

Lab Sample ID: 580-126685-123

Date Collected: 03/20/23 01:28

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 17:16

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-2B2X-SW-B

Lab Sample ID: 580-126685-123

Date Collected: 03/20/23 01:28

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			429942	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 05:48

Client Sample ID: MAWC-3B2X-SW-1

Lab Sample ID: 580-126685-124

Date Collected: 03/19/23 20:13

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 12:49
Total/NA	Prep	1640			429942	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 06:59

Client Sample ID: MAWC-3B2X-SW-20

Lab Sample ID: 580-126685-125

Date Collected: 03/19/23 20:23

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 12:54
Total/NA	Prep	1640			429942	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 14:07

Client Sample ID: MAWC-3B2X-SW-40

Lab Sample ID: 580-126685-126

Date Collected: 03/19/23 20:32

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425970	COW	EET SEA	05/11/23 12:53
Total/NA	Prep	1640			429942	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 14:21

Client Sample ID: MAWC-3B2X-SW-B

Lab Sample ID: 580-126685-127

Date Collected: 03/19/23 20:43

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425970	COW	EET SEA	05/11/23 12:57
Total/NA	Prep	1640			429942	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 14:36

Client Sample ID: MAWC-3C2-SW-1

Lab Sample ID: 580-126685-128

Date Collected: 03/19/23 19:09

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 12:58

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-3C2-SW-1

Lab Sample ID: 580-126685-128

Date Collected: 03/19/23 19:09

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			429942	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 15:18

Client Sample ID: MAWC-3C2-SW-20

Lab Sample ID: 580-126685-129

Date Collected: 03/19/23 19:26

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 13:02
Total/NA	Prep	1640			429942	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 15:33

Client Sample ID: MAWC-3C2-SW-40

Lab Sample ID: 580-126685-130

Date Collected: 03/19/23 19:04

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 17:20
Total/NA	Prep	1640			429942	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 15:47

Client Sample ID: MAWC-3C2-SW-B

Lab Sample ID: 580-126685-131

Date Collected: 03/19/23 19:46

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 17:24
Total/NA	Prep	1640			429942	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 16:01

Client Sample ID: MAWC-4B2X-SW-1

Lab Sample ID: 580-126685-132

Date Collected: 03/19/23 21:02

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 17:29
Total/NA	Prep	1640			429118	KJG	EET SEA	06/16/23 00:00
Total/NA	Analysis	1640		1	429429	V1R	EET SEA	06/17/23 03:00

Client Sample ID: MAWC-4B2X-SW-20

Lab Sample ID: 580-126685-133

Date Collected: 03/19/23 21:52

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 17:41

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-4B2X-SW-20

Lab Sample ID: 580-126685-133

Date Collected: 03/19/23 21:52

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			429118	KJG	EET SEA	06/16/23 00:00
Total/NA	Analysis	1640		1	429429	V1R	EET SEA	06/17/23 03:15

Client Sample ID: MAWC-4B2X-SW-40

Lab Sample ID: 580-126685-134

Date Collected: 03/19/23 22:01

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 17:45
Total/NA	Prep	1640			429118	KJG	EET SEA	06/16/23 00:00
Total/NA	Analysis	1640		1	429429	V1R	EET SEA	06/17/23 01:06

Client Sample ID: MAWC-4B2X-SW-B

Lab Sample ID: 580-126685-135

Date Collected: 03/19/23 22:12

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 17:49
Total/NA	Prep	1640			429118	KJG	EET SEA	06/16/23 00:00
Total/NA	Analysis	1640		1	429429	V1R	EET SEA	06/17/23 01:49

Client Sample ID: MAWC-4B2X-SW-B-FD

Lab Sample ID: 580-126685-136

Date Collected: 03/19/23 22:25

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 17:54
Total/NA	Prep	1640			429118	KJG	EET SEA	06/16/23 00:00
Total/NA	Analysis	1640		1	429429	V1R	EET SEA	06/17/23 03:29

Client Sample ID: MAWC-EQ

Lab Sample ID: 580-126685-137

Date Collected: 03/19/23 09:07

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 17:58
Total/NA	Prep	1640			429942	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 16:44

Client Sample ID: MAWC-WB

Lab Sample ID: 580-126685-138

Date Collected: 03/19/23 19:00

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425969	CL	EET SEA	05/11/23 18:02

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Client Sample ID: MAWC-WB

Lab Sample ID: 580-126685-138

Date Collected: 03/19/23 19:00

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			429942	V1R	EET SEA	06/26/23 00:00
Total/NA	Analysis	1640		1	430176	V1R	EET SEA	06/27/23 16:58

Laboratory References:
EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310



Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Laboratory: Eurofins Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc

ANAB	Dept. of Defense ELAP	L2236	01-19-25
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc

ANAB	Dept. of Energy	L2236	01-19-25
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc

ANAB	ISO/IEC 17025	L2236	01-19-25
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Laboratory: Eurofins Seattle (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc
California	State	2954	07-07-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc
Florida	NELAP	E87575	06-30-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Barium
1640	1640	Water	Chromium
1640	1640	Water	Iron
1640	1640	Water	Manganese
Louisiana (All)	NELAP	03073	06-30-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Barium
1640	1640	Water	Iron
1640	1640	Water	Manganese
Maine	State	WA01273	05-02-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Laboratory: Eurofins Seattle (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc

Montana (UST)	State	NA	04-14-27
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1631E		Water	Mercury
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc

New Jersey	NELAP	WA014	06-30-23
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc

New York	NELAP	11662	03-31-24
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Laboratory: Eurofins Seattle (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc
Oregon	NELAP	4167	07-07-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Barium
1640	1640	Water	Iron
1640	1640	Water	Manganese
US Fish & Wildlife	US Federal Programs	A20571	06-30-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631E		Water	Mercury
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc
USDA	US Federal Programs	525-23-4-22573	01-04-26
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631E		Water	Mercury
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc
Washington	State	C788	07-13-23

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Laboratory: Eurofins Seattle (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc

Wisconsin	State	399133460	08-31-23
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-126685-58	MAWA-1C2-SW-1	Water	03/22/23 05:30	05/02/23 10:04
580-126685-59	MAWA-1C2-SW-20	Water	03/22/23 05:36	05/02/23 10:04
580-126685-60	MAWA-1C2-SW-40	Water	03/22/23 05:46	05/02/23 10:04
580-126685-61	MAWA-1C2-SW-B	Water	03/22/23 05:57	05/02/23 10:04
580-126685-62	MAWA-1CP2-SW-1	Water	03/22/23 12:26	05/02/23 10:04
580-126685-63	MAWA-1CP2-SW-20	Water	03/22/23 12:32	05/02/23 10:04
580-126685-64	MAWA-1CP2-SW-40	Water	03/22/23 12:41	05/02/23 10:04
580-126685-65	MAWA-1CP2-SW-B	Water	03/22/23 12:52	05/02/23 10:04
580-126685-66	MAWA-2B2X-SW-1	Water	03/22/23 03:52	05/02/23 10:04
580-126685-67	MAWA-2B2X-SW-20	Water	03/22/23 03:58	05/02/23 10:04
580-126685-68	MAWA-2B2X-SW-40	Water	03/22/23 04:07	05/02/23 10:04
580-126685-69	MAWA-2B2X-SW-B	Water	03/22/23 04:19	05/02/23 10:04
580-126685-70	MAWA-3B2-SW-1	Water	03/22/23 02:12	05/02/23 10:04
580-126685-71	MAWA-3B2-SW-20	Water	03/22/23 02:19	05/02/23 10:04
580-126685-72	MAWA-3B2-SW-20-FD	Water	03/22/23 02:26	05/02/23 10:04
580-126685-73	MAWA-3B2-SW-40	Water	03/22/23 02:35	05/02/23 10:04
580-126685-74	MAWA-3B2-SW-B	Water	03/22/23 02:48	05/02/23 10:04
580-126685-75	MAWA-3C2-SW-1	Water	03/22/23 00:21	05/02/23 10:04
580-126685-76	MAWA-3C2-SW-20	Water	03/22/23 00:27	05/02/23 10:04
580-126685-77	MAWA-3C2-SW-40	Water	03/22/23 00:36	05/02/23 10:04
580-126685-78	MAWA-3C2-SW-B	Water	03/22/23 00:47	05/02/23 10:04
580-126685-79	MAWA-4B2X-SW-1	Water	03/21/23 21:43	05/02/23 10:04
580-126685-80	MAWA-4B2X-SW-20	Water	03/21/23 21:49	05/02/23 10:04
580-126685-81	MAWA-4B2X-SW-40	Water	03/21/23 21:57	05/02/23 10:04
580-126685-82	MAWA-4B2X-SW-B	Water	03/21/23 22:09	05/02/23 10:04
580-126685-83	MAWA-EQ	Water	03/21/23 21:33	05/02/23 10:04
580-126685-84	MAWA-WB	Water	03/21/23 21:28	05/02/23 10:04
580-126685-85	MAWB-1B2X-SW-1	Water	03/21/23 03:08	05/02/23 10:04
580-126685-86	MAWB-1B2X-SW-1-FD	Water	03/21/23 03:13	05/02/23 10:04
580-126685-87	MAWB-1B2X-SW-20	Water	03/21/23 03:19	05/02/23 10:04
580-126685-88	MAWB-1B2X-SW-40	Water	03/21/23 03:27	05/02/23 10:04
580-126685-89	MAWB-1B2X-SW-B	Water	03/21/23 03:38	05/02/23 10:04
580-126685-90	MAWB-1C2X-SW-1	Water	03/20/23 16:42	05/02/23 10:04
580-126685-91	MAWB-1C2X-SW-20	Water	03/20/23 16:48	05/02/23 10:04
580-126685-92	MAWB-1C2X-SW-40	Water	03/20/23 16:59	05/02/23 10:04
580-126685-93	MAWB-1C2X-SW-B	Water	03/20/23 17:11	05/02/23 10:04
580-126685-94	MAWB-2B2X-SW-1	Water	03/21/23 01:06	05/02/23 10:04
580-126685-95	MAWB-2B2X-SW-20	Water	03/21/23 01:11	05/02/23 10:04
580-126685-96	MAWB-2B2X-SW-20-FD	Water	03/21/23 01:18	05/02/23 10:04
580-126685-97	MAWB-2B2X-SW-40	Water	03/21/23 01:26	05/02/23 10:04
580-126685-98	MAWB-2B2X-SW-B	Water	03/21/23 01:37	05/02/23 10:04
580-126685-99	MAWB-3B2X-SW-1	Water	03/20/23 19:17	05/02/23 10:04
580-126685-100	MAWB-3B2X-SW-20	Water	03/20/23 19:23	05/02/23 10:04
580-126685-101	MAWB-3B2X-SW-40	Water	03/20/23 19:31	05/02/23 10:04
580-126685-102	MAWB-3B2X-SW-B	Water	03/20/23 19:43	05/02/23 10:04
580-126685-103	MAWB-3C2-SW-1	Water	03/20/23 10:55	05/02/23 10:04
580-126685-104	MAWB-3C2-SW-20	Water	03/20/23 11:00	05/02/23 10:04
580-126685-105	MAWB-3C2-SW-40	Water	03/20/23 11:13	05/02/23 10:04
580-126685-106	MAWB-3C2-SW-B	Water	03/20/23 11:24	05/02/23 10:04
580-126685-107	MAWB-4B2X-SW-1	Water	03/20/23 20:25	05/02/23 10:04
580-126685-108	MAWB-4B2X-SW-20	Water	03/20/23 20:30	05/02/23 10:04
580-126685-109	MAWB-4B2X-SW-40	Water	03/20/23 20:39	05/02/23 10:04
580-126685-110	MAWB-4B2X-SW-B	Water	03/20/23 20:50	05/02/23 10:04
580-126685-111	MAWB-4B2X-SW-B-FD	Water	03/20/23 21:03	05/02/23 10:04



Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

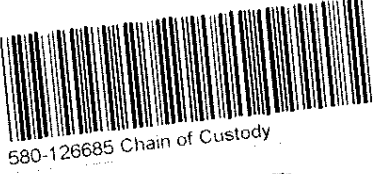
Job ID: 580-126685-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-126685-112	MAWC-1B2X-SW-1	Water	03/20/23 02:37	05/02/23 10:04
580-126685-113	MAWC-1B2X-SW-20	Water	03/20/23 02:43	05/02/23 10:04
580-126685-114	MAWC-1B2X-SW-40	Water	03/20/23 02:52	05/02/23 10:04
580-126685-115	MAWC-1B2X-SW-B	Water	03/20/23 03:04	05/02/23 10:04
580-126685-116	MAWC-1C2-SW-1	Water	03/20/23 04:37	05/02/23 10:04
580-126685-117	MAWC-1C2-SW-20	Water	03/20/23 04:43	05/02/23 10:04
580-126685-118	MAWC-1C2-SW-40	Water	03/20/23 04:52	05/02/23 10:04
580-126685-119	MAWC-1C2-SW-B	Water	03/20/23 05:04	05/02/23 10:04
580-126685-120	MAWC-2B2X-SW-1	Water	03/20/23 01:02	05/02/23 10:04
580-126685-121	MAWC-2B2X-SW-20	Water	03/20/23 01:08	05/02/23 10:04
580-126685-122	MAWC-2B2X-SW-40	Water	03/20/23 01:17	05/02/23 10:04
580-126685-123	MAWC-2B2X-SW-B	Water	03/20/23 01:28	05/02/23 10:04
580-126685-124	MAWC-3B2X-SW-1	Water	03/19/23 20:13	05/02/23 10:04
580-126685-125	MAWC-3B2X-SW-20	Water	03/19/23 20:23	05/02/23 10:04
580-126685-126	MAWC-3B2X-SW-40	Water	03/19/23 20:32	05/02/23 10:04
580-126685-127	MAWC-3B2X-SW-B	Water	03/19/23 20:43	05/02/23 10:04
580-126685-128	MAWC-3C2-SW-1	Water	03/19/23 19:09	05/02/23 10:04
580-126685-129	MAWC-3C2-SW-20	Water	03/19/23 19:26	05/02/23 10:04
580-126685-130	MAWC-3C2-SW-40	Water	03/19/23 19:04	05/02/23 10:04
580-126685-131	MAWC-3C2-SW-B	Water	03/19/23 19:46	05/02/23 10:04
580-126685-132	MAWC-4B2X-SW-1	Water	03/19/23 21:02	05/02/23 10:04
580-126685-133	MAWC-4B2X-SW-20	Water	03/19/23 21:52	05/02/23 10:04
580-126685-134	MAWC-4B2X-SW-40	Water	03/19/23 22:01	05/02/23 10:04
580-126685-135	MAWC-4B2X-SW-B	Water	03/19/23 22:12	05/02/23 10:04
580-126685-136	MAWC-4B2X-SW-B-FD	Water	03/19/23 22:25	05/02/23 10:04
580-126685-137	MAWC-EQ	Water	03/19/23 09:07	05/02/23 10:04
580-126685-138	MAWC-WB	Water	03/19/23 19:00	05/02/23 10:04

CHAIN OF CUSTODY

Ship To: Patrick Garcia-Strickland
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580-126685 Chain of Custody

General Notes:

Program: Gulf of Thailand (2020-2023)
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Please report results on a dry weight basis.

1770 0547 3120

Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.20	LAWA-1C1	SED	FREEZE	19-Mar-23	4:40	1	1	1		
T423.20	LAWA-1C2	SED	FREEZE	19-Mar-23	5:44	1	1	1		
T423.20	LAWA-1C2-FD	SED	FREEZE	19-Mar-23	5:55	1	1	1		
T423.20	LAWA-1C3X	SED	FREEZE	19-Mar-23	7:33	1	1	1		
T423.20	LAWA-1D1	SED	FREEZE	18-Mar-23	11:03	1	1	1		
T423.20	LAWA-1D2	SED	FREEZE	18-Mar-23	22:49	1	1	1		
T423.20	LAWA-1D3X	SED	FREEZE	18-Mar-23	22:13	1	1	1		
T423.20	LAWA-3C1	SED	FREEZE	17-Mar-23	19:07	1	1	1		
T423.20	LAWA-3C2	SED	FREEZE	17-Mar-23	19:55	1	1	1		
T423.20	LAWA-3C3	SED	FREEZE	17-Mar-23	20:23	1	1	1		
T423.20	LAWA-3D1X	SED	FREEZE	17-Mar-23	22:15	1	1	1		
T423.20	LAWA-3D2	SED	FREEZE	17-Mar-23	23:06	1	1	1		
T423.20	LAWA-3D3	SED	FREEZE	18-Mar-23	1:00	1	1	1		

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T423.20	G4I43REF-SW-1	SW	FREEZE	23-Mar-23	10:11				1	1
T423.20	G4I43REF-SW-20	SW	FREEZE	23-Mar-23	10:17				1	1
T423.20	G4I43REF-SW-40	SW	FREEZE	23-Mar-23	10:25				1	1
T423.20	G4I43REF-SW-B	SW	FREEZE	23-Mar-23	10:37				1	1
T423.20	LAWA-1C1-SW-1	SW	FREEZE	18-Mar-23	4:36				1	
T423.20	LAWA-1C1-SW-20	SW	FREEZE	18-Mar-23	4:44				1	1
T423.20	LAWA-1C1-SW-40	SW	FREEZE	18-Mar-23	4:56				1	1
T423.20	LAWA-1C1-SW-B	SW	FREEZE	18-Mar-23	5:08				1	1
T423.20	LAWA-1C1-SW-B-FD	SW	FREEZE	18-Mar-23	5:20				1	1
T423.20	LAWA-1C2-SW-1	SW	FREEZE	18-Mar-23	7:08				1	1
T423.20	LAWA-1C2-SW-20	SW	FREEZE	18-Mar-23	7:45				1	1

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CHAIN OF CUSTODY

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.20	LAWA-1C2-SW-40	SW	FREEZE	18-Mar-23	7:55				1	1
T423.20	LAWA-1C2-SW-B	SW	FREEZE	18-Mar-23	8:07				1	1
T423.20	LAWA-1C3X-SW-1	SW	FREEZE	18-Mar-23	19:21				1	1
T423.20	LAWA-1C3X-SW-20	SW	FREEZE	18-Mar-23	19:29				1	1
T423.20	LAWA-1C3X-SW-40	SW	FREEZE	18-Mar-23	19:40				1	1
T423.20	LAWA-1C3X-SW-B	SW	FREEZE	18-Mar-23	19:52				1	1
T423.20	LAWA-1D1-SW-1	SW	FREEZE	19-Mar-23	2:31				1	1
T423.20	LAWA-1D1-SW-20	SW	FREEZE	19-Mar-23	2:37				1	1
T423.20	LAWA-1D1-SW-40	SW	FREEZE	19-Mar-23	2:46				1	1
T423.20	LAWA-1D1-SW-B	SW	FREEZE	19-Mar-23	2:59				1	1
T423.20	LAWA-1D2-SW-1	SW	FREEZE	19-Mar-23	0:28				1	1
T423.20	LAWA-1D2-SW-1-FD	SW	FREEZE	19-Mar-23	0:36				1	1
T423.20	LAWA-1D2-SW-20	SW	FREEZE	19-Mar-23	0:43				1	1
T423.20	LAWA-1D2-SW-40	SW	FREEZE	19-Mar-23	0:52				1	1
T423.20	LAWA-1D2-SW-B	SW	FREEZE	19-Mar-23	1:05				1	1
T423.20	LAWA-1D3X-SW-1	SW	FREEZE	18-Mar-23	20:43				1	1
T423.20	LAWA-1D3X-SW-20	SW	FREEZE	18-Mar-23	20:51				1	1
T423.20	LAWA-1D3X-SW-40	SW	FREEZE	18-Mar-23	21:01				1	1
T423.20	LAWA-1D3X-SW-B	SW	FREEZE	18-Mar-23	21:14				1	1
T423.20	LAWA-3C1-SW-1	SW	FREEZE	17-Mar-23	16:43				1	1
T423.20	LAWA-3C1-SW-20	SW	FREEZE	17-Mar-23	16:50				1	1
T423.20	LAWA-3C1-SW-40	SW	FREEZE	17-Mar-23	17:00				1	1
T423.20	LAWA-3C1-SW-B	SW	FREEZE	17-Mar-23	17:13				1	1
T423.20	LAWA-3C2-SW-1	SW	FREEZE	18-Mar-23	3:47				1	1
T423.20	LAWA-3C2-SW-20	SW	FREEZE	18-Mar-23	3:04				1	1

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CHAIN OF CUSTODY

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.20	LAWA-3C2-SW-40	SW	FREEZE	18-Mar-23	4:03				1	1
T423.20	LAWA-3C2-SW-B	SW	FREEZE	18-Mar-23	4:15				1	1
T423.20	LAWA-3C3-SW-1	SW	FREEZE	18-Mar-23	2:01				1	1
T423.20	LAWA-3C3-SW-20	SW	FREEZE	18-Mar-23	2:08				1	1
T423.20	LAWA-3C3-SW-40	SW	FREEZE	18-Mar-23	2:07				1	1
T423.20	LAWA-3C3-SW-B	SW	FREEZE	18-Mar-23	2:33				1	1
T423.20	LAWA-3D1X-SW-1	SW	FREEZE	17-Mar-23	12:21				1	1
T423.20	LAWA-3D1X-SW-20	SW	FREEZE	17-Mar-23	12:29				1	1
T423.20	LAWA-3D1X-SW-40	SW	FREEZE	17-Mar-23	12:39				1	1
T423.20	LAWA-3D1X-SW-B	SW	FREEZE	17-Mar-23	12:51				1	1
T423.20	LAWA-3D2-SW-1	SW	FREEZE	17-Mar-23	4:33				1	1
T423.20	LAWA-3D2-SW-1-FD	SW	FREEZE	17-Mar-23	4:41				1	1
T423.20	LAWA-3D2-SW-20	SW	FREEZE	17-Mar-23	4:48				1	1
T423.20	LAWA-3D2-SW-40	SW	FREEZE	17-Mar-23	4:58				1	1
T423.20	LAWA-3D2-SW-B	SW	FREEZE	17-Mar-23	5:10				1	1
T423.20	LAWA-3D3-SW-1	SW	FREEZE	17-Mar-23	3:38				1	1
T423.20	LAWA-3D3-SW-20	SW	FREEZE	17-Mar-23	3:49				1	1
T423.20	LAWA-3D3-SW-40	SW	FREEZE	17-Mar-23	3:59				1	1
T423.20	LAWA-3D3-SW-B	SW	FREEZE	17-Mar-23	4:14				1	1
T423.20	LAWA-EQ	SW	FREEZE	17-Mar-23	3:25				1	1
T423.20	LAWA-WB	SW	FREEZE	17-Mar-23	3:30				1	1
T423.18	MAWA-1C2	SED	FREEZE	22-Mar-23	7:27	1	1	1		
T423.18	MAWA-1CP2	SED	FREEZE	22-Mar-23	13:29	1	1	1		
T423.18	MAWA-2B2X	SED	FREEZE	22-Mar-23	4:35	1	1	1		

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CHAIN OF CUSTODY

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.18	MAWA-3B2	SED	FREEZE	21-Mar-23	23:28	1	1	1		
T423.18	MAWA-3C2	SED	FREEZE	21-Mar-23	23:07	1	1	1		
T423.18	MAWA-4B2X	SED	FREEZE	21-Mar-23	22:45	1	1	1		
T423.18	MAWB-1B2X	SED	FREEZE	21-Mar-23	3:53	1	1	1		
T423.18	MAWB-1C2X	SED	FREEZE	21-Mar-23	4:06	1	1	1		
T423.18	MAWB-2B2X	SED	FREEZE	21-Mar-23	1:50	1	1	1		
T423.18	MAWB-3B2X	SED	FREEZE	20-Mar-23	23:15	1	1	1		
T423.18	MAWB-3C2	SED	FREEZE	20-Mar-23	22:52	1	1	1		
T423.18	MAWB-4B2X	SED	FREEZE	20-Mar-23	21:37	1	1	1		
T423.18	MAWC-1B2X	SED	FREEZE	20-Mar-23	3:53	1	1	1		
T423.18	MAWC-1C2	SED	FREEZE	20-Mar-23	5:16	1	1	1		
T423.18	MAWC-1C2-FD	SED	FREEZE	20-Mar-23	5:27	1	1	1		
T423.18	MAWC-2B2X	SED	FREEZE	20-Mar-23	1:41	1	1	1		
T423.18	MAWC-3B2X	SED	FREEZE	19-Mar-23	23:32	1	1	1		
T423.18	MAWC-3C2	SED	FREEZE	19-Mar-23	23:18	1	1	1		
T423.18	MAWC-4B2X	SED	FREEZE	19-Mar-23	23:01	1	1	1		
T423.18	MAWD-1B2X	SED	FREEZE	23-Mar-23	1:09	1	1	1		
T423.18	MAWD-1C2	SED	FREEZE	23-Mar-23	3:36	1	1	1		
T423.18	MAWD-2C2X	SED	FREEZE	23-Mar-23	5:07	1	1	1		
T423.18	MAWD-3B2	SED	FREEZE	22-Mar-23	23:16	1	1	1		
T423.18	MAWD-3C2X	SED	FREEZE	22-Mar-23	23:29	1	1	1		
T423.18	MAWD-3C2X-FD	SED	FREEZE	22-Mar-23	23:38	1	1	1		
T423.18	MAWD-4B2X	SED	FREEZE	22-Mar-23	22:57	1	1	1		
T423.18	MAWA-1C2-SW-1	SW	COLD	22-Mar-23	5:30				1	1

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CHAIN OF CUSTODY

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.18	MAWA-1C2-SW-20	SW	COLD	22-Mar-23	5:36				1	1
T423.18	MAWA-1C2-SW-40	SW	COLD	22-Mar-23	5:46				1	1
T423.18	MAWA-1C2-SW-B	SW	COLD	22-Mar-23	5:57				1	1
T423.18	MAWA-1CP2-SW-1	SW	COLD	22-Mar-23	12:26				1	1
T423.18	MAWA-1CP2-SW-20	SW	COLD	22-Mar-23	12:32				1	1
T423.18	MAWA-1CP2-SW-40	SW	COLD	22-Mar-23	12:41				1	1
T423.18	MAWA-1CP2-SW-B	SW	COLD	22-Mar-23	12:52				1	1
T423.18	MAWA-2B2X-SW-1	SW	COLD	22-Mar-23	3:52				1	1
T423.18	MAWA-2B2X-SW-20	SW	COLD	22-Mar-23	3:58				1	1
T423.18	MAWA-2B2X-SW-40	SW	COLD	22-Mar-23	4:07				1	1
T423.18	MAWA-2B2X-SW-B	SW	COLD	22-Mar-23	4:19				1	1
T423.18	MAWA-3B2-SW-1	SW	COLD	22-Mar-23	2:12				1	1
T423.18	MAWA-3B2-SW-20	SW	COLD	22-Mar-23	2:19				1	1
T423.18	MAWA-3B2-SW-20-FD	SW	COLD	22-Mar-23	2:26				1	1
T423.18	MAWA-3B2-SW-40	SW	COLD	22-Mar-23	2:35				1	1
T423.18	MAWA-3B2-SW-B	SW	COLD	22-Mar-23	2:48				1	1
T423.18	MAWA-3C2-SW-1	SW	COLD	22-Mar-23	0:21				1	1
T423.18	MAWA-3C2-SW-20	SW	COLD	22-Mar-23	0:27				1	1
T423.18	MAWA-3C2-SW-40	SW	COLD	22-Mar-23	0:36				1	1
T423.18	MAWA-3C2-SW-B	SW	COLD	22-Mar-23	0:47				1	1
T423.18	MAWA-4B2X-SW-1	SW	COLD	21-Mar-23	21:43				1	1
T423.18	MAWA-4B2X-SW-20	SW	COLD	21-Mar-23	21:49				1	1
T423.18	MAWA-4B2X-SW-40	SW	COLD	21-Mar-23	21:57				1	1
T423.18	MAWA-4B2X-SW-B	SW	COLD	21-Mar-23	22:09				1	1
T423.18	MAWA-EQ	SW	COLD	21-Mar-23	21:33				1	1

Relinquished by: Relinquished by:

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CHAIN OF CUSTODY

Ship To:

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T423.18	MAWA-WB	SW	COLD	21-Mar-23	21:28				1	1
T423.18	MAWB-1B2X-SW-1	SW	FREEZE	21-Mar-23	3:08				1	1
T423.18	MAWB-1B2X-SW-1-FD	SW	FREEZE	21-Mar-23	3:13				1	1
T423.18	MAWB-1B2X-SW-20	SW	FREEZE	21-Mar-23	3:19				1	1
T423.18	MAWB-1B2X-SW-40	SW	FREEZE	21-Mar-23	3:27				1	1
T423.18	MAWB-1B2X-SW-B	SW	FREEZE	21-Mar-23	3:38				1	1
T423.18	MAWB-1C2X-SW-1	SW	FREEZE	20-Mar-23	16:42				1	1
T423.18	MAWB-1C2X-SW-20	SW	FREEZE	20-Mar-23	16:48				1	1
T423.18	MAWB-1C2X-SW-40	SW	FREEZE	20-Mar-23	16:59				1	1
T423.18	MAWB-1C2X-SW-B	SW	FREEZE	20-Mar-23	17:11				1	1
T423.18	MAWB-2B2X-SW-1	SW	FREEZE	21-Mar-23	1:06				1	1
T423.18	MAWB-2B2X-SW-20	SW	FREEZE	21-Mar-23	1:11				1	1
T423.18	MAWB-2B2X-SW-20-FD	SW	FREEZE	21-Mar-23	1:18				1	1
T423.18	MAWB-2B2X-SW-40	SW	FREEZE	21-Mar-23	1:26				1	1
T423.18	MAWB-2B2X-SW-B	SW	FREEZE	21-Mar-23	1:37				1	1
T423.18	MAWB-3B2X-SW-1	SW	FREEZE	20-Mar-23	19:17				1	1
T423.18	MAWB-3B2X-SW-20	SW	FREEZE	20-Mar-23	19:23				1	1
T423.18	MAWB-3B2X-SW-40	SW	FREEZE	20-Mar-23	19:31				1	1
T423.18	MAWB-3B2X-SW-B	SW	FREEZE	20-Mar-23	19:43				1	1
T423.18	MAWB-3C2-SW-1	SW	FREEZE	20-Mar-23	10:55				1	1
T423.18	MAWB-3C2-SW-20	SW	FREEZE	20-Mar-23	11:00				1	1
T423.18	MAWB-3C2-SW-40	SW	FREEZE	20-Mar-23	11:13				1	1
T423.18	MAWB-3C2-SW-B	SW	FREEZE	20-Mar-23	11:24				1	1
T423.18	MAWB-4B2X-SW-1	SW	FREEZE	20-Mar-23	20:25				1	1
T423.18	MAWB-4B2X-SW-20	SW	FREEZE	20-Mar-23	20:30				1	1

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Recieved by:  5/5/23 5:30
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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.18	MAWB-4B2X-SW-40	SW	FREEZE	20-Mar-23	20:39				1	1
T423.18	MAWB-4B2X-SW-B	SW	FREEZE	20-Mar-23	20:50				1	1
T423.18	MAWB-4B2X-SW-B-FD	SW	FREEZE	20-Mar-23	21:03				1	1
T423.18	MAWC-1B2X-SW-1	SW	FREEZE	20-Mar-23	2:37				1	1
T423.18	MAWC-1B2X-SW-20	SW	FREEZE	20-Mar-23	2:43				1	1
T423.18	MAWC-1B2X-SW-40	SW	FREEZE	20-Mar-23	2:52				1	1
T423.18	MAWC-1B2X-SW-B	SW	FREEZE	20-Mar-23	3:04				1	1
T423.18	MAWC-1C2-SW-1	SW	FREEZE	20-Mar-23	4:37				1	1
T423.18	MAWC-1C2-SW-20	SW	FREEZE	20-Mar-23	4:43				1	1
T423.18	MAWC-1C2-SW-40	SW	FREEZE	20-Mar-23	4:52				1	1
T423.18	MAWC-1C2-SW-B	SW	FREEZE	20-Mar-23	5:04				1	1
T423.18	MAWC-2B2X-SW-1	SW	FREEZE	20-Mar-23	1:02				1	1
T423.18	MAWC-2B2X-SW-20	SW	FREEZE	20-Mar-23	1:08				1	1
T423.18	MAWC-2B2X-SW-40	SW	FREEZE	20-Mar-23	1:17				1	1
T423.18	MAWC-2B2X-SW-B	SW	FREEZE	20-Mar-23	1:28				1	1
T423.18	MAWC-3B2X-SW-1	SW	FREEZE	19-Mar-23	20:13				1	1
T423.18	MAWC-3B2X-SW-20	SW	FREEZE	19-Mar-23	20:23				1	1
T423.18	MAWC-3B2X-SW-40	SW	FREEZE	19-Mar-23	20:32				1	1
T423.18	MAWC-3B2X-SW-B	SW	FREEZE	19-Mar-23	20:43				1	1
T423.18	MAWC-3C2-SW-1	SW	FREEZE	19-Mar-23	19:09				1	1
T423.18	MAWC-3C2-SW-20	SW	FREEZE	19-Mar-23	19:26				1	1
T423.18	MAWC-3C2-SW-40	SW	FREEZE	19-Mar-23	19:04				1	1
T423.18	MAWC-3C2-SW-B	SW	FREEZE	19-Mar-23	19:46				1	1
T423.18	MAWC-4B2X-SW-1	SW	FREEZE	19-Mar-23	21:02				1	1
T423.18	MAWC-4B2X-SW-20	SW	FREEZE	19-Mar-23	21:52				1	1

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T423.18	MAWC-4B2X-SW-40	SW	FREEZE	19-Mar-23	22:01				1	1
T423.18	MAWC-4B2X-SW-B	SW	FREEZE	19-Mar-23	22:12				1	1
T423.18	MAWC-4B2X-SW-B-FD	SW	FREEZE	19-Mar-23	22:25				1	1
T423.18	MAWC-EQ	SW	FREEZE	19-Mar-23	9:07				1	1
T423.18	MAWC-WB	SW	FREEZE	19-Mar-23	19:00				1	1
T423.18	MAWD-1B2X-SW-1	SW	COLD	23-Mar-23	0:50				1	1
T423.18	MAWD-1B2X-SW-20	SW	COLD	23-Mar-23	0:56				1	1
T423.18	MAWD-1B2X-SW-40	SW	COLD	23-Mar-23	1:05				1	1
T423.18	MAWD-1B2X-SW-B	SW	COLD	23-Mar-23	1:17				1	1
T423.18	MAWD-1C2-SW-1	SW	COLD	23-Mar-23	2:22				1	1
T423.18	MAWD-1C2-SW-20	SW	COLD	23-Mar-23	2:28				1	1
T423.18	MAWD-1C2-SW-40	SW	COLD	23-Mar-23	2:37				1	1
T423.18	MAWD-1C2-SW-B	SW	COLD	23-Mar-23	2:48				1	1
T423.18	MAWD-2C2X-SW-1	SW	COLD	23-Mar-23	4:27				1	1
T423.18	MAWD-2C2X-SW-20	SW	COLD	23-Mar-23	4:34				1	1
T423.18	MAWD-2C2X-SW-40	SW	COLD	23-Mar-23	4:43				1	1
T423.18	MAWD-2C2X-SW-B	SW	COLD	23-Mar-23	4:55				1	1
T423.18	MAWD-3B2-SW-1	SW	COLD	22-Mar-23	20:25				1	1
T423.18	MAWD-3B2-SW-20	SW	COLD	22-Mar-23	20:31				1	1
T423.18	MAWD-3B2-SW-40	SW	COLD	22-Mar-23	20:42				1	1
T423.18	MAWD-3B2-SW-B	SW	COLD	22-Mar-23	20:54				1	1
T423.18	MAWD-3C2X-SW-1	SW	COLD	22-Mar-23	19:15				1	1
T423.18	MAWD-3C2X-SW-20	SW	COLD	22-Mar-23	19:24				1	1
T423.18	MAWD-3C2X-SW-40	SW	COLD	22-Mar-23	19:33				1	1
T423.18	MAWD-3C2X-SW-B	SW	COLD	22-Mar-23	19:44				1	1

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T423.18	MAWD-4B2X-SW-1	SW	COLD	22-Mar-23	22:18				1	1
T423.18	MAWD-4B2X-SW-20	SW	COLD	22-Mar-23	22:24				1	1
T423.18	MAWD-4B2X-SW-40	SW	COLD	22-Mar-23	22:33				1	1
T423.18	MAWD-4B2X-SW-B	SW	COLD	22-Mar-23	22:44				1	1
T423.19	Control-3-A	SED	FREEZE	23-Mar-23		1	1	1		
T423.19	Control-3-B	SED	FREEZE	23-Mar-23		1	1	1		
T423.19	Control-3-C	SED	FREEZE	23-Mar-23		1	1	1		
T423.19	MAWG-1B1X	SED	FREEZE	21-Mar-23	18:15	1	1	1		
T423.19	MAWG-1B2X	SED	FREEZE	21-Mar-23	17:14	1	1	1		
T423.19	MAWG-1B3X	SED	FREEZE	21-Mar-23	19:04	1	1	1		
T423.19	MAWG-1C1	SED	FREEZE	21-Mar-23	19:44	1	1	1		
T423.19	MAWG-1C2	SED	FREEZE	21-Mar-23	19:09	1	1	1		
T423.19	MAWG-1C3	SED	FREEZE	21-Mar-23	19:15	1	1	1		
T423.19	MAWG-1D1	SED	FREEZE	21-Mar-23	20:12	1	1	1		
T423.19	MAWG-1D2	SED	FREEZE	21-Mar-23	20:32	1	1	1		
T423.19	MAWG-1D3	SED	FREEZE	21-Mar-23	20:50	1	1	1		
T423.19	MAWG-2B2X	SED	FREEZE	21-Mar-23	13:25	1	1	1		
T423.19	MAWG-2B2X-FD	SED	FREEZE	21-Mar-23	13:35	1	1	1		
T423.19	MAWG-2C2	SED	FREEZE	21-Mar-23	13:08	1	1	1		
T423.19	MAWG-3B1X	SED	FREEZE	21-Mar-23	8:02	1	1	1		
T423.19	MAWG-3B2X	SED	FREEZE	21-Mar-23	8:08	1	1	1		
T423.19	MAWG-3B3X	SED	FREEZE	21-Mar-23	8:52	1	1	1		
T423.19	MAWG-3C1	SED	FREEZE	21-Mar-23	10:28	1	1	1		
T423.19	MAWG-3C2	SED	FREEZE	21-Mar-23	9:00	1	1	1		
T423.19	MAWG-3C2-FD	SED	FREEZE	21-Mar-23	9:45	1	1	1		

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T423.19	MAWG-3C3	SED	FREEZE	21-Mar-23	9:11	1	1	1		
T423.19	MAWG-3D1	SED	FREEZE	21-Mar-23	11:02	1	1	1		
T423.19	MAWG-3D2	SED	FREEZE	21-Mar-23	11:26	1	1	1		
T423.19	MAWG-3D3	SED	FREEZE	21-Mar-23	11:48	1	1	1		
T423.19	MAWG-4B2X	SED	FREEZE	21-Mar-23	12:46	1	1	1		
T423.19	MAWG-4C2	SED	FREEZE	21-Mar-23	12:28	1	1	1		

T423.19	Control-3-SW-1	SW	COLD	23-Mar-23	19:18				1	1
T423.19	Control-3-SW-20	SW	COLD	23-Mar-23	19:27				1	1
T423.19	Control-3-SW-40	SW	COLD	23-Mar-23	19:39				1	1
T423.19	Control-3-SW-B	SW	COLD	23-Mar-23	19:50				1	1
T423.19	MAWG-1B2X-SW-1	SW	COLD	21-Mar-23	15:44				1	1
T423.19	MAWG-1B2X-SW-20	SW	COLD	21-Mar-23	15:50				1	1
T423.19	MAWG-1B2X-SW-40	SW	COLD	21-Mar-23	16:01				1	1
T423.19	MAWG-1B2X-SW-B	SW	COLD	21-Mar-23	16:16				1	1
T423.19	MAWG-3B2X-SW-1	SW	COLD	21-Mar-23	5:13				1	1
T423.19	MAWG-3B2X-SW-1-FD	SW	COLD	21-Mar-23	5:18				1	1
T423.19	MAWG-3B2X-SW-20	SW	COLD	21-Mar-23	5:24				1	1
T423.19	MAWG-3B2X-SW-40	SW	COLD	21-Mar-23	5:39				1	1
T423.19	MAWG-3B2X-SW-B	SW	COLD	21-Mar-23	5:50				1	1
T423.19	MAWG-EQ	SW	COLD	21-Mar-23	4:05				1	1
T423.19	MAWG-WB	SW	COLD	21-Mar-23	5:00				1	1

T423.21	TFPSO-1B2	SED	FREEZE	25-Mar-23	4:33	1	1	1		
T423.21	TFPSO-1C2	SED	FREEZE	25-Mar-23	2:39	1	1	1		

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T423.21	TFPSO-1CP2	SED	FREEZE	25-Mar-23	2:19	1	1	1		
T423.21	TFPSO-1D2	SED	FREEZE	25-Mar-23	1:48	1	1	1		
T423.21	TFPSO-1D2-FD	SED	FREEZE	25-Mar-23	2:00	1	1	1		
T423.21	TFPSO-2B2	SED	FREEZE	25-Mar-23	7:42	1	1	1		
T423.21	TFPSO-2CP2	SED	FREEZE	25-Mar-23	7:19	1	1	1		
T423.21	TFPSO-3B2	SED	FREEZE	25-Mar-23	8:01	1	1	1		
T423.21	TFPSO-3CP2	SED	FREEZE	25-Mar-23	8:47	1	1	1		
T423.21	TFPSO-4B2	SED	FREEZE	25-Mar-23	8:20	1	1	1		
T423.21	TFPSO-4CP2	SED	FREEZE	25-Mar-23	9:10	1	1	1		
T423.21	YAREF-A2	SED	FREEZE	25-Mar-23	12:54	1	1	1		
T423.21	YAREF-B2	SED	FREEZE	25-Mar-23	13:04	1	1	1		
T423.21	YAREF-C2	SED	FREEZE	25-Mar-23	13:14	1	1	1		

T423.21	TFPSO-1B2-SW-1	SW	COLD	25-Mar-23	2:57				1	1
T423.21	TFPSO-1B2-SW-20	SW	COLD	25-Mar-23	3:04				1	1
T423.21	TFPSO-1B2-SW-20-FD	SW	COLD	25-Mar-23	3:10				1	1
T423.21	TFPSO-1B2-SW-40	SW	COLD	25-Mar-23	3:17				1	1
T423.21	TFPSO-1B2-SW-B	SW	COLD	25-Mar-23	3:28				1	1
T423.21	TFPSO-3B2-SW-1	SW	COLD	25-Mar-23	4:51				1	1
T423.21	TFPSO-3B2-SW-20	SW	COLD	25-Mar-23	4:57				1	1
T423.21	TFPSO-3B2-SW-40	SW	COLD	25-Mar-23	5:05				1	1
T423.21	TFPSO-3B2-SW-B	SW	COLD	25-Mar-23	5:21				1	1
T423.21	TFPSO-EQ	SW	COLD	25-Mar-23	1:00				1	1
T423.21	TFPSO-WB	SW	COLD	25-Mar-23	1:05				1	1
T423.21	YAREF-SW-1	SW	COLD	25-Mar-23	12:16				1	1

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T423.21	YAREF-SW-20	SW	COLD	25-Mar-23	12:23				1	1
T423.21	YAREF-SW-40	SW	COLD	25-Mar-23	12:31				1	1
T423.21	YAREF-SW-B	SW	COLD	25-Mar-23	12:42				1	1

T423.17	CBREF-A	SED	FREEZE	25-Mar-23	19:20	1	1	1		
T423.17	CBREF-B	SED	FREEZE	25-Mar-23	19:30	1	1	1		
T423.17	CBREF-C	SED	FREEZE	25-Mar-23	19:39	1	1	1		
T423.17	YUWA-1B1X	SED	FREEZE	16-Mar-23	17:20	1	1	1		
T423.17	YUWA-1B2X	SED	FREEZE	16-Mar-23	16:50	1	1	1		
T423.17	YUWA-1B3X	SED	FREEZE	16-Mar-23	17:03	1	1	1		
T423.17	YUWA-1C1	SED	FREEZE	16-Mar-23	19:30	1	1	1		
T423.17	YUWA-1C2	SED	FREEZE	16-Mar-23	19:43	1	1	1		
T423.17	YUWA-1C3	SED	FREEZE	16-Mar-23	19:55	1	1	1		
T423.17	YUWA-1D1	SED	FREEZE	16-Mar-23	20:13	1	1	1		
T423.17	YUWA-1D2	SED	FREEZE	16-Mar-23	20:19	1	1	1		
T423.17	YUWA-1D3	SED	FREEZE	16-Mar-23	20:44	1	1	1		
T423.17	YUWA-2B2X	SED	FREEZE	16-Mar-23	18:57	1	1	1		
T423.17	YUWA-2C2	SED	FREEZE	16-Mar-23	19:13	1	1	1		
T423.17	YUWA-3B1X	SED	FREEZE	16-Mar-23	10:09	1	1	1		
T423.17	YUWA-3B1X-FD	SED	FREEZE	16-Mar-23	10:19	1	1	1		
T423.17	YUWA-3B2X	SED	FREEZE	16-Mar-23	9:07	1	1	1		
T423.17	YUWA-3B3X	SED	FREEZE	16-Mar-23	10:49	1	1	1		
T423.17	YUWA-3C1	SED	FREEZE	16-Mar-23	13:00	1	1	1		
T423.17	YUWA-3C1-FD	SED	FREEZE	16-Mar-23	13:09	1	1	1		
T423.17	YUWA-3C2	SED	FREEZE	16-Mar-23	12:03	1	1	1		

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T423.17	YUWA-3C3	SED	FREEZE	16-Mar-23	11:19	1	1	1	1	
T423.17	YUWA-3D1	SED	FREEZE	16-Mar-23	13:34	1	1	1	1	
T423.17	YUWA-3D2	SED	FREEZE	16-Mar-23	13:04	1	1	1	1	
T423.17	YUWA-3D3	SED	FREEZE	16-Mar-23	14:17	1	1	1	1	
T423.17	YUWA-4B2X	SED	FREEZE	16-Mar-23	6:03	1	1	1	1	
T423.17	YUWA-4C2	SED	FREEZE	16-Mar-23	6:24	1	1	1	1	
T423.17	CBREF-SW-1	SW	FREEZE	25-Mar-23	17:03				1	1
T423.17	CBREF-SW-20	SW	FREEZE	25-Mar-23	17:10				1	1
T423.17	CBREF-SW-40	SW	FREEZE	25-Mar-23	17:18				1	1
T423.17	CBREF-SW-B	SW	FREEZE	25-Mar-23	17:30				1	1
T423.17	YUWA-1B2X-SW-1	SW	FREEZE	16-Mar-23	15:09				1	1
T423.17	YUWA-1B2X-SW-20	SW	FREEZE	16-Mar-23	15:16				1	1
T423.17	YUWA-1B2X-SW-40	SW	FREEZE	16-Mar-23	15:04				1	1
T423.17	YUWA-1B2X-SW-40-FD	SW	FREEZE	16-Mar-23	15:34				1	1
T423.17	YUWA-1B2X-SW-B	SW	FREEZE	16-Mar-23	15:45				1	1
T423.17	YUWA-3B2X-SW-1	SW	FREEZE	16-Mar-23	7:04				1	1
T423.17	YUWA-3B2X-SW-20	SW	FREEZE	16-Mar-23	7:58				1	1
T423.17	YUWA-3B2X-SW-40	SW	FREEZE	16-Mar-23	8:19				1	1
T423.17	YUWA-3B2X-SW-B	SW	FREEZE	16-Mar-23	8:33				1	1
T423.17	YUWA-EQ	SW	FREEZE	16-Mar-23	5:55				1	1
T423.17	YUWA-WB	SW	FREEZE	16-Mar-23	6:00				1	1

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5/5/20

6/30/2023

General Notes:
Program: Gulf of Thailand (2020-2023)
Please report all results to the MDL, J-flag results between MDL and RL
Please report results and invoice separately for each Project ID
Please report results in pdf format with Excel EDD deliverable
Please report results on a dry weight basis.

Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.17	YAREF-SW-20	SW	COLD	25-Mar-23	12:23				1	1
T423.21	YAREF-SW-40	SW	COLD	25-Mar-23	12:31				1	1
T423.21	YAREF-SW-B	SW	COLD	25-Mar-23	12:42				1	1
T423.17	CBREF-A	SED	FREEZE	25-Mar-23	19:20	1	1	1		
T423.17	CBREF-B	SED	FREEZE	25-Mar-23	19:30	1	1	1		
T423.17	CBREF-C	SED	FREEZE	25-Mar-23	19:39	1	1	1		
T423.17	YUWA-1B1X	SED	FREEZE	16-Mar-23	17:20	1	1	1		
T423.17	YUWA-1B2X	SED	FREEZE	16-Mar-23	16:50	1	1	1		
T423.17	YUWA-1B3X	SED	FREEZE	16-Mar-23	17:03	1	1	1		
T423.17	YUWA-1C1	SED	FREEZE	16-Mar-23	19:30	1	1	1		
T423.17	YUWA-1C2	SED	FREEZE	16-Mar-23	19:43	1	1	1		
T423.17	YUWA-1C3	SED	FREEZE	16-Mar-23	19:55	1	1	1		
T423.17	YUWA-1D1	SED	FREEZE	16-Mar-23	20:13	1	1	1		
T423.17	YUWA-1D2	SED	FREEZE	16-Mar-23	20:19	1	1	1		
T423.17	YUWA-1D3	SED	FREEZE	16-Mar-23	20:44	1	1	1		
T423.17	YUWA-2B2X	SED	FREEZE	16-Mar-23	18:57	1	1	1		
T423.17	YUWA-2C2	SED	FREEZE	16-Mar-23	19:13	1	1	1		
T423.17	YUWA-3B1X	SED	FREEZE	16-Mar-23	10:09	1	1	1		
T423.17	YUWA-3B1X-FD	SED	FREEZE	16-Mar-23	10:19	1	1	1		
T423.17	YUWA-3B2X	SED	FREEZE	16-Mar-23	9:07	1	1	1		
T423.17	YUWA-3B3X	SED	FREEZE	16-Mar-23	10:49	1	1	1		
T423.17	YUWA-3C1	SED	FREEZE	16-Mar-23	13:00	1	1	1		
T423.17	YUWA-3C1-FD	SED	FREEZE	16-Mar-23	13:09	1	1	1		
T423.17	YUWA-3C2	SED	FREEZE	16-Mar-23	12:03	1	1	1		

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Relinquished by:

Relieved by:

Relinquished by:

Relieved by:

Box 21

Therm. ID: Dig 21 Cust. Seal: (Y) N
 Uncorr./Corr. Temp: 24 / -23.8 °C
 Delivery: UPS / (FedEx) / Other: _____
 Ice Type: Blue / (Dry) / Wet / None
 Label Ver.: DL/VA Packing: B

Box 22

Therm. ID: Dig 22 Cust. Seal: Y / N
 Uncorr./Corr. Temp: 149 / -17.1 °C
 Delivery: UPS / (FedEx) / Other: _____
 Ice Type: Blue / (Dry) / Wet / None
 Label Ver.: DL/VA Packing: B

Box 19

Therm. ID: Dig 19 Cust. Seal: (Y) N
 Uncorr./Corr. Temp: 140 / -15.4 °C
 Delivery: UPS / (FedEx) / Other: _____
 Ice Type: Blue / (Dry) / Wet / None
 Label Ver.: DL/VA Packing: B

Box 13

Therm. ID: Dig 13 Cust. Seal: (Y) N
 Uncorr./Corr. Temp: 34 / -13.4 °C
 Delivery: UPS / (FedEx) / Other: _____
 Ice Type: Blue / (Dry) / Wet / None
 Label Ver.: DL/VA Packing: B

Box 17

Therm. ID: Dig 17 Cust. Seal: (Y) N
 Uncorr./Corr. Temp: 8 / -29 °C
 Delivery: UPS / (FedEx) / Other: _____
 Ice Type: Blue / (Dry) / Wet / None
 Label Ver.: DL/VA Packing: B

Box 22 Dry Ice Bag

Therm. ID: Dig _____ Cust. Seal: Y / N
 Uncorr./Corr. Temp: 24 / 25 °C
 Delivery: UPS / FedEx / Other: _____
 Ice Type: Blue / Dry / Wet / None
 Label Ver.: DL/VA Packing: _____

Box 6

Therm. ID: Dig 6 Cust. Seal: (Y) N
 Uncorr./Corr. Temp: 21 / -26.9 °C
 Delivery: UPS / (FedEx) / Other: _____
 Ice Type: Blue / (Dry) / Wet / None
 Label Ver.: DL/VA Packing: B

Box 10

Therm. ID: Dig 10 Cust. Seal: (Y) N
 Uncorr./Corr. Temp: 19 / -19.5 °C
 Delivery: UPS / (FedEx) / Other: _____
 Ice Type: Blue / (Dry) / Wet / None
 Label Ver.: DL/VA Packing: B

Box 14

Therm. ID: Dig 14 Cust. Seal: (Y) N
 Uncorr./Corr. Temp: 17.0 / -16.5 °C
 Delivery: UPS / (FedEx) / Other: _____
 Ice Type: Blue / (Dry) / Wet / None
 Label Ver.: DL/VA Packing: B

Box 18

Therm. ID: Dig 18 Cust. Seal: (Y) N
 Uncorr./Corr. Temp: 14.4 / -14.6 °C
 Delivery: UPS / (FedEx) / Other: _____
 Ice Type: Blue / (Dry) / Wet / None
 Label Ver.: DL/VA Packing: _____

Box 23

Therm. ID: Dig 23 Cust. Seal: (Y) N
 Uncorr./Corr. Temp: 18 / -6.7 °C
 Delivery: UPS / (FedEx) / Other: _____
 Ice Type: Blue / (Dry) / Wet / None
 Label Ver.: DL/VA Packing: B

Box 7

Therm. ID: Dig 7 Cust. Seal: (Y) N
 Uncorr./Corr. Temp: 17.0 / -16.4 °C
 Delivery: UPS / (FedEx) / Other: _____
 Ice Type: Blue / (Dry) / Wet / None
 Label Ver.: DL/VA Packing: B

Box 11 3

Therm. ID: Dig _____ Cust. Seal: Y / N
 Uncorr./Corr. Temp: 15.1 / -15.3 °C
 Delivery: UPS / (FedEx) / Other: _____
 Ice Type: Blue / (Dry) / Wet / None
 Label Ver.: DL/VA Packing: _____

Box 15

Therm. ID: Dig 15 Cust. Seal: (Y) N
 Uncorr./Corr. Temp: 15.0 / -14.5 °C
 Delivery: UPS / (FedEx) / Other: _____
 Ice Type: Blue / (Dry) / Wet / None
 Label Ver.: DL/VA Packing: B

Box 4

Therm. ID: Dig _____ Cust. Seal: _____
 Uncorr./Corr. Temp: _____ / _____ °C
 Delivery: UPS / FedEx / Other: _____
 Ice Type: Blue / Dry / Wet / None
 Label Ver.: DL/VA Packing: _____

Box 8

Therm. ID: Dig 8 Cust. Seal: (Y) N
 Uncorr./Corr. Temp: 14.4 / -16.0 °C
 Delivery: UPS / (FedEx) / Other: _____
 Ice Type: Blue / (Dry) / Wet / None
 Label Ver.: DL/VA Packing: B

Box 12

Therm. ID: Dig 12 Cust. Seal: (Y) N
 Uncorr./Corr. Temp: 11 / -16.0 °C
 Delivery: UPS / (FedEx) / Other: _____
 Ice Type: Blue / (Dry) / Wet / None
 Label Ver.: DL/VA Packing: B

Box 16

Therm. ID: Dig 16 Cust. Seal: (Y) N
 Uncorr./Corr. Temp: 24 / -25.6 °C
 Delivery: UPS / (FedEx) / Other: _____
 Ice Type: Blue / (Dry) / Wet / None
 Label Ver.: DL/VA Packing: B

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 580-126685-2

Login Number: 126685

List Source: Eurofins Seattle

List Number: 1

Creator: Groden, Kyle J

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

PREPARED FOR

Attn: Ted Donn
Tetra Tech, Inc.
3697 Mt. Diablo Blvd.
Suite 150
Lafayette, California 94549

Generated 5/30/2023 3:31:36 PM

JOB DESCRIPTION

Gulf of Thailand - 2023

JOB NUMBER

580-126685-3

Eurofins Seattle

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



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Authorized for release by
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Case Narrative

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Job ID: 580-126685-3

Laboratory: Eurofins Seattle

Narrative

Job Narrative 580-126685-3

Receipt

The samples were received on 5/2/2023 10:04 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 17 coolers at receipt time were -28.8°C, -23.9°C, -23.1°C, -20.8°C, -18.8°C, -18.8°C, -17.1°C, -16.9°C, -16.8°C, -16.0°C, -15.3°C, -14.9°C, -14.6°C, -10.8°C, -6.7°C, -2.9°C and 2.7°C

Receipt Exceptions

One or more containers for the following samples were received broken or leaking: 126685-84 & 126685-187G443REF-SW-1 (580-126685-1), G443REF-SW-20 (580-126685-2), G443REF-SW-40 (580-126685-3), G443REF-SW-B (580-126685-4), LAWA-1C1-SW-1 (580-126685-5), LAWA-1C1-SW-20 (580-126685-6), LAWA-1C1-SW-40 (580-126685-7), LAWA-1C1-SW-B (580-126685-8), LAWA-1C1-SW-B-FD (580-126685-9), LAWA-1C2-SW-1 (580-126685-10), LAWA-1C2-SW-20 (580-126685-11), LAWA-1C2-SW-40 (580-126685-12), LAWA-1C2-SW-B (580-126685-13), LAWA-1C3X-SW-1 (580-126685-14), LAWA-1C3X-SW-20 (580-126685-15), LAWA-1C3X-SW-40 (580-126685-16), LAWA-1C3X-SW-B (580-126685-17), LAWA-1D1-SW-1 (580-126685-18), LAWA-1D1-SW-20 (580-126685-19), LAWA-1D1-SW-40 (580-126685-20), LAWA-1D1-SW-B (580-126685-21), LAWA-1D2-SW-1 (580-126685-22), LAWA-1D2-SW-1-FD (580-126685-23), LAWA-1D2-SW-20 (580-126685-24), LAWA-1D2-SW-40 (580-126685-25), LAWA-1D2-SW-B (580-126685-26), LAWA-1D3X-SW-1 (580-126685-27), LAWA-1D3X-SW-20 (580-126685-28), LAWA-1D3X-SW-40 (580-126685-29), LAWA-1D3X-SW-B (580-126685-30), LAWA-3C1-SW-1 (580-126685-31), LAWA-3C1-SW-20 (580-126685-32), LAWA-3C1-SW-40 (580-126685-33), LAWA-3C1-SW-B (580-126685-34), LAWA-3C2-SW-1 (580-126685-35), LAWA-3C2-SW-20 (580-126685-36), LAWA-3C2-SW-40 (580-126685-37), LAWA-3C2-SW-B (580-126685-38), LAWA-3C3-SW-1 (580-126685-39), LAWA-3C3-SW-20 (580-126685-40), LAWA-3C3-SW-40 (580-126685-41), LAWA-3C3-SW-B (580-126685-42), LAWA-3D1X-SW-1 (580-126685-43), LAWA-3D1X-SW-20 (580-126685-44), LAWA-3D1X-SW-40 (580-126685-45), LAWA-3D1X-SW-B (580-126685-46), LAWA-3D2-SW-1 (580-126685-47), LAWA-3D2-SW-1-FD (580-126685-48), LAWA-3D2-SW-20 (580-126685-49), LAWA-3D2-SW-40 (580-126685-50), LAWA-3D2-SW-B (580-126685-51), LAWA-3D3-SW-1 (580-126685-52), LAWA-3D3-SW-20 (580-126685-53), LAWA-3D3-SW-40 (580-126685-54), LAWA-3D3-SW-B (580-126685-55), LAWA-EQ (580-126685-56), LAWA-WB (580-126685-57), MAWA-1C2-SW-1 (580-126685-58), MAWA-1C2-SW-20 (580-126685-59), MAWA-1C2-SW-40 (580-126685-60), MAWA-1C2-SW-B (580-126685-61), MAWA-1CP2-SW-1 (580-126685-62), MAWA-1CP2-SW-20 (580-126685-63), MAWA-1CP2-SW-40 (580-126685-64), MAWA-1CP2-SW-B (580-126685-65), MAWA-2B2X-SW-1 (580-126685-66), MAWA-2B2X-SW-20 (580-126685-67), MAWA-2B2X-SW-40 (580-126685-68), MAWA-2B2X-SW-B (580-126685-69), MAWA-3B2-SW-1 (580-126685-70), MAWA-3B2-SW-20 (580-126685-71), MAWA-3B2-SW-20-FD (580-126685-72), MAWA-3B2-SW-40 (580-126685-73), MAWA-3B2-SW-B (580-126685-74), MAWA-3C2-SW-1 (580-126685-75), MAWA-3C2-SW-20 (580-126685-76), MAWA-3C2-SW-40 (580-126685-77), MAWA-3C2-SW-B (580-126685-78), MAWA-4B2X-SW-1 (580-126685-79), MAWA-4B2X-SW-20 (580-126685-80), MAWA-4B2X-SW-40 (580-126685-81), MAWA-4B2X-SW-B (580-126685-82), MAWA-EQ (580-126685-83), MAWA-WB (580-126685-84), MAWB-1B2X-SW-1 (580-126685-85), MAWB-1B2X-SW-1-FD (580-126685-86), MAWB-1B2X-SW-20 (580-126685-87), MAWB-1B2X-SW-40 (580-126685-88), MAWB-1B2X-SW-B (580-126685-89), MAWB-1C2X-SW-1 (580-126685-90), MAWB-1C2X-SW-20 (580-126685-91), MAWB-1C2X-SW-40 (580-126685-92), MAWB-1C2X-SW-B (580-126685-93), MAWB-2B2X-SW-1 (580-126685-94), MAWB-2B2X-SW-20 (580-126685-95), MAWB-2B2X-SW-20-FD (580-126685-96), MAWB-2B2X-SW-40 (580-126685-97), MAWB-2B2X-SW-B (580-126685-98), MAWB-3B2X-SW-1 (580-126685-99), MAWB-3B2X-SW-20 (580-126685-100), MAWB-3B2X-SW-40 (580-126685-101), MAWB-3B2X-SW-B (580-126685-102), MAWB-3C2-SW-1 (580-126685-103), MAWB-3C2-SW-20 (580-126685-104), MAWB-3C2-SW-40 (580-126685-105), MAWB-3C2-SW-B (580-126685-106), MAWB-4B2X-SW-1 (580-126685-107), MAWB-4B2X-SW-20 (580-126685-108), MAWB-4B2X-SW-40 (580-126685-109), MAWB-4B2X-SW-B (580-126685-110), MAWB-4B2X-SW-B-FD (580-126685-111), MAWC-1B2X-SW-1 (580-126685-112), MAWC-1B2X-SW-20 (580-126685-113), MAWC-1B2X-SW-40 (580-126685-114), MAWC-1B2X-SW-B (580-126685-115), MAWC-1C2-SW-1 (580-126685-116), MAWC-1C2-SW-20 (580-126685-117), MAWC-1C2-SW-40 (580-126685-118), MAWC-1C2-SW-B (580-126685-119), MAWC-2B2X-SW-1 (580-126685-120), MAWC-2B2X-SW-20 (580-126685-121), MAWC-2B2X-SW-40 (580-126685-122), MAWC-2B2X-SW-B (580-126685-123), MAWC-3B2X-SW-1 (580-126685-124), MAWC-3B2X-SW-20 (580-126685-125), MAWC-3B2X-SW-40 (580-126685-126), MAWC-3B2X-SW-B (580-126685-127), MAWC-3C2-SW-1 (580-126685-128), MAWC-3C2-SW-20 (580-126685-129), MAWC-3C2-SW-40 (580-126685-130), MAWC-3C2-SW-B (580-126685-131), MAWC-4B2X-SW-1 (580-126685-132), MAWC-4B2X-SW-20 (580-126685-133), MAWC-4B2X-SW-40 (580-126685-134), MAWC-4B2X-SW-B (580-126685-135), MAWC-4B2X-SW-B-FD (580-126685-136), MAWC-EQ (580-126685-137), MAWC-WB (580-126685-138), MAWD-1B2X-SW-1 (580-126685-139), MAWD-1B2X-SW-20 (580-126685-140), MAWD-1B2X-SW-40 (580-126685-141), MAWD-1B2X-SW-B (580-126685-142), MAWD-1C2-SW-1 (580-126685-143), MAWD-1C2-SW-20 (580-126685-144), MAWD-1C2-SW-40 (580-126685-145), MAWD-1C2-SW-B (580-126685-146), MAWD-2C2X-SW-1 (580-126685-147), MAWD-2C2X-SW-20 (580-126685-148), MAWD-2C2X-SW-40 (580-126685-149), MAWD-2C2X-SW-B (580-126685-150), MAWD-3B2-SW-1 (580-126685-151), MAWD-3B2-SW-20 (580-126685-152), MAWD-3B2-SW-40 (580-126685-153), MAWD-3B2-SW-B (580-126685-154), MAWD-3C2X-SW-1 (580-126685-155), MAWD-3C2X-SW-20 (580-126685-156), MAWD-3C2X-SW-40 (580-126685-157),

Case Narrative

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Job ID: 580-126685-3 (Continued)

Laboratory: Eurofins Seattle (Continued)

MAWD-3C2X-SW-B (580-126685-158), MAWD-4B2X-SW-1 (580-126685-159), MAWD-4B2X-SW-20 (580-126685-160), MAWD-4B2X-SW-40 (580-126685-161), MAWD-4B2X-SW-B (580-126685-162), Control-3-SW-1 (580-126685-163), Control-3-SW-20 (580-126685-164), Control-3-SW-40 (580-126685-165), Control-3-SW-B (580-126685-166), MAWG-1B2X-SW-1 (580-126685-167), MAWG-1B2X-SW-20 (580-126685-168), MAWG-1B2X-SW-40 (580-126685-169), MAWG-1B2X-SW-B (580-126685-170), MAWG-3B2X-SW-1 (580-126685-171), MAWG-3B2X-SW-1-FD (580-126685-172), MAWG-3B2X-SW-20 (580-126685-173), MAWG-3B2X-SW-40 (580-126685-174), MAWG-3B2X-SW-B (580-126685-175), MAWG-EQ (580-126685-176), MAWG-WB (580-126685-177), TFPSO-1B2-SW-1 (580-126685-178), TFPSO-1B2-SW-20 (580-126685-179), TFPSO-1B2-SW-20-FD (580-126685-180), TFPSO-1B2-SW-40 (580-126685-181), TFPSO-1B2-SW-B (580-126685-182), TFPSO-3B2-SW-1 (580-126685-183), TFPSO-3B2-SW-20 (580-126685-184), TFPSO-3B2-SW-40 (580-126685-185), TFPSO-3B2-SW-B (580-126685-186), TFPSO-EQ (580-126685-187), TFPSO-WB (580-126685-188), YAREF-SW-1 (580-126685-189), YAREF-SW-20 (580-126685-190), YAREF-SW-40 (580-126685-191), YAREF-SW-B (580-126685-192), CBREF-SW-1 (580-126685-193), CBREF-SW-20 (580-126685-194), CBREF-SW-40 (580-126685-195), CBREF-SW-B (580-126685-196), YUWA-1B2X-SW-1 (580-126685-197), YUWA-1B2X-SW-20 (580-126685-198), YUWA-1B2X-SW-40 (580-126685-199), YUWA-1B2X-SW-40-FD (580-126685-200), YUWA-1B2X-SW-B (580-126685-201), YUWA-3B2X-SW-1 (580-126685-202), YUWA-3B2X-SW-20 (580-126685-203), YUWA-3B2X-SW-40 (580-126685-204), YUWA-3B2X-SW-B (580-126685-205), YUWA-EQ (580-126685-206) and YUWA-WB (580-126685-207). Splits were taken from the metals containers.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Client Sample ID: Control-3-SW-1

Lab Sample ID: 580-126685-163

Date Collected: 03/23/23 19:18

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.51		0.50	0.079	ng/L			05/10/23 19:02	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 10:01	1
Cadmium	0.014	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 10:01	1
Chromium	1.6		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 10:01	1
Copper	0.16	J B	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 10:01	1
Lead	0.020	J B	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 10:01	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 10:01	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/27/23 10:01	1
Barium	7.5		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 10:01	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 10:01	1
Manganese	0.36		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 10:01	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Client Sample ID: Control-3-SW-20

Lab Sample ID: 580-126685-164

Date Collected: 03/23/23 19:27

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.42	J	0.50	0.079	ng/L			05/10/23 19:06	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.5		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 10:15	1
Cadmium	ND		0.040	0.011	ug/L		05/25/23 00:00	05/27/23 10:15	1
Chromium	1.5		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 10:15	1
Copper	0.41	J B	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 10:15	1
Lead	0.048	J B	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 10:15	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 10:15	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/27/23 10:15	1
Barium	6.9		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 10:15	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 10:15	1
Manganese	0.33		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 10:15	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Client Sample ID: Control-3-SW-40

Lab Sample ID: 580-126685-165

Date Collected: 03/23/23 19:39

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.28	J	0.50	0.079	ng/L			05/10/23 19:10	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 10:29	1
Cadmium	0.012	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 10:29	1
Chromium	1.5		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 10:29	1
Copper	0.13	J B	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 10:29	1
Lead	0.024	J B	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 10:29	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 10:29	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/27/23 10:29	1
Barium	7.1		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 10:29	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 10:29	1
Manganese	0.38		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 10:29	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Client Sample ID: Control-3-SW-B

Lab Sample ID: 580-126685-166

Date Collected: 03/23/23 19:50

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.51		0.50	0.079	ng/L			05/10/23 19:14	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.0		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 10:44	1
Cadmium	0.024	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 10:44	1
Chromium	1.7		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 10:44	1
Copper	0.15	J B	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 10:44	1
Lead	0.060	B	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 10:44	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 10:44	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/27/23 10:44	1
Barium	8.4		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 10:44	1
Iron	16		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 10:44	1
Manganese	1.2		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 10:44	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Client Sample ID: MAWG-1B2X-SW-1

Lab Sample ID: 580-126685-167

Date Collected: 03/21/23 15:44

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.47	J	0.50	0.079	ng/L			05/10/23 19:18	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.4		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 10:58	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 10:58	1
Chromium	1.8		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 10:58	1
Copper	0.32	J B	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 10:58	1
Lead	0.032	J B	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 10:58	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 10:58	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/27/23 10:58	1
Barium	7.6		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 10:58	1
Iron	1.2	J	2.0	1.1	ug/L		05/25/23 00:00	05/27/23 10:58	1
Manganese	1.5		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 10:58	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Client Sample ID: MAWG-1B2X-SW-20

Lab Sample ID: 580-126685-168

Date Collected: 03/21/23 15:50

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.34	J	0.50	0.079	ng/L			05/10/23 19:23	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 11:12	1
Cadmium	0.012	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 11:12	1
Chromium	1.7		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 11:12	1
Copper	0.16	J B	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 11:12	1
Lead	0.018	J B	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 11:12	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 11:12	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/27/23 11:12	1
Barium	7.3		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 11:12	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 11:12	1
Manganese	0.97		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 11:12	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Client Sample ID: MAWG-1B2X-SW-40

Lab Sample ID: 580-126685-169

Date Collected: 03/21/23 16:01

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.35	J	0.50	0.079	ng/L			05/10/23 19:27	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.9		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 11:26	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 11:26	1
Chromium	1.7		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 11:26	1
Copper	0.15	J B	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 11:26	1
Lead	0.013	J B	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 11:26	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 11:26	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/27/23 11:26	1
Barium	7.9		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 11:26	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 11:26	1
Manganese	1.3		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 11:26	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Client Sample ID: MAWG-1B2X-SW-B

Lab Sample ID: 580-126685-170

Date Collected: 03/21/23 16:16

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.64		0.50	0.079	ng/L			05/10/23 19:31	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.0		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 12:09	1
Cadmium	0.020	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 12:09	1
Chromium	1.8		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 12:09	1
Copper	0.14	J B	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 12:09	1
Lead	0.038	J B	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 12:09	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 12:09	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/27/23 12:09	1
Barium	9.1		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 12:09	1
Iron	16		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 12:09	1
Manganese	2.0		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 12:09	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Client Sample ID: MAWG-3B2X-SW-1

Lab Sample ID: 580-126685-171

Date Collected: 03/21/23 05:13

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.40	J	0.50	0.079	ng/L			05/10/23 19:35	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.5		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 01:13	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 01:13	1
Chromium	1.6		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 01:13	1
Copper	0.17	J B	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 01:13	1
Lead	0.020	J B	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 01:13	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 01:13	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/27/23 01:13	1
Barium	8.0		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 01:13	1
Iron	1.1	J	2.0	1.1	ug/L		05/25/23 00:00	05/27/23 01:13	1
Manganese	1.0		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 01:13	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Client Sample ID: MAWG-3B2X-SW-1-FD

Lab Sample ID: 580-126685-172

Date Collected: 03/21/23 05:18

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.66		0.50	0.079	ng/L			05/10/23 19:48	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.5		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 01:56	1
Cadmium	0.012	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 01:56	1
Chromium	1.5		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 01:56	1
Copper	0.17	J B	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 01:56	1
Lead	0.029	J B	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 01:56	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 01:56	1
Zinc	0.20	J	0.50	0.070	ug/L		05/25/23 00:00	05/27/23 01:56	1
Barium	7.4		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 01:56	1
Iron	1.4	J	2.0	1.1	ug/L		05/25/23 00:00	05/27/23 01:56	1
Manganese	0.85		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 01:56	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Client Sample ID: MAWG-3B2X-SW-20

Lab Sample ID: 580-126685-173

Date Collected: 03/21/23 05:24

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.23	J	0.50	0.079	ng/L			05/10/23 19:52	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 12:23	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 12:23	1
Chromium	1.7		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 12:23	1
Copper	0.16	J B	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 12:23	1
Lead	0.014	J B	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 12:23	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 12:23	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/27/23 12:23	1
Barium	7.5		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 12:23	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 12:23	1
Manganese	0.84		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 12:23	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Client Sample ID: MAWG-3B2X-SW-40

Lab Sample ID: 580-126685-174

Date Collected: 03/21/23 05:39

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.21	J	0.50	0.079	ng/L			05/10/23 19:56	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 12:38	1
Cadmium	0.013	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 12:38	1
Chromium	1.8		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 12:38	1
Copper	0.14	J B	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 12:38	1
Lead	0.014	J B	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 12:38	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 12:38	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/27/23 12:38	1
Barium	8.2		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 12:38	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 12:38	1
Manganese	0.74		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 12:38	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Client Sample ID: MAWG-3B2X-SW-B

Lab Sample ID: 580-126685-175

Date Collected: 03/21/23 05:50

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.64		0.50	0.079	ng/L			05/10/23 20:01	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.0		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 12:52	1
Cadmium	0.020	J	0.040	0.011	ug/L		05/25/23 00:00	05/27/23 12:52	1
Chromium	1.7		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 12:52	1
Copper	0.20	J B	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 12:52	1
Lead	0.044	J B	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 12:52	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 12:52	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/27/23 12:52	1
Barium	8.9		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 12:52	1
Iron	17		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 12:52	1
Manganese	2.0		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 12:52	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Client Sample ID: MAWG-EQ

Lab Sample ID: 580-126685-176

Date Collected: 03/21/23 04:05

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.53		0.50	0.079	ng/L			05/10/23 20:05	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 13:06	1
Cadmium	ND		0.040	0.011	ug/L		05/25/23 00:00	05/27/23 13:06	1
Chromium	ND		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 13:06	1
Copper	ND		1.0	0.020	ug/L		05/25/23 00:00	05/27/23 13:06	1
Lead	0.0086	J B	0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 13:06	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 13:06	1
Zinc	0.096	J	0.50	0.070	ug/L		05/25/23 00:00	05/27/23 13:06	1
Barium	ND		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 13:06	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 13:06	1
Manganese	0.94		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 13:06	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Client Sample ID: MAWG-WB

Lab Sample ID: 580-126685-177

Date Collected: 03/21/23 05:00

Matrix: Water

Date Received: 05/02/23 10:04

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.43	J	0.50	0.079	ng/L			05/10/23 20:09	1

Method: EPA 1640 - Metals (ICPMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/25/23 00:00	05/27/23 13:20	1
Cadmium	ND		0.040	0.011	ug/L		05/25/23 00:00	05/27/23 13:20	1
Chromium	ND		0.50	0.34	ug/L		05/25/23 00:00	05/27/23 13:20	1
Copper	0.020	J B	1.0	0.020	ug/L		05/25/23 00:00	05/27/23 13:20	1
Lead	ND		0.050	0.0040	ug/L		05/25/23 00:00	05/27/23 13:20	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/27/23 13:20	1
Zinc	0.12	J	0.50	0.070	ug/L		05/25/23 00:00	05/27/23 13:20	1
Barium	ND		0.50	0.13	ug/L		05/25/23 00:00	05/27/23 13:20	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/27/23 13:20	1
Manganese	0.59		0.050	0.0080	ug/L		05/25/23 00:00	05/27/23 13:20	1

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 580-425972/25

Matrix: Water

Analysis Batch: 425972

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 14:04	1

Lab Sample ID: MB 580-425972/26

Matrix: Water

Analysis Batch: 425972

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 14:08	1

Lab Sample ID: MB 580-425972/27

Matrix: Water

Analysis Batch: 425972

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.079	ng/L			05/10/23 14:13	1

Lab Sample ID: LCS 580-425972/32

Matrix: Water

Analysis Batch: 425972

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.17		ng/L		103	77 - 123

Lab Sample ID: LCSD 580-425972/35

Matrix: Water

Analysis Batch: 425972

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	5.14		ng/L		103	77 - 123	1	24

Method: 1640 - Metals (ICPMS)

Lab Sample ID: MB 580-426506/1-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 426506

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/25/23 00:00	05/26/23 19:02	1
Cadmium	ND		0.040	0.011	ug/L		05/25/23 00:00	05/26/23 19:02	1
Chromium	ND		0.50	0.34	ug/L		05/25/23 00:00	05/26/23 19:02	1
Copper	ND		1.0	0.020	ug/L		05/25/23 00:00	05/26/23 19:02	1
Lead	0.00553	J	0.050	0.0040	ug/L		05/25/23 00:00	05/26/23 19:02	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/26/23 19:02	1
Zinc	0.0972	J	0.50	0.070	ug/L		05/25/23 00:00	05/26/23 19:02	1
Barium	ND		0.50	0.13	ug/L		05/25/23 00:00	05/26/23 19:02	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/26/23 19:02	1
Manganese	ND		0.050	0.0080	ug/L		05/25/23 00:00	05/26/23 19:02	1

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: MB 580-426506/2-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 426506

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/25/23 00:00	05/26/23 19:16	1
Cadmium	ND		0.040	0.011	ug/L		05/25/23 00:00	05/26/23 19:16	1
Chromium	ND		0.50	0.34	ug/L		05/25/23 00:00	05/26/23 19:16	1
Copper	0.498	J	1.0	0.020	ug/L		05/25/23 00:00	05/26/23 19:16	1
Lead	0.0480	J	0.050	0.0040	ug/L		05/25/23 00:00	05/26/23 19:16	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/26/23 19:16	1
Zinc	0.256	J	0.50	0.070	ug/L		05/25/23 00:00	05/26/23 19:16	1
Barium	ND		0.50	0.13	ug/L		05/25/23 00:00	05/26/23 19:16	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/26/23 19:16	1
Manganese	ND		0.050	0.0080	ug/L		05/25/23 00:00	05/26/23 19:16	1

Lab Sample ID: LCS 580-426506/3-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 426506

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	12.5	14.5		ug/L		116	70 - 130
Cadmium	1.25	1.29		ug/L		103	70 - 130
Chromium	12.5	13.4		ug/L		107	70 - 130
Copper	12.5	12.1		ug/L		97	70 - 130
Lead	2.50	2.65		ug/L		106	70 - 130
Nickel	12.5	12.7		ug/L		102	70 - 130
Zinc	12.5	12.6		ug/L		101	70 - 130
Barium	12.5	12.0		ug/L		96	70 - 130
Iron	62.5	61.9		ug/L		99	70 - 130
Manganese	12.5	12.6		ug/L		101	70 - 130

Lab Sample ID: LCSD 580-426506/4-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 426506

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	12.5	14.3		ug/L		114	70 - 130	2	20
Cadmium	1.25	1.24		ug/L		99	70 - 130	4	20
Chromium	12.5	13.2		ug/L		106	70 - 130	1	20
Copper	12.5	12.3		ug/L		98	70 - 130	1	20
Lead	2.50	2.69		ug/L		107	70 - 130	1	20
Nickel	12.5	12.7		ug/L		102	70 - 130	0	20
Zinc	12.5	12.8		ug/L		103	70 - 130	2	20
Barium	12.5	11.9		ug/L		95	70 - 130	1	20
Iron	62.5	62.1		ug/L		99	70 - 130	0	20
Manganese	12.5	12.7		ug/L		101	70 - 130	0	20

Lab Sample ID: MB 580-426509/1-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 426509

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/25/23 00:00	05/26/23 19:31	1

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: MB 580-426509/1-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 426509

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.040	0.011	ug/L		05/25/23 00:00	05/26/23 19:31	1
Chromium	ND		0.50	0.34	ug/L		05/25/23 00:00	05/26/23 19:31	1
Copper	ND		1.0	0.020	ug/L		05/25/23 00:00	05/26/23 19:31	1
Lead	ND		0.050	0.0040	ug/L		05/25/23 00:00	05/26/23 19:31	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/26/23 19:31	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/26/23 19:31	1
Barium	ND		0.50	0.13	ug/L		05/25/23 00:00	05/26/23 19:31	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/26/23 19:31	1
Manganese	ND		0.050	0.0080	ug/L		05/25/23 00:00	05/26/23 19:31	1

Lab Sample ID: MB 580-426509/2-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 426509

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.60	0.42	ug/L		05/25/23 00:00	05/26/23 19:45	1
Cadmium	ND		0.040	0.011	ug/L		05/25/23 00:00	05/26/23 19:45	1
Chromium	ND		0.50	0.34	ug/L		05/25/23 00:00	05/26/23 19:45	1
Copper	0.474	J	1.0	0.020	ug/L		05/25/23 00:00	05/26/23 19:45	1
Lead	0.0407	J	0.050	0.0040	ug/L		05/25/23 00:00	05/26/23 19:45	1
Nickel	ND		0.30	0.11	ug/L		05/25/23 00:00	05/26/23 19:45	1
Zinc	ND		0.50	0.070	ug/L		05/25/23 00:00	05/26/23 19:45	1
Barium	ND		0.50	0.13	ug/L		05/25/23 00:00	05/26/23 19:45	1
Iron	ND		2.0	1.1	ug/L		05/25/23 00:00	05/26/23 19:45	1
Manganese	ND		0.050	0.0080	ug/L		05/25/23 00:00	05/26/23 19:45	1

Lab Sample ID: LCS 580-426509/3-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 426509

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	12.5	14.1		ug/L		113	70 - 130
Cadmium	1.25	1.30		ug/L		104	70 - 130
Chromium	12.5	13.4		ug/L		107	70 - 130
Copper	12.5	12.6		ug/L		101	70 - 130
Lead	2.50	2.72		ug/L		109	70 - 130
Nickel	12.5	12.7		ug/L		102	70 - 130
Zinc	12.5	13.1		ug/L		105	70 - 130
Barium	12.5	9.94		ug/L		80	70 - 130
Iron	62.5	64.0		ug/L		102	70 - 130
Manganese	12.5	12.9		ug/L		103	70 - 130

Lab Sample ID: LCSD 580-426509/4-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 426509

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	12.5	13.8		ug/L		111	70 - 130	2	20
Cadmium	1.25	1.29		ug/L		104	70 - 130	0	20

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: LCSD 580-426509/4-A

Matrix: Water

Analysis Batch: 427365

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 426509

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium	12.5	13.3		ug/L		107	70 - 130	1	20
Copper	12.5	12.0		ug/L		96	70 - 130	5	20
Lead	2.50	3.04		ug/L		122	70 - 130	11	20
Nickel	12.5	13.1		ug/L		105	70 - 130	3	20
Zinc	12.5	13.4		ug/L		108	70 - 130	2	20
Barium	12.5	9.78		ug/L		78	70 - 130	2	20
Iron	62.5	62.3		ug/L		100	70 - 130	3	20
Manganese	12.5	12.8		ug/L		103	70 - 130	1	20

Lab Sample ID: 580-126685-171 MS

Matrix: Water

Analysis Batch: 427365

Client Sample ID: MAWG-3B2X-SW-1

Prep Type: Total/NA

Prep Batch: 426509

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.5		12.5	18.0		ug/L		132	50 - 150
Cadmium	0.013	J	1.25	1.26		ug/L		99	50 - 150
Chromium	1.6		12.5	15.1		ug/L		107	50 - 150
Copper	0.17	J B	12.5	11.8		ug/L		93	50 - 150
Lead	0.020	J B	2.50	2.87		ug/L		114	50 - 150
Nickel	ND		12.5	12.4		ug/L		99	50 - 150
Zinc	ND		12.5	13.0		ug/L		104	50 - 150
Barium	8.0		12.5	19.9		ug/L		95	50 - 150
Iron	1.1	J	62.5	62.1		ug/L		99	50 - 150
Manganese	1.0		12.5	13.5		ug/L		100	50 - 150

Lab Sample ID: 580-126685-171 MSD

Matrix: Water

Analysis Batch: 427365

Client Sample ID: MAWG-3B2X-SW-1

Prep Type: Total/NA

Prep Batch: 426509

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.5		12.5	17.7		ug/L		130	50 - 150	2	20
Cadmium	0.013	J	1.25	1.26		ug/L		99	50 - 150	0	20
Chromium	1.6		12.5	15.2		ug/L		109	50 - 150	1	20
Copper	0.17	J B	12.5	11.7		ug/L		92	50 - 150	1	20
Lead	0.020	J B	2.50	2.81		ug/L		112	50 - 150	2	20
Nickel	ND		12.5	12.6		ug/L		101	50 - 150	1	20
Zinc	ND		12.5	13.0		ug/L		104	50 - 150	0	20
Barium	8.0		12.5	20.3		ug/L		99	50 - 150	2	20
Iron	1.1	J	62.5	62.4		ug/L		100	50 - 150	1	20
Manganese	1.0		12.5	13.7		ug/L		102	50 - 150	2	20

Lab Sample ID: 580-126685-172 MS

Matrix: Water

Analysis Batch: 427365

Client Sample ID: MAWG-3B2X-SW-1-FD

Prep Type: Total/NA

Prep Batch: 426509

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.5		12.5	17.4		ug/L		127	50 - 150
Cadmium	0.012	J	1.25	1.24		ug/L		98	50 - 150
Chromium	1.5		12.5	15.2		ug/L		109	50 - 150

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Method: 1640 - Metals (ICPMS) (Continued)

Lab Sample ID: 580-126685-172 MS

Matrix: Water

Analysis Batch: 427365

Client Sample ID: MAWG-3B2X-SW-1-FD

Prep Type: Total/NA

Prep Batch: 426509

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	0.17	J B	12.5	11.6		ug/L		91	50 - 150
Lead	0.029	J B	2.50	2.94		ug/L		116	50 - 150
Nickel	ND		12.5	12.9		ug/L		103	50 - 150
Zinc	0.20	J	12.5	13.2		ug/L		104	50 - 150
Barium	7.4		12.5	20.1		ug/L		101	50 - 150
Iron	1.4	J	62.5	63.4		ug/L		99	50 - 150
Manganese	0.85		12.5	13.6		ug/L		102	50 - 150

Lab Sample ID: 580-126685-172 MSD

Matrix: Water

Analysis Batch: 427365

Client Sample ID: MAWG-3B2X-SW-1-FD

Prep Type: Total/NA

Prep Batch: 426509

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.5		12.5	17.9		ug/L		131	50 - 150	3	20
Cadmium	0.012	J	1.25	1.24		ug/L		98	50 - 150	0	20
Chromium	1.5		12.5	15.4		ug/L		111	50 - 150	2	20
Copper	0.17	J B	12.5	11.6		ug/L		92	50 - 150	0	20
Lead	0.029	J B	2.50	2.72		ug/L		108	50 - 150	8	20
Nickel	ND		12.5	12.6		ug/L		101	50 - 150	2	20
Zinc	0.20	J	12.5	12.9		ug/L		101	50 - 150	2	20
Barium	7.4		12.5	20.1		ug/L		101	50 - 150	0	20
Iron	1.4	J	62.5	63.7		ug/L		100	50 - 150	0	20
Manganese	0.85		12.5	13.5		ug/L		101	50 - 150	1	20

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Client Sample ID: Control-3-SW-1

Lab Sample ID: 580-126685-163

Date Collected: 03/23/23 19:18

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 19:02
Total/NA	Prep	1640			426506	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 10:01

Client Sample ID: Control-3-SW-20

Lab Sample ID: 580-126685-164

Date Collected: 03/23/23 19:27

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 19:06
Total/NA	Prep	1640			426506	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 10:15

Client Sample ID: Control-3-SW-40

Lab Sample ID: 580-126685-165

Date Collected: 03/23/23 19:39

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 19:10
Total/NA	Prep	1640			426506	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 10:29

Client Sample ID: Control-3-SW-B

Lab Sample ID: 580-126685-166

Date Collected: 03/23/23 19:50

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 19:14
Total/NA	Prep	1640			426506	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 10:44

Client Sample ID: MAWG-1B2X-SW-1

Lab Sample ID: 580-126685-167

Date Collected: 03/21/23 15:44

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 19:18
Total/NA	Prep	1640			426506	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 10:58

Client Sample ID: MAWG-1B2X-SW-20

Lab Sample ID: 580-126685-168

Date Collected: 03/21/23 15:50

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 19:23

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Client Sample ID: MAWG-1B2X-SW-20

Lab Sample ID: 580-126685-168

Date Collected: 03/21/23 15:50

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			426506	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 11:12

Client Sample ID: MAWG-1B2X-SW-40

Lab Sample ID: 580-126685-169

Date Collected: 03/21/23 16:01

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 19:27
Total/NA	Prep	1640			426506	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 11:26

Client Sample ID: MAWG-1B2X-SW-B

Lab Sample ID: 580-126685-170

Date Collected: 03/21/23 16:16

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 19:31
Total/NA	Prep	1640			426506	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 12:09

Client Sample ID: MAWG-3B2X-SW-1

Lab Sample ID: 580-126685-171

Date Collected: 03/21/23 05:13

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 19:35
Total/NA	Prep	1640			426509	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 01:13

Client Sample ID: MAWG-3B2X-SW-1-FD

Lab Sample ID: 580-126685-172

Date Collected: 03/21/23 05:18

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 19:48
Total/NA	Prep	1640			426509	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 01:56

Client Sample ID: MAWG-3B2X-SW-20

Lab Sample ID: 580-126685-173

Date Collected: 03/21/23 05:24

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 19:52

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Client Sample ID: MAWG-3B2X-SW-20

Lab Sample ID: 580-126685-173

Date Collected: 03/21/23 05:24

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1640			426509	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 12:23

Client Sample ID: MAWG-3B2X-SW-40

Lab Sample ID: 580-126685-174

Date Collected: 03/21/23 05:39

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 19:56
Total/NA	Prep	1640			426509	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 12:38

Client Sample ID: MAWG-3B2X-SW-B

Lab Sample ID: 580-126685-175

Date Collected: 03/21/23 05:50

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 20:01
Total/NA	Prep	1640			426509	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 12:52

Client Sample ID: MAWG-EQ

Lab Sample ID: 580-126685-176

Date Collected: 03/21/23 04:05

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 20:05
Total/NA	Prep	1640			426509	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 13:06

Client Sample ID: MAWG-WB

Lab Sample ID: 580-126685-177

Date Collected: 03/21/23 05:00

Matrix: Water

Date Received: 05/02/23 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	1631E		1	425972	CL	EET SEA	05/10/23 20:09
Total/NA	Prep	1640			426509	D1C	EET SEA	05/25/23 00:00
Total/NA	Analysis	1640		1	427365	V1R	EET SEA	05/27/23 13:20

Laboratory References:

EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Eurofins Seattle

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Laboratory: Eurofins Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc

ANAB	Dept. of Defense ELAP	L2236	01-19-25
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc

ANAB	Dept. of Energy	L2236	01-19-25
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc

ANAB	ISO/IEC 17025	L2236	01-19-25
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Laboratory: Eurofins Seattle (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc
California	State	2954	07-07-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc
Florida	NELAP	E87575	06-30-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Barium
1640	1640	Water	Chromium
1640	1640	Water	Iron
1640	1640	Water	Manganese
Louisiana (All)	NELAP	03073	06-30-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Barium
1640	1640	Water	Iron
1640	1640	Water	Manganese
Maine	State	WA01273	05-02-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Laboratory: Eurofins Seattle (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc
Montana (UST)	State	NA	04-14-27
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631E		Water	Mercury
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc
New Jersey	NELAP	WA014	06-30-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc
New York	NELAP	11662	03-31-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Laboratory: Eurofins Seattle (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc
Oregon	NELAP	4167	07-07-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Barium
1640	1640	Water	Iron
1640	1640	Water	Manganese
US Fish & Wildlife	US Federal Programs	A20571	06-30-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631E		Water	Mercury
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc
USDA	US Federal Programs	525-23-4-22573	01-04-26
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631E		Water	Mercury
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc
Washington	State	C788	07-13-23

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

Job ID: 580-126685-3

Laboratory: Eurofins Seattle (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc
Wisconsin	State	399133460	08-31-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1640	1640	Water	Arsenic
1640	1640	Water	Barium
1640	1640	Water	Cadmium
1640	1640	Water	Chromium
1640	1640	Water	Copper
1640	1640	Water	Iron
1640	1640	Water	Lead
1640	1640	Water	Manganese
1640	1640	Water	Nickel
1640	1640	Water	Zinc

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand - 2023

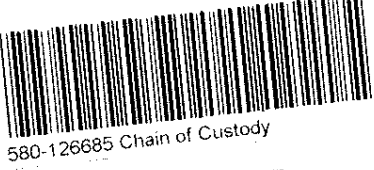
Job ID: 580-126685-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-126685-163	Control-3-SW-1	Water	03/23/23 19:18	05/02/23 10:04
580-126685-164	Control-3-SW-20	Water	03/23/23 19:27	05/02/23 10:04
580-126685-165	Control-3-SW-40	Water	03/23/23 19:39	05/02/23 10:04
580-126685-166	Control-3-SW-B	Water	03/23/23 19:50	05/02/23 10:04
580-126685-167	MAWG-1B2X-SW-1	Water	03/21/23 15:44	05/02/23 10:04
580-126685-168	MAWG-1B2X-SW-20	Water	03/21/23 15:50	05/02/23 10:04
580-126685-169	MAWG-1B2X-SW-40	Water	03/21/23 16:01	05/02/23 10:04
580-126685-170	MAWG-1B2X-SW-B	Water	03/21/23 16:16	05/02/23 10:04
580-126685-171	MAWG-3B2X-SW-1	Water	03/21/23 05:13	05/02/23 10:04
580-126685-172	MAWG-3B2X-SW-1-FD	Water	03/21/23 05:18	05/02/23 10:04
580-126685-173	MAWG-3B2X-SW-20	Water	03/21/23 05:24	05/02/23 10:04
580-126685-174	MAWG-3B2X-SW-40	Water	03/21/23 05:39	05/02/23 10:04
580-126685-175	MAWG-3B2X-SW-B	Water	03/21/23 05:50	05/02/23 10:04
580-126685-176	MAWG-EQ	Water	03/21/23 04:05	05/02/23 10:04
580-126685-177	MAWG-WB	Water	03/21/23 05:00	05/02/23 10:04

CHAIN OF CUSTODY

Ship To: Patrick Garcia-Strickland
Eurofins Specialty Metals Testing
5755 8th St. E
Fife, WA 98424
USA

Dr. Ted Donn
Tetra Tech Inc.
3697 Mt. Diablo Blvd., Suite 150
Lafayette, CA
ted.donn@tetratech.com



580-126685 Chain of Custody

General Notes:

Program: Gulf of Thailand (2020-2023)
Please report all results to the MDL, J-flag results between MDL and I
Please report results and invoice separately for each Project ID
Please report results in pdf format with Excel EDD deliverable
Please report results on a dry weight basis.

1770 0547 3120

Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.20	LAWA-1C1	SED	FREEZE	19-Mar-23	4:40	1	1	1		
T423.20	LAWA-1C2	SED	FREEZE	19-Mar-23	5:44	1	1	1		
T423.20	LAWA-1C2-FD	SED	FREEZE	19-Mar-23	5:55	1	1	1		
T423.20	LAWA-1C3X	SED	FREEZE	19-Mar-23	7:33	1	1	1		
T423.20	LAWA-1D1	SED	FREEZE	18-Mar-23	11:03	1	1	1		
T423.20	LAWA-1D2	SED	FREEZE	18-Mar-23	22:49	1	1	1		
T423.20	LAWA-1D3X	SED	FREEZE	18-Mar-23	22:13	1	1	1		
T423.20	LAWA-3C1	SED	FREEZE	17-Mar-23	19:07	1	1	1		
T423.20	LAWA-3C2	SED	FREEZE	17-Mar-23	19:55	1	1	1		
T423.20	LAWA-3C3	SED	FREEZE	17-Mar-23	20:23	1	1	1		
T423.20	LAWA-3D1X	SED	FREEZE	17-Mar-23	22:15	1	1	1		
T423.20	LAWA-3D2	SED	FREEZE	17-Mar-23	23:06	1	1	1		
T423.20	LAWA-3D3	SED	FREEZE	18-Mar-23	1:00	1	1	1		

T423.20	G4/43REF-SW-1	SW	FREEZE	23-Mar-23	10:11				1	1
T423.20	G4/43REF-SW-20	SW	FREEZE	23-Mar-23	10:17				1	1
T423.20	G4/43REF-SW-40	SW	FREEZE	23-Mar-23	10:25				1	1
T423.20	G4/43REF-SW-B	SW	FREEZE	23-Mar-23	10:37				1	1
T423.20	LAWA-1C1-SW-1	SW	FREEZE	18-Mar-23	4:36				1	1
T423.20	LAWA-1C1-SW-20	SW	FREEZE	18-Mar-23	4:44				1	1
T423.20	LAWA-1C1-SW-40	SW	FREEZE	18-Mar-23	4:56				1	1
T423.20	LAWA-1C1-SW-B	SW	FREEZE	18-Mar-23	5:08				1	1
T423.20	LAWA-1C1-SW-B-FD	SW	FREEZE	18-Mar-23	5:20				1	1
T423.20	LAWA-1C2-SW-1	SW	FREEZE	18-Mar-23	7:08				1	1
T423.20	LAWA-1C2-SW-20	SW	FREEZE	18-Mar-23	7:45				1	1

Relinquished by:

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2522 5/5/23

CHAIN OF CUSTODY

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ted.donn@tetratech.com

Ship To:
Patrick Garcia-Strickland
Eurofins Specialty Metals Testing
5755 8th St. E
Fife, WA 98424
USA

General Notes:
Program: Gulf of Thailand (2020-2023)
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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.20	LAWA-1C2-SW-40	SW	FREEZE	18-Mar-23	7:55				1	1
T423.20	LAWA-1C2-SW-B	SW	FREEZE	18-Mar-23	8:07				1	1
T423.20	LAWA-1C3X-SW-1	SW	FREEZE	18-Mar-23	19:21				1	1
T423.20	LAWA-1C3X-SW-20	SW	FREEZE	18-Mar-23	19:29				1	1
T423.20	LAWA-1C3X-SW-40	SW	FREEZE	18-Mar-23	19:40				1	1
T423.20	LAWA-1C3X-SW-B	SW	FREEZE	18-Mar-23	19:52				1	1
T423.20	LAWA-1D1-SW-1	SW	FREEZE	19-Mar-23	2:31				1	1
T423.20	LAWA-1D1-SW-20	SW	FREEZE	19-Mar-23	2:37				1	1
T423.20	LAWA-1D1-SW-40	SW	FREEZE	19-Mar-23	2:46				1	1
T423.20	LAWA-1D1-SW-B	SW	FREEZE	19-Mar-23	2:59				1	1
T423.20	LAWA-1D2-SW-1	SW	FREEZE	19-Mar-23	0:28				1	1
T423.20	LAWA-1D2-SW-1-FD	SW	FREEZE	19-Mar-23	0:36				1	1
T423.20	LAWA-1D2-SW-20	SW	FREEZE	19-Mar-23	0:43				1	1
T423.20	LAWA-1D2-SW-40	SW	FREEZE	19-Mar-23	0:52				1	1
T423.20	LAWA-1D2-SW-B	SW	FREEZE	19-Mar-23	1:05				1	1
T423.20	LAWA-1D3X-SW-1	SW	FREEZE	18-Mar-23	20:43				1	1
T423.20	LAWA-1D3X-SW-20	SW	FREEZE	18-Mar-23	20:51				1	1
T423.20	LAWA-1D3X-SW-40	SW	FREEZE	18-Mar-23	21:01				1	1
T423.20	LAWA-1D3X-SW-B	SW	FREEZE	18-Mar-23	21:14				1	1
T423.20	LAWA-3C1-SW-1	SW	FREEZE	17-Mar-23	16:43				1	1
T423.20	LAWA-3C1-SW-20	SW	FREEZE	17-Mar-23	16:50				1	1
T423.20	LAWA-3C1-SW-40	SW	FREEZE	17-Mar-23	17:00				1	1
T423.20	LAWA-3C1-SW-B	SW	FREEZE	17-Mar-23	17:13				1	1
T423.20	LAWA-3C2-SW-1	SW	FREEZE	18-Mar-23	3:47				1	1
T423.20	LAWA-3C2-SW-20	SW	FREEZE	18-Mar-23	3:04				1	1

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.20	LAWA-3C2-SW-40	SW	FREEZE	18-Mar-23	4:03				1	1
T423.20	LAWA-3C2-SW-B	SW	FREEZE	18-Mar-23	4:15				1	1
T423.20	LAWA-3C3-SW-1	SW	FREEZE	18-Mar-23	2:01				1	1
T423.20	LAWA-3C3-SW-20	SW	FREEZE	18-Mar-23	2:08				1	1
T423.20	LAWA-3C3-SW-40	SW	FREEZE	18-Mar-23	2:07				1	1
T423.20	LAWA-3C3-SW-B	SW	FREEZE	18-Mar-23	2:33				1	1
T423.20	LAWA-3D1X-SW-1	SW	FREEZE	17-Mar-23	12:21				1	1
T423.20	LAWA-3D1X-SW-20	SW	FREEZE	17-Mar-23	12:29				1	1
T423.20	LAWA-3D1X-SW-40	SW	FREEZE	17-Mar-23	12:39				1	1
T423.20	LAWA-3D1X-SW-B	SW	FREEZE	17-Mar-23	12:51				1	1
T423.20	LAWA-3D2-SW-1	SW	FREEZE	17-Mar-23	4:33				1	1
T423.20	LAWA-3D2-SW-1-FD	SW	FREEZE	17-Mar-23	4:41				1	1
T423.20	LAWA-3D2-SW-20	SW	FREEZE	17-Mar-23	4:48				1	1
T423.20	LAWA-3D2-SW-40	SW	FREEZE	17-Mar-23	4:58				1	1
T423.20	LAWA-3D2-SW-B	SW	FREEZE	17-Mar-23	5:10				1	1
T423.20	LAWA-3D3-SW-1	SW	FREEZE	17-Mar-23	3:38				1	1
T423.20	LAWA-3D3-SW-20	SW	FREEZE	17-Mar-23	3:49				1	1
T423.20	LAWA-3D3-SW-40	SW	FREEZE	17-Mar-23	3:59				1	1
T423.20	LAWA-3D3-SW-B	SW	FREEZE	17-Mar-23	4:14				1	1
T423.20	LAWA-EQ	SW	FREEZE	17-Mar-23	3:25				1	1
T423.20	LAWA-WB	SW	FREEZE	17-Mar-23	3:30				1	1

T423.18	MAWA-1C2	SED	FREEZE	22-Mar-23	7:27	1	1	1		
T423.18	MAWA-1CP2	SED	FREEZE	22-Mar-23	13:29	1	1	1		
T423.18	MAWA-2B2X	SED	FREEZE	22-Mar-23	4:35	1	1	1		

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.18	MAWA-3B2	SED	FREEZE	21-Mar-23	23:28	1	1	1	1	
T423.18	MAWA-3C2	SED	FREEZE	21-Mar-23	23:07	1	1	1	1	
T423.18	MAWA-4B2X	SED	FREEZE	21-Mar-23	22:45	1	1	1	1	
T423.18	MAWB-1B2X	SED	FREEZE	21-Mar-23	3:53	1	1	1	1	
T423.18	MAWB-1C2X	SED	FREEZE	21-Mar-23	4:06	1	1	1	1	
T423.18	MAWB-2B2X	SED	FREEZE	21-Mar-23	1:50	1	1	1	1	
T423.18	MAWB-3B2X	SED	FREEZE	20-Mar-23	23:15	1	1	1	1	
T423.18	MAWB-3C2	SED	FREEZE	20-Mar-23	22:52	1	1	1	1	
T423.18	MAWB-4B2X	SED	FREEZE	20-Mar-23	21:37	1	1	1	1	
T423.18	MAWC-1B2X	SED	FREEZE	20-Mar-23	3:53	1	1	1	1	
T423.18	MAWC-1C2	SED	FREEZE	20-Mar-23	5:16	1	1	1	1	
T423.18	MAWC-1C2-FD	SED	FREEZE	20-Mar-23	5:27	1	1	1	1	
T423.18	MAWC-2B2X	SED	FREEZE	20-Mar-23	1:41	1	1	1	1	
T423.18	MAWC-3B2X	SED	FREEZE	19-Mar-23	23:32	1	1	1	1	
T423.18	MAWC-3C2	SED	FREEZE	19-Mar-23	23:18	1	1	1	1	
T423.18	MAWC-4B2X	SED	FREEZE	19-Mar-23	23:01	1	1	1	1	
T423.18	MAWD-1B2X	SED	FREEZE	23-Mar-23	1:09	1	1	1	1	
T423.18	MAWD-1C2	SED	FREEZE	23-Mar-23	3:36	1	1	1	1	
T423.18	MAWD-2C2X	SED	FREEZE	23-Mar-23	5:07	1	1	1	1	
T423.18	MAWD-3B2	SED	FREEZE	22-Mar-23	23:16	1	1	1	1	
T423.18	MAWD-3C2X	SED	FREEZE	22-Mar-23	23:29	1	1	1	1	
T423.18	MAWD-3C2X-FD	SED	FREEZE	22-Mar-23	23:38	1	1	1	1	
T423.18	MAWD-4B2X	SED	FREEZE	22-Mar-23	22:57	1	1	1	1	
T423.18	MAWA-1C2-SW-1	SW	COLD	22-Mar-23	5:30				1	1

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Recieved by:

[Signature] 5/30/23

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.18	MAWA-1C2-SW-20	SW	COLD	22-Mar-23	5:36				1	1
T423.18	MAWA-1C2-SW-40	SW	COLD	22-Mar-23	5:46				1	1
T423.18	MAWA-1C2-SW-B	SW	COLD	22-Mar-23	5:57				1	1
T423.18	MAWA-1CP2-SW-1	SW	COLD	22-Mar-23	12:26				1	1
T423.18	MAWA-1CP2-SW-20	SW	COLD	22-Mar-23	12:32				1	1
T423.18	MAWA-1CP2-SW-40	SW	COLD	22-Mar-23	12:41				1	1
T423.18	MAWA-1CP2-SW-B	SW	COLD	22-Mar-23	12:52				1	1
T423.18	MAWA-2B2X-SW-1	SW	COLD	22-Mar-23	3:52				1	1
T423.18	MAWA-2B2X-SW-20	SW	COLD	22-Mar-23	3:58				1	1
T423.18	MAWA-2B2X-SW-40	SW	COLD	22-Mar-23	4:07				1	1
T423.18	MAWA-2B2X-SW-B	SW	COLD	22-Mar-23	4:19				1	1
T423.18	MAWA-3B2-SW-1	SW	COLD	22-Mar-23	2:12				1	1
T423.18	MAWA-3B2-SW-20	SW	COLD	22-Mar-23	2:19				1	1
T423.18	MAWA-3B2-SW-20-FD	SW	COLD	22-Mar-23	2:26				1	1
T423.18	MAWA-3B2-SW-40	SW	COLD	22-Mar-23	2:35				1	1
T423.18	MAWA-3B2-SW-B	SW	COLD	22-Mar-23	2:48				1	1
T423.18	MAWA-3C2-SW-1	SW	COLD	22-Mar-23	0:21				1	1
T423.18	MAWA-3C2-SW-20	SW	COLD	22-Mar-23	0:27				1	1
T423.18	MAWA-3C2-SW-40	SW	COLD	22-Mar-23	0:36				1	1
T423.18	MAWA-3C2-SW-B	SW	COLD	22-Mar-23	0:47				1	1
T423.18	MAWA-4B2X-SW-1	SW	COLD	21-Mar-23	21:43				1	1
T423.18	MAWA-4B2X-SW-20	SW	COLD	21-Mar-23	21:49				1	1
T423.18	MAWA-4B2X-SW-40	SW	COLD	21-Mar-23	21:57				1	1
T423.18	MAWA-4B2X-SW-B	SW	COLD	21-Mar-23	22:09				1	1
T423.18	MAWA-EQ	SW	COLD	21-Mar-23	21:33				1	1

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T423.18	MAWA-WB	SW	COLD	21-Mar-23	21:28				1	1
T423.18	MAWB-1B2X-SW-1	SW	FREEZE	21-Mar-23	3:08				1	1
T423.18	MAWB-1B2X-SW-1-FD	SW	FREEZE	21-Mar-23	3:13				1	1
T423.18	MAWB-1B2X-SW-20	SW	FREEZE	21-Mar-23	3:19				1	1
T423.18	MAWB-1B2X-SW-40	SW	FREEZE	21-Mar-23	3:27				1	1
T423.18	MAWB-1B2X-SW-B	SW	FREEZE	21-Mar-23	3:38				1	1
T423.18	MAWB-1C2X-SW-1	SW	FREEZE	20-Mar-23	16:42				1	1
T423.18	MAWB-1C2X-SW-20	SW	FREEZE	20-Mar-23	16:48				1	1
T423.18	MAWB-1C2X-SW-40	SW	FREEZE	20-Mar-23	16:59				1	1
T423.18	MAWB-1C2X-SW-B	SW	FREEZE	20-Mar-23	17:11				1	1
T423.18	MAWB-2B2X-SW-1	SW	FREEZE	21-Mar-23	1:06				1	1
T423.18	MAWB-2B2X-SW-20	SW	FREEZE	21-Mar-23	1:11				1	1
T423.18	MAWB-2B2X-SW-20-FD	SW	FREEZE	21-Mar-23	1:18				1	1
T423.18	MAWB-2B2X-SW-40	SW	FREEZE	21-Mar-23	1:26				1	1
T423.18	MAWB-2B2X-SW-B	SW	FREEZE	21-Mar-23	1:37				1	1
T423.18	MAWB-3B2X-SW-1	SW	FREEZE	20-Mar-23	19:17				1	1
T423.18	MAWB-3B2X-SW-20	SW	FREEZE	20-Mar-23	19:23				1	1
T423.18	MAWB-3B2X-SW-40	SW	FREEZE	20-Mar-23	19:31				1	1
T423.18	MAWB-3B2X-SW-B	SW	FREEZE	20-Mar-23	19:43				1	1
T423.18	MAWB-3C2-SW-1	SW	FREEZE	20-Mar-23	10:55				1	1
T423.18	MAWB-3C2-SW-20	SW	FREEZE	20-Mar-23	11:00				1	1
T423.18	MAWB-3C2-SW-40	SW	FREEZE	20-Mar-23	11:13				1	1
T423.18	MAWB-3C2-SW-B	SW	FREEZE	20-Mar-23	11:24				1	1
T423.18	MAWB-4B2X-SW-1	SW	FREEZE	20-Mar-23	20:25				1	1
T423.18	MAWB-4B2X-SW-20	SW	FREEZE	20-Mar-23	20:30				1	1

X

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T423.18	MAWB-4B2X-SW-40	SW	FREEZE	20-Mar-23	20:39				1	1
T423.18	MAWB-4B2X-SW-B	SW	FREEZE	20-Mar-23	20:50				1	1
T423.18	MAWB-4B2X-SW-B-FD	SW	FREEZE	20-Mar-23	21:03				1	1
T423.18	MAWC-1B2X-SW-1	SW	FREEZE	20-Mar-23	2:37				1	1
T423.18	MAWC-1B2X-SW-20	SW	FREEZE	20-Mar-23	2:43				1	1
T423.18	MAWC-1B2X-SW-40	SW	FREEZE	20-Mar-23	2:52				1	1
T423.18	MAWC-1B2X-SW-B	SW	FREEZE	20-Mar-23	3:04				1	1
T423.18	MAWC-1C2-SW-1	SW	FREEZE	20-Mar-23	4:37				1	1
T423.18	MAWC-1C2-SW-20	SW	FREEZE	20-Mar-23	4:43				1	1
T423.18	MAWC-1C2-SW-40	SW	FREEZE	20-Mar-23	4:52				1	1
T423.18	MAWC-1C2-SW-B	SW	FREEZE	20-Mar-23	5:04				1	1
T423.18	MAWC-2B2X-SW-1	SW	FREEZE	20-Mar-23	1:02				1	1
T423.18	MAWC-2B2X-SW-20	SW	FREEZE	20-Mar-23	1:08				1	1
T423.18	MAWC-2B2X-SW-40	SW	FREEZE	20-Mar-23	1:17				1	1
T423.18	MAWC-2B2X-SW-B	SW	FREEZE	20-Mar-23	1:28				1	1
T423.18	MAWC-3B2X-SW-1	SW	FREEZE	19-Mar-23	20:13				1	1
T423.18	MAWC-3B2X-SW-20	SW	FREEZE	19-Mar-23	20:23				1	1
T423.18	MAWC-3B2X-SW-40	SW	FREEZE	19-Mar-23	20:32				1	1
T423.18	MAWC-3B2X-SW-B	SW	FREEZE	19-Mar-23	20:43				1	1
T423.18	MAWC-3C2-SW-1	SW	FREEZE	19-Mar-23	19:09				1	1
T423.18	MAWC-3C2-SW-20	SW	FREEZE	19-Mar-23	19:26				1	1
T423.18	MAWC-3C2-SW-40	SW	FREEZE	19-Mar-23	19:04				1	1
T423.18	MAWC-3C2-SW-B	SW	FREEZE	19-Mar-23	19:46				1	1
T423.18	MAWC-4B2X-SW-1	SW	FREEZE	19-Mar-23	21:02				1	1
T423.18	MAWC-4B2X-SW-20	SW	FREEZE	19-Mar-23	21:52				1	1

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T423.18	MAWC-4B2X-SW-40	SW	FREEZE	19-Mar-23	22:01				1	1
T423.18	MAWC-4B2X-SW-B	SW	FREEZE	19-Mar-23	22:12				1	1
T423.18	MAWC-4B2X-SW-B-FD	SW	FREEZE	19-Mar-23	22:25				1	1
T423.18	MAWC-EQ	SW	FREEZE	19-Mar-23	9:07				1	1
T423.18	MAWC-WB	SW	FREEZE	19-Mar-23	19:00				1	1
T423.18	MAWD-1B2X-SW-1	SW	COLD	23-Mar-23	0:50				1	1
T423.18	MAWD-1B2X-SW-20	SW	COLD	23-Mar-23	0:56				1	1
T423.18	MAWD-1B2X-SW-40	SW	COLD	23-Mar-23	1:05				1	1
T423.18	MAWD-1B2X-SW-B	SW	COLD	23-Mar-23	1:17				1	1
T423.18	MAWD-1C2-SW-1	SW	COLD	23-Mar-23	2:22				1	1
T423.18	MAWD-1C2-SW-20	SW	COLD	23-Mar-23	2:28				1	1
T423.18	MAWD-1C2-SW-40	SW	COLD	23-Mar-23	2:37				1	1
T423.18	MAWD-1C2-SW-B	SW	COLD	23-Mar-23	2:48				1	1
T423.18	MAWD-2C2X-SW-1	SW	COLD	23-Mar-23	4:27				1	1
T423.18	MAWD-2C2X-SW-20	SW	COLD	23-Mar-23	4:34				1	1
T423.18	MAWD-2C2X-SW-40	SW	COLD	23-Mar-23	4:43				1	1
T423.18	MAWD-2C2X-SW-B	SW	COLD	23-Mar-23	4:55				1	1
T423.18	MAWD-3B2-SW-1	SW	COLD	22-Mar-23	20:25				1	1
T423.18	MAWD-3B2-SW-20	SW	COLD	22-Mar-23	20:31				1	1
T423.18	MAWD-3B2-SW-40	SW	COLD	22-Mar-23	20:42				1	1
T423.18	MAWD-3B2-SW-B	SW	COLD	22-Mar-23	20:54				1	1
T423.18	MAWD-3C2X-SW-1	SW	COLD	22-Mar-23	19:15				1	1
T423.18	MAWD-3C2X-SW-20	SW	COLD	22-Mar-23	19:24				1	1
T423.18	MAWD-3C2X-SW-40	SW	COLD	22-Mar-23	19:33				1	1
T423.18	MAWD-3C2X-SW-B	SW	COLD	22-Mar-23	19:44				1	1

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.18	MAWD-4B2X-SW-1	SW	COLD	22-Mar-23	22:18				1	1
T423.18	MAWD-4B2X-SW-20	SW	COLD	22-Mar-23	22:24				1	1
T423.18	MAWD-4B2X-SW-40	SW	COLD	22-Mar-23	22:33				1	1
T423.18	MAWD-4B2X-SW-B	SW	COLD	22-Mar-23	22:44				1	1

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T423.19	Control-3-A	SED	FREEZE	23-Mar-23		1	1	1		
T423.19	Control-3-B	SED	FREEZE	23-Mar-23		1	1	1		
T423.19	Control-3-C	SED	FREEZE	23-Mar-23		1	1	1		
T423.19	MAWG-1B1X	SED	FREEZE	21-Mar-23	18:15	1	1	1		
T423.19	MAWG-1B2X	SED	FREEZE	21-Mar-23	17:14	1	1	1		
T423.19	MAWG-1B3X	SED	FREEZE	21-Mar-23	19:04	1	1	1		
T423.19	MAWG-1C1	SED	FREEZE	21-Mar-23	19:44	1	1	1		
T423.19	MAWG-1C2	SED	FREEZE	21-Mar-23	19:09	1	1	1		
T423.19	MAWG-1C3	SED	FREEZE	21-Mar-23	19:15	1	1	1		
T423.19	MAWG-1D1	SED	FREEZE	21-Mar-23	20:12	1	1	1		
T423.19	MAWG-1D2	SED	FREEZE	21-Mar-23	20:32	1	1	1		
T423.19	MAWG-1D3	SED	FREEZE	21-Mar-23	20:50	1	1	1		
T423.19	MAWG-2B2X	SED	FREEZE	21-Mar-23	13:25	1	1	1		
T423.19	MAWG-2B2X-FD	SED	FREEZE	21-Mar-23	13:35	1	1	1		
T423.19	MAWG-2C2	SED	FREEZE	21-Mar-23	13:08	1	1	1		
T423.19	MAWG-3B1X	SED	FREEZE	21-Mar-23	8:02	1	1	1		
T423.19	MAWG-3B2X	SED	FREEZE	21-Mar-23	8:08	1	1	1		
T423.19	MAWG-3B3X	SED	FREEZE	21-Mar-23	8:52	1	1	1		
T423.19	MAWG-3C1	SED	FREEZE	21-Mar-23	10:28	1	1	1		
T423.19	MAWG-3C2	SED	FREEZE	21-Mar-23	9:00	1	1	1		
T423.19	MAWG-3C2-FD	SED	FREEZE	21-Mar-23	9:45	1	1	1		

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T423.19	MAWG-3C3	SED	FREEZE	21-Mar-23	9:11	1	1	1	1	
T423.19	MAWG-3D1	SED	FREEZE	21-Mar-23	11:02	1	1	1	1	
T423.19	MAWG-3D2	SED	FREEZE	21-Mar-23	11:26	1	1	1	1	
T423.19	MAWG-3D3	SED	FREEZE	21-Mar-23	11:48	1	1	1	1	
T423.19	MAWG-4B2X	SED	FREEZE	21-Mar-23	12:46	1	1	1	1	
T423.19	MAWG-4C2	SED	FREEZE	21-Mar-23	12:28	1	1	1	1	

T423.19	Control-3-SW-1	SW	COLD	23-Mar-23	19:18				1	1
T423.19	Control-3-SW-20	SW	COLD	23-Mar-23	19:27				1	1
T423.19	Control-3-SW-40	SW	COLD	23-Mar-23	19:39				1	1
T423.19	Control-3-SW-B	SW	COLD	23-Mar-23	19:50				1	1
T423.19	MAWG-1B2X-SW-1	SW	COLD	21-Mar-23	15:44				1	1
T423.19	MAWG-1B2X-SW-20	SW	COLD	21-Mar-23	15:50				1	1
T423.19	MAWG-1B2X-SW-40	SW	COLD	21-Mar-23	16:01				1	1
T423.19	MAWG-1B2X-SW-B	SW	COLD	21-Mar-23	16:16				1	1
T423.19	MAWG-3B2X-SW-1	SW	COLD	21-Mar-23	5:13				1	1
T423.19	MAWG-3B2X-SW-1-FD	SW	COLD	21-Mar-23	5:18				1	1
T423.19	MAWG-3B2X-SW-20	SW	COLD	21-Mar-23	5:24				1	1
T423.19	MAWG-3B2X-SW-40	SW	COLD	21-Mar-23	5:39				1	1
T423.19	MAWG-3B2X-SW-B	SW	COLD	21-Mar-23	5:50				1	1
T423.19	MAWG-EQ	SW	COLD	21-Mar-23	4:05				1	1
T423.19	MAWG-WB	SW	COLD	21-Mar-23	5:00				1	1

T423.21	TFPSO-1B2	SED	FREEZE	25-Mar-23	4:33	1	1	1	1	
T423.21	TFPSO-1C2	SED	FREEZE	25-Mar-23	2:39	1	1	1	1	

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.21	TFPSO-1CP2	SED	FREEZE	25-Mar-23	2:19	1	1	1		
T423.21	TFPSO-1D2	SED	FREEZE	25-Mar-23	1:48	1	1	1		
T423.21	TFPSO-1D2-FD	SED	FREEZE	25-Mar-23	2:00	1	1	1		
T423.21	TFPSO-2B2	SED	FREEZE	25-Mar-23	7:42	1	1	1		
T423.21	TFPSO-2CP2	SED	FREEZE	25-Mar-23	7:19	1	1	1		
T423.21	TFPSO-3B2	SED	FREEZE	25-Mar-23	8:01	1	1	1		
T423.21	TFPSO-3CP2	SED	FREEZE	25-Mar-23	8:47	1	1	1		
T423.21	TFPSO-4B2	SED	FREEZE	25-Mar-23	8:20	1	1	1		
T423.21	TFPSO-4CP2	SED	FREEZE	25-Mar-23	9:10	1	1	1		
T423.21	YAREF-A2	SED	FREEZE	25-Mar-23	12:54	1	1	1		
T423.21	YAREF-B2	SED	FREEZE	25-Mar-23	13:04	1	1	1		
T423.21	YAREF-C2	SED	FREEZE	25-Mar-23	13:14	1	1	1		

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T423.21	TFPSO-1B2-SW-1	SW	COLD	25-Mar-23	2:57				1	1
T423.21	TFPSO-1B2-SW-20	SW	COLD	25-Mar-23	3:04				1	1
T423.21	TFPSO-1B2-SW-20-FD	SW	COLD	25-Mar-23	3:10				1	1
T423.21	TFPSO-1B2-SW-40	SW	COLD	25-Mar-23	3:17				1	1
T423.21	TFPSO-1B2-SW-B	SW	COLD	25-Mar-23	3:28				1	1
T423.21	TFPSO-3B2-SW-1	SW	COLD	25-Mar-23	4:51				1	1
T423.21	TFPSO-3B2-SW-20	SW	COLD	25-Mar-23	4:57				1	1
T423.21	TFPSO-3B2-SW-40	SW	COLD	25-Mar-23	5:05				1	1
T423.21	TFPSO-3B2-SW-B	SW	COLD	25-Mar-23	5:21				1	1
T423.21	TFPSO-EQ	SW	COLD	25-Mar-23	1:00				1	1
T423.21	TFPSO-WB	SW	COLD	25-Mar-23	1:05				1	1
T423.21	YAREF-SW-1	SW	COLD	25-Mar-23	12:16				1	1

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T423.21	YAREF-SW-20	SW	COLD	25-Mar-23	12:23				1	1
T423.21	YAREF-SW-40	SW	COLD	25-Mar-23	12:31				1	1
T423.21	YAREF-SW-B	SW	COLD	25-Mar-23	12:42				1	1

T423.17	CBREF-A	SED	FREEZE	25-Mar-23	19:20	1	1	1		
T423.17	CBREF-B	SED	FREEZE	25-Mar-23	19:30	1	1	1		
T423.17	CBREF-C	SED	FREEZE	25-Mar-23	19:39	1	1	1		
T423.17	YUWA-1B1X	SED	FREEZE	16-Mar-23	17:20	1	1	1		
T423.17	YUWA-1B2X	SED	FREEZE	16-Mar-23	16:50	1	1	1		
T423.17	YUWA-1B3X	SED	FREEZE	16-Mar-23	17:03	1	1	1		
T423.17	YUWA-1C1	SED	FREEZE	16-Mar-23	19:30	1	1	1		
T423.17	YUWA-1C2	SED	FREEZE	16-Mar-23	19:43	1	1	1		
T423.17	YUWA-1C3	SED	FREEZE	16-Mar-23	19:55	1	1	1		
T423.17	YUWA-1D1	SED	FREEZE	16-Mar-23	20:13	1	1	1		
T423.17	YUWA-1D2	SED	FREEZE	16-Mar-23	20:19	1	1	1		
T423.17	YUWA-1D3	SED	FREEZE	16-Mar-23	20:44	1	1	1		
T423.17	YUWA-2B2X	SED	FREEZE	16-Mar-23	18:57	1	1	1		
T423.17	YUWA-2C2	SED	FREEZE	16-Mar-23	19:13	1	1	1		
T423.17	YUWA-3B1X	SED	FREEZE	16-Mar-23	10:09	1	1	1		
T423.17	YUWA-3B1X-FD	SED	FREEZE	16-Mar-23	10:19	1	1	1		
T423.17	YUWA-3B2X	SED	FREEZE	16-Mar-23	9:07	1	1	1		
T423.17	YUWA-3B3X	SED	FREEZE	16-Mar-23	10:49	1	1	1		
T423.17	YUWA-3C1	SED	FREEZE	16-Mar-23	13:00	1	1	1		
T423.17	YUWA-3C1-FD	SED	FREEZE	16-Mar-23	13:09	1	1	1		
T423.17	YUWA-3C2	SED	FREEZE	16-Mar-23	12:03	1	1	1		

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T423.17	YUWA-3C3	SED	FREEZE	16-Mar-23	11:19	1	1	1		
T423.17	YUWA-3D1	SED	FREEZE	16-Mar-23	13:34	1	1	1		
T423.17	YUWA-3D2	SED	FREEZE	16-Mar-23	13:04	1	1	1		
T423.17	YUWA-3D3	SED	FREEZE	16-Mar-23	14:17	1	1	1		
T423.17	YUWA-4B2X	SED	FREEZE	16-Mar-23	6:03	1	1	1		
T423.17	YUWA-4C2	SED	FREEZE	16-Mar-23	6:24	1	1	1		
T423.17	CBREF-SW-1	SW	FREEZE	25-Mar-23	17:03				1	1
T423.17	CBREF-SW-20	SW	FREEZE	25-Mar-23	17:10				1	1
T423.17	CBREF-SW-40	SW	FREEZE	25-Mar-23	17:18				1	1
T423.17	CBREF-SW-B	SW	FREEZE	25-Mar-23	17:30				1	1
T423.17	YUWA-1B2X-SW-1	SW	FREEZE	16-Mar-23	15:09				1	1
T423.17	YUWA-1B2X-SW-20	SW	FREEZE	16-Mar-23	15:16				1	1
T423.17	YUWA-1B2X-SW-40	SW	FREEZE	16-Mar-23	15:04				1	1
T423.17	YUWA-1B2X-SW-40-FD	SW	FREEZE	16-Mar-23	15:34				1	1
T423.17	YUWA-1B2X-SW-B	SW	FREEZE	16-Mar-23	15:45				1	1
T423.17	YUWA-3B2X-SW-1	SW	FREEZE	16-Mar-23	7:04				1	1
T423.17	YUWA-3B2X-SW-20	SW	FREEZE	16-Mar-23	7:58				1	1
T423.17	YUWA-3B2X-SW-40	SW	FREEZE	16-Mar-23	8:19				1	1
T423.17	YUWA-3B2X-SW-B	SW	FREEZE	16-Mar-23	8:33				1	1
T423.17	YUWA-EQ	SW	FREEZE	16-Mar-23	5:55				1	1
T423.17	YUWA-WB	SW	FREEZE	16-Mar-23	6:00				1	1

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T423.21	YAREF-SW-20	SW	COLD	25-Mar-23	12:23				1	1
T423.21	YAREF-SW-40	SW	COLD	25-Mar-23	12:31				1	1
T423.21	YAREF-SW-B	SW	COLD	25-Mar-23	12:42				1	1
T423.17	CBREF-A	SED	FREEZE	25-Mar-23	19:20	1	1	1		
T423.17	CBREF-B	SED	FREEZE	25-Mar-23	19:30	1	1	1		
T423.17	CBREF-C	SED	FREEZE	25-Mar-23	19:39	1	1	1		
T423.17	YUWA-1B1X	SED	FREEZE	16-Mar-23	17:20	1	1	1		
T423.17	YUWA-1B2X	SED	FREEZE	16-Mar-23	16:50	1	1	1		
T423.17	YUWA-1B3X	SED	FREEZE	16-Mar-23	17:03	1	1	1		
T423.17	YUWA-1C1	SED	FREEZE	16-Mar-23	19:30	1	1	1		
T423.17	YUWA-1C2	SED	FREEZE	16-Mar-23	19:43	1	1	1		
T423.17	YUWA-1C3	SED	FREEZE	16-Mar-23	19:55	1	1	1		
T423.17	YUWA-1D1	SED	FREEZE	16-Mar-23	20:13	1	1	1		
T423.17	YUWA-1D2	SED	FREEZE	16-Mar-23	20:19	1	1	1		
T423.17	YUWA-1D3	SED	FREEZE	16-Mar-23	20:44	1	1	1		
T423.17	YUWA-2B2X	SED	FREEZE	16-Mar-23	18:57	1	1	1		
T423.17	YUWA-2C2	SED	FREEZE	16-Mar-23	19:13	1	1	1		
T423.17	YUWA-3B1X	SED	FREEZE	16-Mar-23	10:09	1	1	1		
T423.17	YUWA-3B1X-FD	SED	FREEZE	16-Mar-23	10:19	1	1	1		
T423.17	YUWA-3B2X	SED	FREEZE	16-Mar-23	9:07	1	1	1		
T423.17	YUWA-3B3X	SED	FREEZE	16-Mar-23	10:49	1	1	1		
T423.17	YUWA-3C1	SED	FREEZE	16-Mar-23	13:00	1	1	1		
T423.17	YUWA-3C1-FD	SED	FREEZE	16-Mar-23	13:09	1	1	1		
T423.17	YUWA-3C2	SED	FREEZE	16-Mar-23	12:03	1	1	1		

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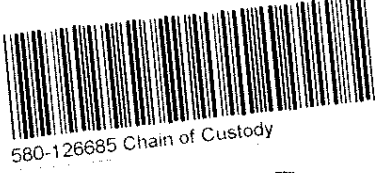
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1720 0547 3120

Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.20	LAWA-1C1	SED	FREEZE	19-Mar-23	4:40	1	1	1		
T423.20	LAWA-1C2	SED	FREEZE	19-Mar-23	5:44	1	1	1		
T423.20	LAWA-1C2-FD	SED	FREEZE	19-Mar-23	5:55	1	1	1		
T423.20	LAWA-1C3X	SED	FREEZE	19-Mar-23	7:33	1	1	1		
T423.20	LAWA-1D1	SED	FREEZE	18-Mar-23	11:03	1	1	1		
T423.20	LAWA-1D2	SED	FREEZE	18-Mar-23	22:49	1	1	1		
T423.20	LAWA-1D3X	SED	FREEZE	18-Mar-23	22:13	1	1	1		
T423.20	LAWA-3C1	SED	FREEZE	17-Mar-23	19:07	1	1	1		
T423.20	LAWA-3C2	SED	FREEZE	17-Mar-23	19:55	1	1	1		
T423.20	LAWA-3C3	SED	FREEZE	17-Mar-23	20:23	1	1	1		
T423.20	LAWA-3D1X	SED	FREEZE	17-Mar-23	22:15	1	1	1		
T423.20	LAWA-3D2	SED	FREEZE	17-Mar-23	23:06	1	1	1		
T423.20	LAWA-3D3	SED	FREEZE	18-Mar-23	1:00	1	1	1		

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T423.20	G4/43REF-SW-1	SW	FREEZE	23-Mar-23	10:11				1	1
T423.20	G4/43REF-SW-20	SW	FREEZE	23-Mar-23	10:17				1	1
T423.20	G4/43REF-SW-40	SW	FREEZE	23-Mar-23	10:25				1	1
T423.20	G4/43REF-SW-B	SW	FREEZE	23-Mar-23	10:37				1	1
T423.20	LAWA-1C1-SW-1	SW	FREEZE	18-Mar-23	4:36				1	
T423.20	LAWA-1C1-SW-20	SW	FREEZE	18-Mar-23	4:44				1	1
T423.20	LAWA-1C1-SW-40	SW	FREEZE	18-Mar-23	4:56				1	1
T423.20	LAWA-1C1-SW-B	SW	FREEZE	18-Mar-23	5:08				1	1
T423.20	LAWA-1C1-SW-B-FD	SW	FREEZE	18-Mar-23	5:20				1	1
T423.20	LAWA-1C2-SW-1	SW	FREEZE	18-Mar-23	7:08				1	1
T423.20	LAWA-1C2-SW-20	SW	FREEZE	18-Mar-23	7:45				1	1

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Ship To:

Patrick Garcia-Strickland

Eurofins Specialty Metals Testing

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T423.20	LAWA-1C2-SW-40	SW	FREEZE	18-Mar-23	7:55				1	1
T423.20	LAWA-1C2-SW-B	SW	FREEZE	18-Mar-23	8:07				1	1
T423.20	LAWA-1C3X-SW-1	SW	FREEZE	18-Mar-23	19:21				1	1
T423.20	LAWA-1C3X-SW-20	SW	FREEZE	18-Mar-23	19:29				1	1
T423.20	LAWA-1C3X-SW-40	SW	FREEZE	18-Mar-23	19:40				1	1
T423.20	LAWA-1C3X-SW-B	SW	FREEZE	18-Mar-23	19:52				1	1
T423.20	LAWA-1D1-SW-1	SW	FREEZE	19-Mar-23	2:31				1	1
T423.20	LAWA-1D1-SW-20	SW	FREEZE	19-Mar-23	2:37				1	1
T423.20	LAWA-1D1-SW-40	SW	FREEZE	19-Mar-23	2:46				1	1
T423.20	LAWA-1D1-SW-B	SW	FREEZE	19-Mar-23	2:59				1	1
T423.20	LAWA-1D2-SW-1	SW	FREEZE	19-Mar-23	0:28				1	1
T423.20	LAWA-1D2-SW-1-FD	SW	FREEZE	19-Mar-23	0:36				1	1
T423.20	LAWA-1D2-SW-20	SW	FREEZE	19-Mar-23	0:43				1	1
T423.20	LAWA-1D2-SW-40	SW	FREEZE	19-Mar-23	0:52				1	1
T423.20	LAWA-1D2-SW-B	SW	FREEZE	19-Mar-23	1:05				1	1
T423.20	LAWA-1D3X-SW-1	SW	FREEZE	18-Mar-23	20:43				1	1
T423.20	LAWA-1D3X-SW-20	SW	FREEZE	18-Mar-23	20:51				1	1
T423.20	LAWA-1D3X-SW-40	SW	FREEZE	18-Mar-23	21:01				1	1
T423.20	LAWA-1D3X-SW-B	SW	FREEZE	18-Mar-23	21:14				1	1
T423.20	LAWA-3C1-SW-1	SW	FREEZE	17-Mar-23	16:43				1	1
T423.20	LAWA-3C1-SW-20	SW	FREEZE	17-Mar-23	16:50				1	1
T423.20	LAWA-3C1-SW-40	SW	FREEZE	17-Mar-23	17:00				1	1
T423.20	LAWA-3C1-SW-B	SW	FREEZE	17-Mar-23	17:13				1	1
T423.20	LAWA-3C2-SW-1	SW	FREEZE	18-Mar-23	3:47				1	1
T423.20	LAWA-3C2-SW-20	SW	FREEZE	18-Mar-23	3:04				1	1

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T423.20	LAWA-3C2-SW-40	SW	FREEZE	18-Mar-23	4:03				1	1
T423.20	LAWA-3C2-SW-B	SW	FREEZE	18-Mar-23	4:15				1	1
T423.20	LAWA-3C3-SW-1	SW	FREEZE	18-Mar-23	2:01				1	1
T423.20	LAWA-3C3-SW-20	SW	FREEZE	18-Mar-23	2:08				1	1
T423.20	LAWA-3C3-SW-40	SW	FREEZE	18-Mar-23	2:07				1	1
T423.20	LAWA-3C3-SW-B	SW	FREEZE	18-Mar-23	2:33				1	1
T423.20	LAWA-3D1X-SW-1	SW	FREEZE	17-Mar-23	12:21				1	1
T423.20	LAWA-3D1X-SW-20	SW	FREEZE	17-Mar-23	12:29				1	1
T423.20	LAWA-3D1X-SW-40	SW	FREEZE	17-Mar-23	12:39				1	1
T423.20	LAWA-3D1X-SW-B	SW	FREEZE	17-Mar-23	12:51				1	1
T423.20	LAWA-3D2-SW-1	SW	FREEZE	17-Mar-23	4:33				1	1
T423.20	LAWA-3D2-SW-1-FD	SW	FREEZE	17-Mar-23	4:41				1	1
T423.20	LAWA-3D2-SW-20	SW	FREEZE	17-Mar-23	4:48				1	1
T423.20	LAWA-3D2-SW-40	SW	FREEZE	17-Mar-23	4:58				1	1
T423.20	LAWA-3D2-SW-B	SW	FREEZE	17-Mar-23	5:10				1	1
T423.20	LAWA-3D3-SW-1	SW	FREEZE	17-Mar-23	3:38				1	1
T423.20	LAWA-3D3-SW-20	SW	FREEZE	17-Mar-23	3:49				1	1
T423.20	LAWA-3D3-SW-40	SW	FREEZE	17-Mar-23	3:59				1	1
T423.20	LAWA-3D3-SW-B	SW	FREEZE	17-Mar-23	4:14				1	1
T423.20	LAWA-EQ	SW	FREEZE	17-Mar-23	3:25				1	1
T423.20	LAWA-WB	SW	FREEZE	17-Mar-23	3:30				1	1
T423.18	MAWA-1C2	SED	FREEZE	22-Mar-23	7:27	1	1	1		
T423.18	MAWA-1CP2	SED	FREEZE	22-Mar-23	13:29	1	1	1		
T423.18	MAWA-2B2X	SED	FREEZE	22-Mar-23	4:35	1	1	1		

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T423.18	MAWA-3B2	SED	FREEZE	21-Mar-23	23:28	1	1	1		
T423.18	MAWA-3C2	SED	FREEZE	21-Mar-23	23:07	1	1	1		
T423.18	MAWA-4B2X	SED	FREEZE	21-Mar-23	22:45	1	1	1		
T423.18	MAWB-1B2X	SED	FREEZE	21-Mar-23	3:53	1	1	1		
T423.18	MAWB-1C2X	SED	FREEZE	21-Mar-23	4:06	1	1	1		
T423.18	MAWB-2B2X	SED	FREEZE	21-Mar-23	1:50	1	1	1		
T423.18	MAWB-3B2X	SED	FREEZE	20-Mar-23	23:15	1	1	1		
T423.18	MAWB-3C2	SED	FREEZE	20-Mar-23	22:52	1	1	1		
T423.18	MAWB-4B2X	SED	FREEZE	20-Mar-23	21:37	1	1	1		
T423.18	MAWC-1B2X	SED	FREEZE	20-Mar-23	3:53	1	1	1		
T423.18	MAWC-1C2	SED	FREEZE	20-Mar-23	5:16	1	1	1		
T423.18	MAWC-1C2-FD	SED	FREEZE	20-Mar-23	5:27	1	1	1		
T423.18	MAWC-2B2X	SED	FREEZE	20-Mar-23	1:41	1	1	1		
T423.18	MAWC-3B2X	SED	FREEZE	19-Mar-23	23:32	1	1	1		
T423.18	MAWC-3C2	SED	FREEZE	19-Mar-23	23:18	1	1	1		
T423.18	MAWC-4B2X	SED	FREEZE	19-Mar-23	23:01	1	1	1		
T423.18	MAWD-1B2X	SED	FREEZE	23-Mar-23	1:09	1	1	1		
T423.18	MAWD-1C2	SED	FREEZE	23-Mar-23	3:36	1	1	1		
T423.18	MAWD-2C2X	SED	FREEZE	23-Mar-23	5:07	1	1	1		
T423.18	MAWD-3B2	SED	FREEZE	22-Mar-23	23:16	1	1	1		
T423.18	MAWD-3C2X	SED	FREEZE	22-Mar-23	23:29	1	1	1		
T423.18	MAWD-3C2X-FD	SED	FREEZE	22-Mar-23	23:38	1	1	1		
T423.18	MAWD-4B2X	SED	FREEZE	22-Mar-23	22:57	1	1	1		
T423.18	MAWA-1C2-SW-1	SW	COLD	22-Mar-23	5:30				1	1

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.18	MAWA-1C2-SW-20	SW	COLD	22-Mar-23	5:36				1	1
T423.18	MAWA-1C2-SW-40	SW	COLD	22-Mar-23	5:46				1	1
T423.18	MAWA-1C2-SW-B	SW	COLD	22-Mar-23	5:57				1	1
T423.18	MAWA-1CP2-SW-1	SW	COLD	22-Mar-23	12:26				1	1
T423.18	MAWA-1CP2-SW-20	SW	COLD	22-Mar-23	12:32				1	1
T423.18	MAWA-1CP2-SW-40	SW	COLD	22-Mar-23	12:41				1	1
T423.18	MAWA-1CP2-SW-B	SW	COLD	22-Mar-23	12:52				1	1
T423.18	MAWA-2B2X-SW-1	SW	COLD	22-Mar-23	3:52				1	1
T423.18	MAWA-2B2X-SW-20	SW	COLD	22-Mar-23	3:58				1	1
T423.18	MAWA-2B2X-SW-40	SW	COLD	22-Mar-23	4:07				1	1
T423.18	MAWA-2B2X-SW-B	SW	COLD	22-Mar-23	4:19				1	1
T423.18	MAWA-3B2-SW-1	SW	COLD	22-Mar-23	2:12				1	1
T423.18	MAWA-3B2-SW-20	SW	COLD	22-Mar-23	2:19				1	1
T423.18	MAWA-3B2-SW-20-FD	SW	COLD	22-Mar-23	2:26				1	1
T423.18	MAWA-3B2-SW-40	SW	COLD	22-Mar-23	2:35				1	1
T423.18	MAWA-3B2-SW-B	SW	COLD	22-Mar-23	2:48				1	1
T423.18	MAWA-3C2-SW-1	SW	COLD	22-Mar-23	0:21				1	1
T423.18	MAWA-3C2-SW-20	SW	COLD	22-Mar-23	0:27				1	1
T423.18	MAWA-3C2-SW-40	SW	COLD	22-Mar-23	0:36				1	1
T423.18	MAWA-3C2-SW-B	SW	COLD	22-Mar-23	0:47				1	1
T423.18	MAWA-4B2X-SW-1	SW	COLD	21-Mar-23	21:43				1	1
T423.18	MAWA-4B2X-SW-20	SW	COLD	21-Mar-23	21:49				1	1
T423.18	MAWA-4B2X-SW-40	SW	COLD	21-Mar-23	21:57				1	1
T423.18	MAWA-4B2X-SW-B	SW	COLD	21-Mar-23	22:09				1	1
T423.18	MAWA-EQ	SW	COLD	21-Mar-23	21:33				1	1

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T423.18	MAWA-WB	SW	COLD	21-Mar-23	21:28				1	1
T423.18	MAWB-1B2X-SW-1	SW	FREEZE	21-Mar-23	3:08				1	1
T423.18	MAWB-1B2X-SW-1-FD	SW	FREEZE	21-Mar-23	3:13				1	1
T423.18	MAWB-1B2X-SW-20	SW	FREEZE	21-Mar-23	3:19				1	1
T423.18	MAWB-1B2X-SW-40	SW	FREEZE	21-Mar-23	3:27				1	1
T423.18	MAWB-1B2X-SW-B	SW	FREEZE	21-Mar-23	3:38				1	1
T423.18	MAWB-1C2X-SW-1	SW	FREEZE	20-Mar-23	16:42				1	1
T423.18	MAWB-1C2X-SW-20	SW	FREEZE	20-Mar-23	16:48				1	1
T423.18	MAWB-1C2X-SW-40	SW	FREEZE	20-Mar-23	16:59				1	1
T423.18	MAWB-1C2X-SW-B	SW	FREEZE	20-Mar-23	17:11				1	1
T423.18	MAWB-2B2X-SW-1	SW	FREEZE	21-Mar-23	1:06				1	1
T423.18	MAWB-2B2X-SW-20	SW	FREEZE	21-Mar-23	1:11				1	1
T423.18	MAWB-2B2X-SW-20-FD	SW	FREEZE	21-Mar-23	1:18				1	1
T423.18	MAWB-2B2X-SW-40	SW	FREEZE	21-Mar-23	1:26				1	1
T423.18	MAWB-2B2X-SW-B	SW	FREEZE	21-Mar-23	1:37				1	1
T423.18	MAWB-3B2X-SW-1	SW	FREEZE	20-Mar-23	19:17				1	1
T423.18	MAWB-3B2X-SW-20	SW	FREEZE	20-Mar-23	19:23				1	1
T423.18	MAWB-3B2X-SW-40	SW	FREEZE	20-Mar-23	19:31				1	1
T423.18	MAWB-3B2X-SW-B	SW	FREEZE	20-Mar-23	19:43				1	1
T423.18	MAWB-3C2-SW-1	SW	FREEZE	20-Mar-23	10:55				1	1
T423.18	MAWB-3C2-SW-20	SW	FREEZE	20-Mar-23	11:00				1	1
T423.18	MAWB-3C2-SW-40	SW	FREEZE	20-Mar-23	11:13				1	1
T423.18	MAWB-3C2-SW-B	SW	FREEZE	20-Mar-23	11:24				1	1
T423.18	MAWB-4B2X-SW-1	SW	FREEZE	20-Mar-23	20:25				1	1
T423.18	MAWB-4B2X-SW-20	SW	FREEZE	20-Mar-23	20:30				1	1

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T423.18	MAWB-4B2X-SW-40	SW	FREEZE	20-Mar-23	20:39				1	1
T423.18	MAWB-4B2X-SW-B	SW	FREEZE	20-Mar-23	20:50				1	1
T423.18	MAWB-4B2X-SW-B-FD	SW	FREEZE	20-Mar-23	21:03				1	1
T423.18	MAWC-1B2X-SW-1	SW	FREEZE	20-Mar-23	2:37				1	1
T423.18	MAWC-1B2X-SW-20	SW	FREEZE	20-Mar-23	2:43				1	1
T423.18	MAWC-1B2X-SW-40	SW	FREEZE	20-Mar-23	2:52				1	1
T423.18	MAWC-1B2X-SW-B	SW	FREEZE	20-Mar-23	3:04				1	1
T423.18	MAWC-1C2-SW-1	SW	FREEZE	20-Mar-23	4:37				1	1
T423.18	MAWC-1C2-SW-20	SW	FREEZE	20-Mar-23	4:43				1	1
T423.18	MAWC-1C2-SW-40	SW	FREEZE	20-Mar-23	4:52				1	1
T423.18	MAWC-1C2-SW-B	SW	FREEZE	20-Mar-23	5:04				1	1
T423.18	MAWC-2B2X-SW-1	SW	FREEZE	20-Mar-23	1:02				1	1
T423.18	MAWC-2B2X-SW-20	SW	FREEZE	20-Mar-23	1:08				1	1
T423.18	MAWC-2B2X-SW-40	SW	FREEZE	20-Mar-23	1:17				1	1
T423.18	MAWC-2B2X-SW-B	SW	FREEZE	20-Mar-23	1:28				1	1
T423.18	MAWC-3B2X-SW-1	SW	FREEZE	19-Mar-23	20:13				1	1
T423.18	MAWC-3B2X-SW-20	SW	FREEZE	19-Mar-23	20:23				1	1
T423.18	MAWC-3B2X-SW-40	SW	FREEZE	19-Mar-23	20:32				1	1
T423.18	MAWC-3B2X-SW-B	SW	FREEZE	19-Mar-23	20:43				1	1
T423.18	MAWC-3C2-SW-1	SW	FREEZE	19-Mar-23	19:09				1	1
T423.18	MAWC-3C2-SW-20	SW	FREEZE	19-Mar-23	19:26				1	1
T423.18	MAWC-3C2-SW-40	SW	FREEZE	19-Mar-23	19:04				1	1
T423.18	MAWC-3C2-SW-B	SW	FREEZE	19-Mar-23	19:46				1	1
T423.18	MAWC-4B2X-SW-1	SW	FREEZE	19-Mar-23	21:02				1	1
T423.18	MAWC-4B2X-SW-20	SW	FREEZE	19-Mar-23	21:52				1	1

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Patrick Garcia-Strickland
Eurofins Specialty Metals Testing
5755 8th St. E
Fife, WA 98424
USA

CHAIN OF CUSTODY

Dr. Ted Donn
Tetra Tech Inc.
3697 Mt. Diablo Blvd., Suite 150
Lafayette, CA
ted.donn@tetratech.com

General Notes:

Program: Gulf of Thailand (2020-2023)
Please report all results to the MDL, J-flag results between MDL and RL
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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.18	MAWC-4B2X-SW-40	SW	FREEZE	19-Mar-23	22:01				1	1
T423.18	MAWC-4B2X-SW-B	SW	FREEZE	19-Mar-23	22:12				1	1
T423.18	MAWC-4B2X-SW-B-FD	SW	FREEZE	19-Mar-23	22:25				1	1
T423.18	MAWC-EQ	SW	FREEZE	19-Mar-23	9:07				1	1
T423.18	MAWC-WB	SW	FREEZE	19-Mar-23	19:00				1	1
T423.18	MAWD-1B2X-SW-1	SW	COLD	23-Mar-23	0:50				1	1
T423.18	MAWD-1B2X-SW-20	SW	COLD	23-Mar-23	0:56				1	1
T423.18	MAWD-1B2X-SW-40	SW	COLD	23-Mar-23	1:05				1	1
T423.18	MAWD-1B2X-SW-B	SW	COLD	23-Mar-23	1:17				1	1
T423.18	MAWD-1C2-SW-1	SW	COLD	23-Mar-23	2:22				1	1
T423.18	MAWD-1C2-SW-20	SW	COLD	23-Mar-23	2:28				1	1
T423.18	MAWD-1C2-SW-40	SW	COLD	23-Mar-23	2:37				1	1
T423.18	MAWD-1C2-SW-B	SW	COLD	23-Mar-23	2:48				1	1
T423.18	MAWD-2C2X-SW-1	SW	COLD	23-Mar-23	4:27				1	1
T423.18	MAWD-2C2X-SW-20	SW	COLD	23-Mar-23	4:34				1	1
T423.18	MAWD-2C2X-SW-40	SW	COLD	23-Mar-23	4:43				1	1
T423.18	MAWD-2C2X-SW-B	SW	COLD	23-Mar-23	4:55				1	1
T423.18	MAWD-3B2-SW-1	SW	COLD	22-Mar-23	20:25				1	1
T423.18	MAWD-3B2-SW-20	SW	COLD	22-Mar-23	20:31				1	1
T423.18	MAWD-3B2-SW-40	SW	COLD	22-Mar-23	20:42				1	1
T423.18	MAWD-3B2-SW-B	SW	COLD	22-Mar-23	20:54				1	1
T423.18	MAWD-3C2X-SW-1	SW	COLD	22-Mar-23	19:15				1	1
T423.18	MAWD-3C2X-SW-20	SW	COLD	22-Mar-23	19:24				1	1
T423.18	MAWD-3C2X-SW-40	SW	COLD	22-Mar-23	19:33				1	1
T423.18	MAWD-3C2X-SW-B	SW	COLD	22-Mar-23	19:44				1	1

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.18	MAWD-4B2X-SW-1	SW	COLD	22-Mar-23	22:18				1	1
T423.18	MAWD-4B2X-SW-20	SW	COLD	22-Mar-23	22:24				1	1
T423.18	MAWD-4B2X-SW-40	SW	COLD	22-Mar-23	22:33				1	1
T423.18	MAWD-4B2X-SW-B	SW	COLD	22-Mar-23	22:44				1	1

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Control-3-A	SED	FREEZE	23-Mar-23	1	1	1	1
Control-3-B	SED	FREEZE	23-Mar-23	1	1	1	1
Control-3-C	SED	FREEZE	23-Mar-23	1	1	1	1
MAWG-1B1X	SED	FREEZE	21-Mar-23	18:15	1	1	1
MAWG-1B2X	SED	FREEZE	21-Mar-23	17:14	1	1	1
MAWG-1B3X	SED	FREEZE	21-Mar-23	19:04	1	1	1
MAWG-1C1	SED	FREEZE	21-Mar-23	19:44	1	1	1
MAWG-1C2	SED	FREEZE	21-Mar-23	19:09	1	1	1
MAWG-1C3	SED	FREEZE	21-Mar-23	19:15	1	1	1
MAWG-1D1	SED	FREEZE	21-Mar-23	20:12	1	1	1
MAWG-1D2	SED	FREEZE	21-Mar-23	20:32	1	1	1
MAWG-1D3	SED	FREEZE	21-Mar-23	20:50	1	1	1
MAWG-2B2X	SED	FREEZE	21-Mar-23	13:25	1	1	1
MAWG-2B2X-FD	SED	FREEZE	21-Mar-23	13:35	1	1	1
MAWG-2C2	SED	FREEZE	21-Mar-23	13:08	1	1	1
MAWG-3B1X	SED	FREEZE	21-Mar-23	8:02	1	1	1
MAWG-3B2X	SED	FREEZE	21-Mar-23	8:08	1	1	1
MAWG-3B3X	SED	FREEZE	21-Mar-23	8:52	1	1	1
MAWG-3C1	SED	FREEZE	21-Mar-23	10:28	1	1	1
MAWG-3C2	SED	FREEZE	21-Mar-23	9:00	1	1	1
MAWG-3C2-FD	SED	FREEZE	21-Mar-23	9:45	1	1	1

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T423.19	MAWG-3C3	SED	FREEZE	21-Mar-23	9:11	1	1	1	1	
T423.19	MAWG-3D1	SED	FREEZE	21-Mar-23	11:02	1	1	1		
T423.19	MAWG-3D2	SED	FREEZE	21-Mar-23	11:26	1	1	1		
T423.19	MAWG-3D3	SED	FREEZE	21-Mar-23	11:48	1	1	1		
T423.19	MAWG-4B2X	SED	FREEZE	21-Mar-23	12:46	1	1	1		
T423.19	MAWG-4C2	SED	FREEZE	21-Mar-23	12:28	1	1	1		

T423.19	Control-3-SW-1	SW	COLD	23-Mar-23	19:18				1	1
T423.19	Control-3-SW-20	SW	COLD	23-Mar-23	19:27				1	1
T423.19	Control-3-SW-40	SW	COLD	23-Mar-23	19:39				1	1
T423.19	Control-3-SW-B	SW	COLD	23-Mar-23	19:50				1	1
T423.19	MAWG-1B2X-SW-1	SW	COLD	21-Mar-23	15:44				1	1
T423.19	MAWG-1B2X-SW-20	SW	COLD	21-Mar-23	15:50				1	1
T423.19	MAWG-1B2X-SW-40	SW	COLD	21-Mar-23	16:01				1	1
T423.19	MAWG-1B2X-SW-B	SW	COLD	21-Mar-23	16:16				1	1
T423.19	MAWG-3B2X-SW-1	SW	COLD	21-Mar-23	5:13				1	1
T423.19	MAWG-3B2X-SW-1-FD	SW	COLD	21-Mar-23	5:18				1	1
T423.19	MAWG-3B2X-SW-20	SW	COLD	21-Mar-23	5:24				1	1
T423.19	MAWG-3B2X-SW-40	SW	COLD	21-Mar-23	5:39				1	1
T423.19	MAWG-3B2X-SW-B	SW	COLD	21-Mar-23	5:50				1	1
T423.19	MAWG-EQ	SW	COLD	21-Mar-23	4:05				1	1
T423.19	MAWG-WB	SW	COLD	21-Mar-23	5:00				1	1

T423.21	TFPSO-1B2	SED	FREEZE	25-Mar-23	4:33	1	1	1		
T423.21	TFPSO-1C2	SED	FREEZE	25-Mar-23	2:39	1	1	1		

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.21	TFPSO-1CP2	SED	FREEZE	25-Mar-23	2:19	1	1	1		
T423.21	TFPSO-1D2	SED	FREEZE	25-Mar-23	1:48	1	1	1		
T423.21	TFPSO-1D2-FD	SED	FREEZE	25-Mar-23	2:00	1	1	1		
T423.21	TFPSO-2B2	SED	FREEZE	25-Mar-23	7:42	1	1	1		
T423.21	TFPSO-2CP2	SED	FREEZE	25-Mar-23	7:19	1	1	1		
T423.21	TFPSO-3B2	SED	FREEZE	25-Mar-23	8:01	1	1	1		
T423.21	TFPSO-3CP2	SED	FREEZE	25-Mar-23	8:47	1	1	1		
T423.21	TFPSO-4B2	SED	FREEZE	25-Mar-23	8:20	1	1	1		
T423.21	TFPSO-4CP2	SED	FREEZE	25-Mar-23	9:10	1	1	1		
T423.21	YAREF-A2	SED	FREEZE	25-Mar-23	12:54	1	1	1		
T423.21	YAREF-B2	SED	FREEZE	25-Mar-23	13:04	1	1	1		
T423.21	YAREF-C2	SED	FREEZE	25-Mar-23	13:14	1	1	1		

T423.21	TFPSO-1B2-SW-1	SW	COLD	25-Mar-23	2:57				1	1
T423.21	TFPSO-1B2-SW-20	SW	COLD	25-Mar-23	3:04				1	1
T423.21	TFPSO-1B2-SW-20-FD	SW	COLD	25-Mar-23	3:10				1	1
T423.21	TFPSO-1B2-SW-40	SW	COLD	25-Mar-23	3:17				1	1
T423.21	TFPSO-1B2-SW-B	SW	COLD	25-Mar-23	3:28				1	1
T423.21	TFPSO-3B2-SW-1	SW	COLD	25-Mar-23	4:51				1	1
T423.21	TFPSO-3B2-SW-20	SW	COLD	25-Mar-23	4:57				1	1
T423.21	TFPSO-3B2-SW-40	SW	COLD	25-Mar-23	5:05				1	1
T423.21	TFPSO-3B2-SW-B	SW	COLD	25-Mar-23	5:21				1	1
T423.21	TFPSO-EQ	SW	COLD	25-Mar-23	1:00				1	1
T423.21	TFPSO-WB	SW	COLD	25-Mar-23	1:05				1	1
T423.21	YAREF-SW-1	SW	COLD	25-Mar-23	12:16				1	1

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T423.21	YAREF-SW-20	SW	COLD	25-Mar-23	12:23				1	1
T423.21	YAREF-SW-40	SW	COLD	25-Mar-23	12:31				1	1
T423.21	YAREF-SW-B	SW	COLD	25-Mar-23	12:42				1	1

T423.17	CBREF-A	SED	FREEZE	25-Mar-23	19:20	1	1	1		
T423.17	CBREF-B	SED	FREEZE	25-Mar-23	19:30	1	1	1		
T423.17	CBREF-C	SED	FREEZE	25-Mar-23	19:39	1	1	1		
T423.17	YUWA-1B1X	SED	FREEZE	16-Mar-23	17:20	1	1	1		
T423.17	YUWA-1B2X	SED	FREEZE	16-Mar-23	16:50	1	1	1		
T423.17	YUWA-1B3X	SED	FREEZE	16-Mar-23	17:03	1	1	1		
T423.17	YUWA-1C1	SED	FREEZE	16-Mar-23	19:30	1	1	1		
T423.17	YUWA-1C2	SED	FREEZE	16-Mar-23	19:43	1	1	1		
T423.17	YUWA-1C3	SED	FREEZE	16-Mar-23	19:55	1	1	1		
T423.17	YUWA-1D1	SED	FREEZE	16-Mar-23	20:13	1	1	1		
T423.17	YUWA-1D2	SED	FREEZE	16-Mar-23	20:19	1	1	1		
T423.17	YUWA-1D3	SED	FREEZE	16-Mar-23	20:44	1	1	1		
T423.17	YUWA-2B2X	SED	FREEZE	16-Mar-23	18:57	1	1	1		
T423.17	YUWA-2C2	SED	FREEZE	16-Mar-23	19:13	1	1	1		
T423.17	YUWA-3B1X	SED	FREEZE	16-Mar-23	10:09	1	1	1		
T423.17	YUWA-3B1X-FD	SED	FREEZE	16-Mar-23	10:19	1	1	1		
T423.17	YUWA-3B2X	SED	FREEZE	16-Mar-23	9:07	1	1	1		
T423.17	YUWA-3B3X	SED	FREEZE	16-Mar-23	10:49	1	1	1		
T423.17	YUWA-3C1	SED	FREEZE	16-Mar-23	13:00	1	1	1		
T423.17	YUWA-3C1-FD	SED	FREEZE	16-Mar-23	13:09	1	1	1		
T423.17	YUWA-3C2	SED	FREEZE	16-Mar-23	12:03	1	1	1		

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T423.17	YUWA-3C3	SED	FREEZE	16-Mar-23	11:19	1	1	1	1	
T423.17	YUWA-3D1	SED	FREEZE	16-Mar-23	13:34	1	1	1	1	
T423.17	YUWA-3D2	SED	FREEZE	16-Mar-23	13:04	1	1	1	1	
T423.17	YUWA-3D3	SED	FREEZE	16-Mar-23	14:17	1	1	1	1	
T423.17	YUWA-4B2X	SED	FREEZE	16-Mar-23	6:03	1	1	1	1	
T423.17	YUWA-4C2	SED	FREEZE	16-Mar-23	6:24	1	1	1	1	
T423.17	CBREF-SW-1	SW	FREEZE	25-Mar-23	17:03				1	1
T423.17	CBREF-SW-20	SW	FREEZE	25-Mar-23	17:10				1	1
T423.17	CBREF-SW-40	SW	FREEZE	25-Mar-23	17:18				1	1
T423.17	CBREF-SW-B	SW	FREEZE	25-Mar-23	17:30				1	1
T423.17	YUWA-1B2X-SW-1	SW	FREEZE	16-Mar-23	15:09				1	1
T423.17	YUWA-1B2X-SW-20	SW	FREEZE	16-Mar-23	15:16				1	1
T423.17	YUWA-1B2X-SW-40	SW	FREEZE	16-Mar-23	15:04				1	1
T423.17	YUWA-1B2X-SW-40-FD	SW	FREEZE	16-Mar-23	15:34				1	1
T423.17	YUWA-1B2X-SW-B	SW	FREEZE	16-Mar-23	15:45				1	1
T423.17	YUWA-3B2X-SW-1	SW	FREEZE	16-Mar-23	7:04				1	1
T423.17	YUWA-3B2X-SW-20	SW	FREEZE	16-Mar-23	7:58				1	1
T423.17	YUWA-3B2X-SW-40	SW	FREEZE	16-Mar-23	8:19				1	1
T423.17	YUWA-3B2X-SW-B	SW	FREEZE	16-Mar-23	8:33				1	1
T423.17	YUWA-EQ	SW	FREEZE	16-Mar-23	5:55				1	1
T423.17	YUWA-WB	SW	FREEZE	16-Mar-23	6:00				1	1

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T423.21	YAREF-SW-20	SW	COLD	25-Mar-23	12:23				1	1
T423.21	YAREF-SW-40	SW	COLD	25-Mar-23	12:31				1	1
T423.21	YAREF-SW-B	SW	COLD	25-Mar-23	12:42				1	1
T423.17	CBREF-A	SED	FREEZE	25-Mar-23	19:20	1	1	1		
T423.17	CBREF-B	SED	FREEZE	25-Mar-23	19:30	1	1	1		
T423.17	CBREF-C	SED	FREEZE	25-Mar-23	19:39	1	1	1		
T423.17	YUWA-1B1X	SED	FREEZE	16-Mar-23	17:20	1	1	1		
T423.17	YUWA-1B2X	SED	FREEZE	16-Mar-23	16:50	1	1	1		
T423.17	YUWA-1B3X	SED	FREEZE	16-Mar-23	17:03	1	1	1		
T423.17	YUWA-1C1	SED	FREEZE	16-Mar-23	19:30	1	1	1		
T423.17	YUWA-1C2	SED	FREEZE	16-Mar-23	19:43	1	1	1		
T423.17	YUWA-1C3	SED	FREEZE	16-Mar-23	19:55	1	1	1		
T423.17	YUWA-1D1	SED	FREEZE	16-Mar-23	20:13	1	1	1		
T423.17	YUWA-1D2	SED	FREEZE	16-Mar-23	20:19	1	1	1		
T423.17	YUWA-1D3	SED	FREEZE	16-Mar-23	20:44	1	1	1		
T423.17	YUWA-2B2X	SED	FREEZE	16-Mar-23	18:57	1	1	1		
T423.17	YUWA-2C2	SED	FREEZE	16-Mar-23	19:13	1	1	1		
T423.17	YUWA-3B1X	SED	FREEZE	16-Mar-23	10:09	1	1	1		
T423.17	YUWA-3B1X-FD	SED	FREEZE	16-Mar-23	10:19	1	1	1		
T423.17	YUWA-3B2X	SED	FREEZE	16-Mar-23	9:07	1	1	1		
T423.17	YUWA-3B3X	SED	FREEZE	16-Mar-23	10:49	1	1	1		
T423.17	YUWA-3C1	SED	FREEZE	16-Mar-23	13:00	1	1	1		
T423.17	YUWA-3C1-FD	SED	FREEZE	16-Mar-23	13:09	1	1	1		
T423.17	YUWA-3C2	SED	FREEZE	16-Mar-23	12:03	1	1	1		

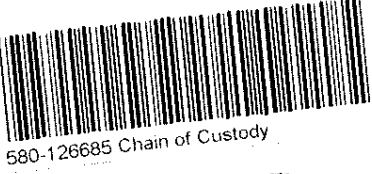
Relinquished by:

Recieved by:  5/15/23
Recieved by:  5/15/23

CHAIN OF CUSTODY

Ship To: Patrick Garcia-Strickland
Eurofins Specialty Metals Testing
5755 8th St. E
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Dr. Ted Donn
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ted.donn@tetratech.com



580-126685 Chain of Custody

General Notes:

Program: Gulf of Thailand (2020-2023)
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1770 0547 3120

Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.20	LAWA-1C1	SED	FREEZE	19-Mar-23	4:40	1	1	1		
T423.20	LAWA-1C2	SED	FREEZE	19-Mar-23	5:44	1	1	1		
T423.20	LAWA-1C2-FD	SED	FREEZE	19-Mar-23	5:55	1	1	1		
T423.20	LAWA-1C3X	SED	FREEZE	19-Mar-23	7:33	1	1	1		
T423.20	LAWA-1D1	SED	FREEZE	18-Mar-23	11:03	1	1	1		
T423.20	LAWA-1D2	SED	FREEZE	18-Mar-23	22:49	1	1	1		
T423.20	LAWA-1D3X	SED	FREEZE	18-Mar-23	22:13	1	1	1		
T423.20	LAWA-3C1	SED	FREEZE	17-Mar-23	19:07	1	1	1		
T423.20	LAWA-3C2	SED	FREEZE	17-Mar-23	19:55	1	1	1		
T423.20	LAWA-3C3	SED	FREEZE	17-Mar-23	20:23	1	1	1		
T423.20	LAWA-3D1X	SED	FREEZE	17-Mar-23	22:15	1	1	1		
T423.20	LAWA-3D2	SED	FREEZE	17-Mar-23	23:06	1	1	1		
T423.20	LAWA-3D3	SED	FREEZE	18-Mar-23	1:00	1	1	1		

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T423.20	G4I43REF-SW-1	SW	FREEZE	23-Mar-23	10:11				1	1
T423.20	G4I43REF-SW-20	SW	FREEZE	23-Mar-23	10:17				1	1
T423.20	G4I43REF-SW-40	SW	FREEZE	23-Mar-23	10:25				1	1
T423.20	G4I43REF-SW-B	SW	FREEZE	23-Mar-23	10:37				1	1
T423.20	LAWA-1C1-SW-1	SW	FREEZE	18-Mar-23	4:36				1	
T423.20	LAWA-1C1-SW-20	SW	FREEZE	18-Mar-23	4:44				1	1
T423.20	LAWA-1C1-SW-40	SW	FREEZE	18-Mar-23	4:56				1	1
T423.20	LAWA-1C1-SW-B	SW	FREEZE	18-Mar-23	5:08				1	1
T423.20	LAWA-1C1-SW-B-FD	SW	FREEZE	18-Mar-23	5:20				1	1
T423.20	LAWA-1C2-SW-1	SW	FREEZE	18-Mar-23	7:08				1	1
T423.20	LAWA-1C2-SW-20	SW	FREEZE	18-Mar-23	7:45				1	1

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Received by: *ESL* 5/5/23 5:30 PM
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CHAIN OF CUSTODY

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.20	LAWA-1C2-SW-40	SW	FREEZE	18-Mar-23	7:55				1	1
T423.20	LAWA-1C2-SW-B	SW	FREEZE	18-Mar-23	8:07				1	1
T423.20	LAWA-1C3X-SW-1	SW	FREEZE	18-Mar-23	19:21				1	1
T423.20	LAWA-1C3X-SW-20	SW	FREEZE	18-Mar-23	19:29				1	1
T423.20	LAWA-1C3X-SW-40	SW	FREEZE	18-Mar-23	19:40				1	1
T423.20	LAWA-1C3X-SW-B	SW	FREEZE	18-Mar-23	19:52				1	1
T423.20	LAWA-1D1-SW-1	SW	FREEZE	19-Mar-23	2:31				1	1
T423.20	LAWA-1D1-SW-20	SW	FREEZE	19-Mar-23	2:37				1	1
T423.20	LAWA-1D1-SW-40	SW	FREEZE	19-Mar-23	2:46				1	1
T423.20	LAWA-1D1-SW-B	SW	FREEZE	19-Mar-23	2:59				1	1
T423.20	LAWA-1D2-SW-1	SW	FREEZE	19-Mar-23	0:28				1	1
T423.20	LAWA-1D2-SW-1-FD	SW	FREEZE	19-Mar-23	0:36				1	1
T423.20	LAWA-1D2-SW-20	SW	FREEZE	19-Mar-23	0:43				1	1
T423.20	LAWA-1D2-SW-40	SW	FREEZE	19-Mar-23	0:52				1	1
T423.20	LAWA-1D2-SW-B	SW	FREEZE	19-Mar-23	1:05				1	1
T423.20	LAWA-1D3X-SW-1	SW	FREEZE	18-Mar-23	20:43				1	1
T423.20	LAWA-1D3X-SW-20	SW	FREEZE	18-Mar-23	20:51				1	1
T423.20	LAWA-1D3X-SW-40	SW	FREEZE	18-Mar-23	21:01				1	1
T423.20	LAWA-1D3X-SW-B	SW	FREEZE	18-Mar-23	21:14				1	1
T423.20	LAWA-3C1-SW-1	SW	FREEZE	17-Mar-23	16:43				1	1
T423.20	LAWA-3C1-SW-20	SW	FREEZE	17-Mar-23	16:50				1	1
T423.20	LAWA-3C1-SW-40	SW	FREEZE	17-Mar-23	17:00				1	1
T423.20	LAWA-3C1-SW-B	SW	FREEZE	17-Mar-23	17:13				1	1
T423.20	LAWA-3C2-SW-1	SW	FREEZE	18-Mar-23	3:47				1	1
T423.20	LAWA-3C2-SW-20	SW	FREEZE	18-Mar-23	3:04				1	1

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.20	LAWA-3C2-SW-40	SW	FREEZE	18-Mar-23	4:03				1	1
T423.20	LAWA-3C2-SW-B	SW	FREEZE	18-Mar-23	4:15				1	1
T423.20	LAWA-3C3-SW-1	SW	FREEZE	18-Mar-23	2:01				1	1
T423.20	LAWA-3C3-SW-20	SW	FREEZE	18-Mar-23	2:08				1	1
T423.20	LAWA-3C3-SW-40	SW	FREEZE	18-Mar-23	2:07				1	1
T423.20	LAWA-3C3-SW-B	SW	FREEZE	18-Mar-23	2:33				1	1
T423.20	LAWA-3D1X-SW-1	SW	FREEZE	17-Mar-23	12:21				1	1
T423.20	LAWA-3D1X-SW-20	SW	FREEZE	17-Mar-23	12:29				1	1
T423.20	LAWA-3D1X-SW-40	SW	FREEZE	17-Mar-23	12:39				1	1
T423.20	LAWA-3D1X-SW-B	SW	FREEZE	17-Mar-23	12:51				1	1
T423.20	LAWA-3D2-SW-1	SW	FREEZE	17-Mar-23	4:33				1	1
T423.20	LAWA-3D2-SW-1-FD	SW	FREEZE	17-Mar-23	4:41				1	1
T423.20	LAWA-3D2-SW-20	SW	FREEZE	17-Mar-23	4:48				1	1
T423.20	LAWA-3D2-SW-40	SW	FREEZE	17-Mar-23	4:58				1	1
T423.20	LAWA-3D2-SW-B	SW	FREEZE	17-Mar-23	5:10				1	1
T423.20	LAWA-3D3-SW-1	SW	FREEZE	17-Mar-23	3:38				1	1
T423.20	LAWA-3D3-SW-20	SW	FREEZE	17-Mar-23	3:49				1	1
T423.20	LAWA-3D3-SW-40	SW	FREEZE	17-Mar-23	3:59				1	1
T423.20	LAWA-3D3-SW-B	SW	FREEZE	17-Mar-23	4:14				1	1
T423.20	LAWA-EQ	SW	FREEZE	17-Mar-23	3:25				1	1
T423.20	LAWA-WB	SW	FREEZE	17-Mar-23	3:30				1	1

T423.18	MAWA-1C2	SED	FREEZE	22-Mar-23	7:27	1	1	1
T423.18	MAWA-1CP2	SED	FREEZE	22-Mar-23	13:29	1	1	1
T423.18	MAWA-2B2X	SED	FREEZE	22-Mar-23	4:35	1	1	1

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Project	SampleID	Medium	Preserve	Date	Time	Hg (EPA 1631B)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Hg, Ni, Pb, Zn) (1638 Mod)	Dry Weight	Hg (EPA 1631E)	Metals (As, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn) (EPA 1640)
T423.18	MAWA-3B2	SED	FREEZE	21-Mar-23	23:28	1	1	1		
T423.18	MAWA-3C2	SED	FREEZE	21-Mar-23	23:07	1	1	1		
T423.18	MAWA-4B2X	SED	FREEZE	21-Mar-23	22:45	1	1	1		
T423.18	MAWB-1B2X	SED	FREEZE	21-Mar-23	3:53	1	1	1		
T423.18	MAWB-1C2X	SED	FREEZE	21-Mar-23	4:06	1	1	1		
T423.18	MAWB-2B2X	SED	FREEZE	21-Mar-23	1:50	1	1	1		
T423.18	MAWB-3B2X	SED	FREEZE	20-Mar-23	23:15	1	1	1		
T423.18	MAWB-3C2	SED	FREEZE	20-Mar-23	22:52	1	1	1		
T423.18	MAWB-4B2X	SED	FREEZE	20-Mar-23	21:37	1	1	1		
T423.18	MAWC-1B2X	SED	FREEZE	20-Mar-23	3:53	1	1	1		
T423.18	MAWC-1C2	SED	FREEZE	20-Mar-23	5:16	1	1	1		
T423.18	MAWC-1C2-FD	SED	FREEZE	20-Mar-23	5:27	1	1	1		
T423.18	MAWC-2B2X	SED	FREEZE	20-Mar-23	1:41	1	1	1		
T423.18	MAWC-3B2X	SED	FREEZE	19-Mar-23	23:32	1	1	1		
T423.18	MAWC-3C2	SED	FREEZE	19-Mar-23	23:18	1	1	1		
T423.18	MAWC-4B2X	SED	FREEZE	19-Mar-23	23:01	1	1	1		
T423.18	MAWD-1B2X	SED	FREEZE	23-Mar-23	1:09	1	1	1		
T423.18	MAWD-1C2	SED	FREEZE	23-Mar-23	3:36	1	1	1		
T423.18	MAWD-2C2X	SED	FREEZE	23-Mar-23	5:07	1	1	1		
T423.18	MAWD-3B2	SED	FREEZE	22-Mar-23	23:16	1	1	1		
T423.18	MAWD-3C2X	SED	FREEZE	22-Mar-23	23:29	1	1	1		
T423.18	MAWD-3C2X-FD	SED	FREEZE	22-Mar-23	23:38	1	1	1		
T423.18	MAWD-4B2X	SED	FREEZE	22-Mar-23	22:57	1	1	1		
T423.18	MAWA-1C2-SW-1	SW	COLD	22-Mar-23	5:30				1	1

Relinquished by: Relinquished by:

Recieved by:  5/30/23
 Recieved by: 5/30/23

CHAIN OF CUSTODY

Ship To: Patrick Garcia-Strickland
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T423.18	MAWA-1C2-SW-20	SW	COLD	22-Mar-23	5:36				1	1
T423.18	MAWA-1C2-SW-40	SW	COLD	22-Mar-23	5:46				1	1
T423.18	MAWA-1C2-SW-B	SW	COLD	22-Mar-23	5:57				1	1
T423.18	MAWA-1CP2-SW-1	SW	COLD	22-Mar-23	12:26				1	1
T423.18	MAWA-1CP2-SW-20	SW	COLD	22-Mar-23	12:32				1	1
T423.18	MAWA-1CP2-SW-40	SW	COLD	22-Mar-23	12:41				1	1
T423.18	MAWA-1CP2-SW-B	SW	COLD	22-Mar-23	12:52				1	1
T423.18	MAWA-2B2X-SW-1	SW	COLD	22-Mar-23	3:52				1	1
T423.18	MAWA-2B2X-SW-20	SW	COLD	22-Mar-23	3:58				1	1
T423.18	MAWA-2B2X-SW-40	SW	COLD	22-Mar-23	4:07				1	1
T423.18	MAWA-2B2X-SW-B	SW	COLD	22-Mar-23	4:19				1	1
T423.18	MAWA-3B2-SW-1	SW	COLD	22-Mar-23	2:12				1	1
T423.18	MAWA-3B2-SW-20	SW	COLD	22-Mar-23	2:19				1	1
T423.18	MAWA-3B2-SW-20-FD	SW	COLD	22-Mar-23	2:26				1	1
T423.18	MAWA-3B2-SW-40	SW	COLD	22-Mar-23	2:35				1	1
T423.18	MAWA-3B2-SW-B	SW	COLD	22-Mar-23	2:48				1	1
T423.18	MAWA-3C2-SW-1	SW	COLD	22-Mar-23	0:21				1	1
T423.18	MAWA-3C2-SW-20	SW	COLD	22-Mar-23	0:27				1	1
T423.18	MAWA-3C2-SW-40	SW	COLD	22-Mar-23	0:36				1	1
T423.18	MAWA-3C2-SW-B	SW	COLD	22-Mar-23	0:47				1	1
T423.18	MAWA-4B2X-SW-1	SW	COLD	21-Mar-23	21:43				1	1
T423.18	MAWA-4B2X-SW-20	SW	COLD	21-Mar-23	21:49				1	1
T423.18	MAWA-4B2X-SW-40	SW	COLD	21-Mar-23	21:57				1	1
T423.18	MAWA-4B2X-SW-B	SW	COLD	21-Mar-23	22:09				1	1
T423.18	MAWA-EQ	SW	COLD	21-Mar-23	21:33				1	1

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T423.18	MAWA-WB	SW	COLD	21-Mar-23	21:28				1	1
T423.18	MAWB-1B2X-SW-1	SW	FREEZE	21-Mar-23	3:08				1	1
T423.18	MAWB-1B2X-SW-1-FD	SW	FREEZE	21-Mar-23	3:13				1	1
T423.18	MAWB-1B2X-SW-20	SW	FREEZE	21-Mar-23	3:19				1	1
T423.18	MAWB-1B2X-SW-40	SW	FREEZE	21-Mar-23	3:27				1	1
T423.18	MAWB-1B2X-SW-B	SW	FREEZE	21-Mar-23	3:38				1	1
T423.18	MAWB-1C2X-SW-1	SW	FREEZE	20-Mar-23	16:42				1	1
T423.18	MAWB-1C2X-SW-20	SW	FREEZE	20-Mar-23	16:48				1	1
T423.18	MAWB-1C2X-SW-40	SW	FREEZE	20-Mar-23	16:59				1	1
T423.18	MAWB-1C2X-SW-B	SW	FREEZE	20-Mar-23	17:11				1	1
T423.18	MAWB-2B2X-SW-1	SW	FREEZE	21-Mar-23	1:06				1	1
T423.18	MAWB-2B2X-SW-20	SW	FREEZE	21-Mar-23	1:11				1	1
T423.18	MAWB-2B2X-SW-20-FD	SW	FREEZE	21-Mar-23	1:18				1	1
T423.18	MAWB-2B2X-SW-40	SW	FREEZE	21-Mar-23	1:26				1	1
T423.18	MAWB-2B2X-SW-B	SW	FREEZE	21-Mar-23	1:37				1	1
T423.18	MAWB-3B2X-SW-1	SW	FREEZE	20-Mar-23	19:17				1	1
T423.18	MAWB-3B2X-SW-20	SW	FREEZE	20-Mar-23	19:23				1	1
T423.18	MAWB-3B2X-SW-40	SW	FREEZE	20-Mar-23	19:31				1	1
T423.18	MAWB-3B2X-SW-B	SW	FREEZE	20-Mar-23	19:43				1	1
T423.18	MAWB-3C2-SW-1	SW	FREEZE	20-Mar-23	10:55				1	1
T423.18	MAWB-3C2-SW-20	SW	FREEZE	20-Mar-23	11:00				1	1
T423.18	MAWB-3C2-SW-40	SW	FREEZE	20-Mar-23	11:13				1	1
T423.18	MAWB-3C2-SW-B	SW	FREEZE	20-Mar-23	11:24				1	1
T423.18	MAWB-4B2X-SW-1	SW	FREEZE	20-Mar-23	20:25				1	1
T423.18	MAWB-4B2X-SW-20	SW	FREEZE	20-Mar-23	20:30				1	1

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T423.18	MAWB-4B2X-SW-40	SW	FREEZE	20-Mar-23	20:39				1	1
T423.18	MAWB-4B2X-SW-B	SW	FREEZE	20-Mar-23	20:50				1	1
T423.18	MAWB-4B2X-SW-B-FD	SW	FREEZE	20-Mar-23	21:03				1	1
T423.18	MAWC-1B2X-SW-1	SW	FREEZE	20-Mar-23	2:37				1	1
T423.18	MAWC-1B2X-SW-20	SW	FREEZE	20-Mar-23	2:43				1	1
T423.18	MAWC-1B2X-SW-40	SW	FREEZE	20-Mar-23	2:52				1	1
T423.18	MAWC-1B2X-SW-B	SW	FREEZE	20-Mar-23	3:04				1	1
T423.18	MAWC-1C2-SW-1	SW	FREEZE	20-Mar-23	4:37				1	1
T423.18	MAWC-1C2-SW-20	SW	FREEZE	20-Mar-23	4:43				1	1
T423.18	MAWC-1C2-SW-40	SW	FREEZE	20-Mar-23	4:52				1	1
T423.18	MAWC-1C2-SW-B	SW	FREEZE	20-Mar-23	5:04				1	1
T423.18	MAWC-2B2X-SW-1	SW	FREEZE	20-Mar-23	1:02				1	1
T423.18	MAWC-2B2X-SW-20	SW	FREEZE	20-Mar-23	1:08				1	1
T423.18	MAWC-2B2X-SW-40	SW	FREEZE	20-Mar-23	1:17				1	1
T423.18	MAWC-2B2X-SW-B	SW	FREEZE	20-Mar-23	1:28				1	1
T423.18	MAWC-3B2X-SW-1	SW	FREEZE	19-Mar-23	20:13				1	1
T423.18	MAWC-3B2X-SW-20	SW	FREEZE	19-Mar-23	20:23				1	1
T423.18	MAWC-3B2X-SW-40	SW	FREEZE	19-Mar-23	20:32				1	1
T423.18	MAWC-3B2X-SW-B	SW	FREEZE	19-Mar-23	20:43				1	1
T423.18	MAWC-3C2-SW-1	SW	FREEZE	19-Mar-23	19:09				1	1
T423.18	MAWC-3C2-SW-20	SW	FREEZE	19-Mar-23	19:26				1	1
T423.18	MAWC-3C2-SW-40	SW	FREEZE	19-Mar-23	19:04				1	1
T423.18	MAWC-3C2-SW-B	SW	FREEZE	19-Mar-23	19:46				1	1
T423.18	MAWC-4B2X-SW-1	SW	FREEZE	19-Mar-23	21:02				1	1
T423.18	MAWC-4B2X-SW-20	SW	FREEZE	19-Mar-23	21:52				1	1

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CHAIN OF CUSTODY

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T423.18	MAWC-4B2X-SW-40	SW	FREEZE	19-Mar-23	22:01				1	1
T423.18	MAWC-4B2X-SW-B	SW	FREEZE	19-Mar-23	22:12				1	1
T423.18	MAWC-4B2X-SW-B-FD	SW	FREEZE	19-Mar-23	22:25				1	1
T423.18	MAWC-EQ	SW	FREEZE	19-Mar-23	9:07				1	1
T423.18	MAWC-WB	SW	FREEZE	19-Mar-23	19:00				1	1
T423.18	MAWD-1B2X-SW-1	SW	COLD	23-Mar-23	0:50				1	1
T423.18	MAWD-1B2X-SW-20	SW	COLD	23-Mar-23	0:56				1	1
T423.18	MAWD-1B2X-SW-40	SW	COLD	23-Mar-23	1:05				1	1
T423.18	MAWD-1B2X-SW-B	SW	COLD	23-Mar-23	1:17				1	1
T423.18	MAWD-1C2-SW-1	SW	COLD	23-Mar-23	2:22				1	1
T423.18	MAWD-1C2-SW-20	SW	COLD	23-Mar-23	2:28				1	1
T423.18	MAWD-1C2-SW-40	SW	COLD	23-Mar-23	2:37				1	1
T423.18	MAWD-1C2-SW-B	SW	COLD	23-Mar-23	2:48				1	1
T423.18	MAWD-2C2X-SW-1	SW	COLD	23-Mar-23	4:27				1	1
T423.18	MAWD-2C2X-SW-20	SW	COLD	23-Mar-23	4:34				1	1
T423.18	MAWD-2C2X-SW-40	SW	COLD	23-Mar-23	4:43				1	1
T423.18	MAWD-2C2X-SW-B	SW	COLD	23-Mar-23	4:55				1	1
T423.18	MAWD-3B2-SW-1	SW	COLD	22-Mar-23	20:25				1	1
T423.18	MAWD-3B2-SW-20	SW	COLD	22-Mar-23	20:31				1	1
T423.18	MAWD-3B2-SW-40	SW	COLD	22-Mar-23	20:42				1	1
T423.18	MAWD-3B2-SW-B	SW	COLD	22-Mar-23	20:54				1	1
T423.18	MAWD-3C2X-SW-1	SW	COLD	22-Mar-23	19:15				1	1
T423.18	MAWD-3C2X-SW-20	SW	COLD	22-Mar-23	19:24				1	1
T423.18	MAWD-3C2X-SW-40	SW	COLD	22-Mar-23	19:33				1	1
T423.18	MAWD-3C2X-SW-B	SW	COLD	22-Mar-23	19:44				1	1

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T423.18	MAWD-4B2X-SW-1	SW	COLD	22-Mar-23	22:18				1	1
T423.18	MAWD-4B2X-SW-20	SW	COLD	22-Mar-23	22:24				1	1
T423.18	MAWD-4B2X-SW-40	SW	COLD	22-Mar-23	22:33				1	1
T423.18	MAWD-4B2X-SW-B	SW	COLD	22-Mar-23	22:44				1	1
T423.19	Control-3-A	SED	FREEZE	23-Mar-23		1	1	1		
T423.19	Control-3-B	SED	FREEZE	23-Mar-23		1	1	1		
T423.19	Control-3-C	SED	FREEZE	23-Mar-23		1	1	1		
T423.19	MAWG-1B1X	SED	FREEZE	21-Mar-23	18:15	1	1	1		
T423.19	MAWG-1B2X	SED	FREEZE	21-Mar-23	17:14	1	1	1		
T423.19	MAWG-1B3X	SED	FREEZE	21-Mar-23	19:04	1	1	1		
T423.19	MAWG-1C1	SED	FREEZE	21-Mar-23	19:44	1	1	1		
T423.19	MAWG-1C2	SED	FREEZE	21-Mar-23	19:09	1	1	1		
T423.19	MAWG-1C3	SED	FREEZE	21-Mar-23	19:15	1	1	1		
T423.19	MAWG-1D1	SED	FREEZE	21-Mar-23	20:12	1	1	1		
T423.19	MAWG-1D2	SED	FREEZE	21-Mar-23	20:32	1	1	1		
T423.19	MAWG-1D3	SED	FREEZE	21-Mar-23	20:50	1	1	1		
T423.19	MAWG-2B2X	SED	FREEZE	21-Mar-23	13:25	1	1	1		
T423.19	MAWG-2B2X-FD	SED	FREEZE	21-Mar-23	13:35	1	1	1		
T423.19	MAWG-2C2	SED	FREEZE	21-Mar-23	13:08	1	1	1		
T423.19	MAWG-3B1X	SED	FREEZE	21-Mar-23	8:02	1	1	1		
T423.19	MAWG-3B2X	SED	FREEZE	21-Mar-23	8:08	1	1	1		
T423.19	MAWG-3B3X	SED	FREEZE	21-Mar-23	8:52	1	1	1		
T423.19	MAWG-3C1	SED	FREEZE	21-Mar-23	10:28	1	1	1		
T423.19	MAWG-3C2	SED	FREEZE	21-Mar-23	9:00	1	1	1		
T423.19	MAWG-3C2-FD	SED	FREEZE	21-Mar-23	9:45	1	1	1		

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T423.19	MAWG-3C3	SED	FREEZE	21-Mar-23	9:11	1	1	1		
T423.19	MAWG-3D1	SED	FREEZE	21-Mar-23	11:02	1	1	1		
T423.19	MAWG-3D2	SED	FREEZE	21-Mar-23	11:26	1	1	1		
T423.19	MAWG-3D3	SED	FREEZE	21-Mar-23	11:48	1	1	1		
T423.19	MAWG-4B2X	SED	FREEZE	21-Mar-23	12:46	1	1	1		
T423.19	MAWG-4C2	SED	FREEZE	21-Mar-23	12:28	1	1	1		

T423.19	Control-3-SW-1	SW	COLD	23-Mar-23	19:18				1	1
T423.19	Control-3-SW-20	SW	COLD	23-Mar-23	19:27				1	1
T423.19	Control-3-SW-40	SW	COLD	23-Mar-23	19:39				1	1
T423.19	Control-3-SW-B	SW	COLD	23-Mar-23	19:50				1	1
T423.19	MAWG-1B2X-SW-1	SW	COLD	21-Mar-23	15:44				1	1
T423.19	MAWG-1B2X-SW-20	SW	COLD	21-Mar-23	15:50				1	1
T423.19	MAWG-1B2X-SW-40	SW	COLD	21-Mar-23	16:01				1	1
T423.19	MAWG-1B2X-SW-B	SW	COLD	21-Mar-23	16:16				1	1
T423.19	MAWG-3B2X-SW-1	SW	COLD	21-Mar-23	5:13				1	1
T423.19	MAWG-3B2X-SW-1-FD	SW	COLD	21-Mar-23	5:18				1	1
T423.19	MAWG-3B2X-SW-20	SW	COLD	21-Mar-23	5:24				1	1
T423.19	MAWG-3B2X-SW-40	SW	COLD	21-Mar-23	5:39				1	1
T423.19	MAWG-3B2X-SW-B	SW	COLD	21-Mar-23	5:50				1	1
T423.19	MAWG-EQ	SW	COLD	21-Mar-23	4:05				1	1
T423.19	MAWG-WB	SW	COLD	21-Mar-23	5:00				1	1

T423.21	TFPSO-1B2	SED	FREEZE	25-Mar-23	4:33	1	1	1		
T423.21	TFPSO-1C2	SED	FREEZE	25-Mar-23	2:39	1	1	1		

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T423.21	TFPSO-1CP2	SED	FREEZE	25-Mar-23	2:19	1	1	1		
T423.21	TFPSO-1D2	SED	FREEZE	25-Mar-23	1:48	1	1	1		
T423.21	TFPSO-1D2-FD	SED	FREEZE	25-Mar-23	2:00	1	1	1		
T423.21	TFPSO-2B2	SED	FREEZE	25-Mar-23	7:42	1	1	1		
T423.21	TFPSO-2CP2	SED	FREEZE	25-Mar-23	7:19	1	1	1		
T423.21	TFPSO-3B2	SED	FREEZE	25-Mar-23	8:01	1	1	1		
T423.21	TFPSO-3CP2	SED	FREEZE	25-Mar-23	8:47	1	1	1		
T423.21	TFPSO-4B2	SED	FREEZE	25-Mar-23	8:20	1	1	1		
T423.21	TFPSO-4CP2	SED	FREEZE	25-Mar-23	9:10	1	1	1		
T423.21	YAREF-A2	SED	FREEZE	25-Mar-23	12:54	1	1	1		
T423.21	YAREF-B2	SED	FREEZE	25-Mar-23	13:04	1	1	1		
T423.21	YAREF-C2	SED	FREEZE	25-Mar-23	13:14	1	1	1		

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T423.21	TFPSO-1B2-SW-1	SW	COLD	25-Mar-23	2:57				1	1
T423.21	TFPSO-1B2-SW-20	SW	COLD	25-Mar-23	3:04				1	1
T423.21	TFPSO-1B2-SW-20-FD	SW	COLD	25-Mar-23	3:10				1	1
T423.21	TFPSO-1B2-SW-40	SW	COLD	25-Mar-23	3:17				1	1
T423.21	TFPSO-1B2-SW-B	SW	COLD	25-Mar-23	3:28				1	1
T423.21	TFPSO-3B2-SW-1	SW	COLD	25-Mar-23	4:51				1	1
T423.21	TFPSO-3B2-SW-20	SW	COLD	25-Mar-23	4:57				1	1
T423.21	TFPSO-3B2-SW-40	SW	COLD	25-Mar-23	5:05				1	1
T423.21	TFPSO-3B2-SW-B	SW	COLD	25-Mar-23	5:21				1	1
T423.21	TFPSO-EQ	SW	COLD	25-Mar-23	1:00				1	1
T423.21	TFPSO-WB	SW	COLD	25-Mar-23	1:05				1	1
T423.21	YAREF-SW-1	SW	COLD	25-Mar-23	12:16				1	1

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T423.21	YAREF-SW-20	SW	COLD	25-Mar-23	12:23				1	1
T423.21	YAREF-SW-40	SW	COLD	25-Mar-23	12:31				1	1
T423.21	YAREF-SW-B	SW	COLD	25-Mar-23	12:42				1	1

T423.17	CBREF-A	SED	FREEZE	25-Mar-23	19:20	1	1	1		
T423.17	CBREF-B	SED	FREEZE	25-Mar-23	19:30	1	1	1		
T423.17	CBREF-C	SED	FREEZE	25-Mar-23	19:39	1	1	1		
T423.17	YUWA-1B1X	SED	FREEZE	16-Mar-23	17:20	1	1	1		
T423.17	YUWA-1B2X	SED	FREEZE	16-Mar-23	16:50	1	1	1		
T423.17	YUWA-1B3X	SED	FREEZE	16-Mar-23	17:03	1	1	1		
T423.17	YUWA-1C1	SED	FREEZE	16-Mar-23	19:30	1	1	1		
T423.17	YUWA-1C2	SED	FREEZE	16-Mar-23	19:43	1	1	1		
T423.17	YUWA-1C3	SED	FREEZE	16-Mar-23	19:55	1	1	1		
T423.17	YUWA-1D1	SED	FREEZE	16-Mar-23	20:13	1	1	1		
T423.17	YUWA-1D2	SED	FREEZE	16-Mar-23	20:19	1	1	1		
T423.17	YUWA-1D3	SED	FREEZE	16-Mar-23	20:44	1	1	1		
T423.17	YUWA-2B2X	SED	FREEZE	16-Mar-23	18:57	1	1	1		
T423.17	YUWA-2C2	SED	FREEZE	16-Mar-23	19:13	1	1	1		
T423.17	YUWA-3B1X	SED	FREEZE	16-Mar-23	10:09	1	1	1		
T423.17	YUWA-3B1X-FD	SED	FREEZE	16-Mar-23	10:19	1	1	1		
T423.17	YUWA-3B2X	SED	FREEZE	16-Mar-23	9:07	1	1	1		
T423.17	YUWA-3B3X	SED	FREEZE	16-Mar-23	10:49	1	1	1		
T423.17	YUWA-3C1	SED	FREEZE	16-Mar-23	13:00	1	1	1		
T423.17	YUWA-3C1-FD	SED	FREEZE	16-Mar-23	13:09	1	1	1		
T423.17	YUWA-3C2	SED	FREEZE	16-Mar-23	12:03	1	1	1		

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T423.17	YUWA-3C3	SED	FREEZE	16-Mar-23	11:19	1	1	1	1	
T423.17	YUWA-3D1	SED	FREEZE	16-Mar-23	13:34	1	1	1	1	
T423.17	YUWA-3D2	SED	FREEZE	16-Mar-23	13:04	1	1	1	1	
T423.17	YUWA-3D3	SED	FREEZE	16-Mar-23	14:17	1	1	1	1	
T423.17	YUWA-4B2X	SED	FREEZE	16-Mar-23	6:03	1	1	1	1	
T423.17	YUWA-4C2	SED	FREEZE	16-Mar-23	6:24	1	1	1	1	
T423.17	CBREF-SW-1	SW	FREEZE	25-Mar-23	17:03				1	1
T423.17	CBREF-SW-20	SW	FREEZE	25-Mar-23	17:10				1	1
T423.17	CBREF-SW-40	SW	FREEZE	25-Mar-23	17:18				1	1
T423.17	CBREF-SW-B	SW	FREEZE	25-Mar-23	17:30				1	1
T423.17	YUWA-1B2X-SW-1	SW	FREEZE	16-Mar-23	15:09				1	1
T423.17	YUWA-1B2X-SW-20	SW	FREEZE	16-Mar-23	15:16				1	1
T423.17	YUWA-1B2X-SW-40	SW	FREEZE	16-Mar-23	15:04				1	1
T423.17	YUWA-1B2X-SW-40-FD	SW	FREEZE	16-Mar-23	15:34				1	1
T423.17	YUWA-1B2X-SW-B	SW	FREEZE	16-Mar-23	15:45				1	1
T423.17	YUWA-3B2X-SW-1	SW	FREEZE	16-Mar-23	7:04				1	1
T423.17	YUWA-3B2X-SW-20	SW	FREEZE	16-Mar-23	7:58				1	1
T423.17	YUWA-3B2X-SW-40	SW	FREEZE	16-Mar-23	8:19				1	1
T423.17	YUWA-3B2X-SW-B	SW	FREEZE	16-Mar-23	8:33				1	1
T423.17	YUWA-EQ	SW	FREEZE	16-Mar-23	5:55				1	1
T423.17	YUWA-WB	SW	FREEZE	16-Mar-23	6:00				1	1

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T423.17	YAREF-SW-20	SW	COLD	25-Mar-23	12:23				1	1
T423.21	YAREF-SW-40	SW	COLD	25-Mar-23	12:31				1	1
T423.21	YAREF-SW-B	SW	COLD	25-Mar-23	12:42				1	1

T423.17	CBREF-A	SED	FREEZE	25-Mar-23	19:20	1	1	1		
T423.17	CBREF-B	SED	FREEZE	25-Mar-23	19:30	1	1	1		
T423.17	CBREF-C	SED	FREEZE	25-Mar-23	19:39	1	1	1		
T423.17	YUWA-1B1X	SED	FREEZE	16-Mar-23	17:20	1	1	1		
T423.17	YUWA-1B2X	SED	FREEZE	16-Mar-23	16:50	1	1	1		
T423.17	YUWA-1B3X	SED	FREEZE	16-Mar-23	17:03	1	1	1		
T423.17	YUWA-1C1	SED	FREEZE	16-Mar-23	19:30	1	1	1		
T423.17	YUWA-1C2	SED	FREEZE	16-Mar-23	19:43	1	1	1		
T423.17	YUWA-1C3	SED	FREEZE	16-Mar-23	19:55	1	1	1		
T423.17	YUWA-1D1	SED	FREEZE	16-Mar-23	20:13	1	1	1		
T423.17	YUWA-1D2	SED	FREEZE	16-Mar-23	20:19	1	1	1		
T423.17	YUWA-1D3	SED	FREEZE	16-Mar-23	20:44	1	1	1		
T423.17	YUWA-2B2X	SED	FREEZE	16-Mar-23	18:57	1	1	1		
T423.17	YUWA-2C2	SED	FREEZE	16-Mar-23	19:13	1	1	1		
T423.17	YUWA-3B1X	SED	FREEZE	16-Mar-23	10:09	1	1	1		
T423.17	YUWA-3B1X-FD	SED	FREEZE	16-Mar-23	10:19	1	1	1		
T423.17	YUWA-3B2X	SED	FREEZE	16-Mar-23	9:07	1	1	1		
T423.17	YUWA-3B3X	SED	FREEZE	16-Mar-23	10:49	1	1	1		
T423.17	YUWA-3C1	SED	FREEZE	16-Mar-23	13:00	1	1	1		
T423.17	YUWA-3C1-FD	SED	FREEZE	16-Mar-23	13:09	1	1	1		
T423.17	YUWA-3C2	SED	FREEZE	16-Mar-23	12:03	1	1	1		

Page 17 of 19

Relinquished by:

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Box 21

Therm. ID: Dig 21 Cust. Seal: (Y) N
Uncorr./Corr. Temp: 24 / -23.8 °C
Delivery: UPS / (FedEx) / Other: _____
Ice Type: Blue / (Dry) / Wet / None
Label Ver.: DL/VA Packing: B

Box 22

Therm. ID: Dig 22 Cust. Seal: Y / N
Uncorr./Corr. Temp: 149 / -17.1 °C
Delivery: UPS / (FedEx) / Other: _____
Ice Type: Blue / (Dry) / Wet / None
Label Ver.: DL/VA Packing: B

Box 19

Therm. ID: Dig 19 Cust. Seal: (Y) N
Uncorr./Corr. Temp: 140 / -15.4 °C
Delivery: UPS / (FedEx) / Other: _____
Ice Type: Blue / (Dry) / Wet / None
Label Ver.: DL/VA Packing: B

Box 13

Therm. ID: Dig 13 Cust. Seal: (Y) N
Uncorr./Corr. Temp: 34 / -13.4 °C
Delivery: UPS / (FedEx) / Other: _____
Ice Type: Blue / (Dry) / Wet / None
Label Ver.: DL/VA Packing: B

Box 17

Therm. ID: Dig 17 Cust. Seal: (Y) N
Uncorr./Corr. Temp: 8 / -2.9 °C
Delivery: UPS / (FedEx) / Other: _____
Ice Type: Blue / (Dry) / Wet / None
Label Ver.: DL/VA Packing: B

Box 22 Dry Ice Bag

Therm. ID: Dig _____ Cust. Seal: Y / N
Uncorr./Corr. Temp: 2.4 / 2.5 °C
Delivery: UPS / FedEx / Other: _____
Ice Type: Blue / Dry / Wet / None
Label Ver.: DL/VA Packing: _____

Box 23

Therm. ID: Dig 23 Cust. Seal: (Y) N
Uncorr./Corr. Temp: 6.8 / -6.7 °C
Delivery: UPS / (FedEx) / Other: _____
Ice Type: Blue / (Dry) / Wet / None
Label Ver.: DL/VA Packing: B

Box 4

Therm. ID: Dig _____ Cust. Seal: _____
Uncorr./Corr. Temp: _____ / _____ °C
Delivery: UPS / FedEx / Other: _____
Ice Type: Blue / Dry / Wet / None
Label Ver.: DL/VA Packing: _____

Box 6

Therm. ID: Dig 6 Cust. Seal: (Y) N
Uncorr./Corr. Temp: 21 / -26.9 °C
Delivery: UPS / (FedEx) / Other: _____
Ice Type: Blue / (Dry) / Wet / None
Label Ver.: DL/VA Packing: B

Box 7

Therm. ID: Dig 7 Cust. Seal: (Y) N
Uncorr./Corr. Temp: 17.0 / -16.4 °C
Delivery: UPS / (FedEx) / Other: _____
Ice Type: Blue / (Dry) / Wet / None
Label Ver.: DL/VA Packing: B

Box 8

Therm. ID: Dig 8 Cust. Seal: (Y) N
Uncorr./Corr. Temp: 14.4 / -16.0 °C
Delivery: UPS / (FedEx) / Other: _____
Ice Type: Blue / (Dry) / Wet / None
Label Ver.: DL/VA Packing: B

Box 10

Therm. ID: Dig 10 Cust. Seal: (Y) N
Uncorr./Corr. Temp: 19.0 / -19.5 °C
Delivery: UPS / (FedEx) / Other: _____
Ice Type: Blue / (Dry) / Wet / None
Label Ver.: DL/VA Packing: B

Box 11

Therm. ID: Dig _____ Cust. Seal: Y / N
Uncorr./Corr. Temp: 15.1 / -15.3 °C
Delivery: UPS / (FedEx) / Other: _____
Ice Type: Blue / (Dry) / Wet / None
Label Ver.: DL/VA Packing: _____

Box 12

Therm. ID: Dig 12 Cust. Seal: (Y) N
Uncorr./Corr. Temp: 11 / -16.0 °C
Delivery: UPS / (FedEx) / Other: _____
Ice Type: Blue / (Dry) / Wet / None
Label Ver.: DL/VA Packing: B

Box 14

Therm. ID: Dig 14 Cust. Seal: (Y) N
Uncorr./Corr. Temp: 17.0 / -16.5 °C
Delivery: UPS / (FedEx) / Other: _____
Ice Type: Blue / (Dry) / Wet / None
Label Ver.: DL/VA Packing: B

Box 15

Therm. ID: Dig 15 Cust. Seal: (Y) N
Uncorr./Corr. Temp: 15.0 / -14.5 °C
Delivery: UPS / (FedEx) / Other: _____
Ice Type: Blue / (Dry) / Wet / None
Label Ver.: DL/VA Packing: B

Box 16

Therm. ID: Dig 16 Cust. Seal: (Y) N
Uncorr./Corr. Temp: 2.4 / -25.6 °C
Delivery: UPS / (FedEx) / Other: _____
Ice Type: Blue / (Dry) / Wet / None
Label Ver.: DL/VA Packing: B

Box 18

Therm. ID: Dig 18 Cust. Seal: (Y) N
Uncorr./Corr. Temp: 14.4 / -14.6 °C
Delivery: UPS / (FedEx) / Other: _____
Ice Type: Blue / (Dry) / Wet / None
Label Ver.: DL/VA Packing: _____

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 580-126685-3

Login Number: 126685

List Source: Eurofins Seattle

List Number: 1

Creator: Groden, Kyle J

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



United Analyst and Engineering Consultant Co., Ltd.

3 Soi Udomsuk 41, Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260

Tel. 0 2763 2828 Fax 0 2763 2800 www.uaec consultant.com E-mail: uae@uaec consultant.com

July 02, 2023

Dr. Ted Donn

Tetra Tech, Inc.

3697 Mt. Diablo Blvd., Suite 150, Lafayette, CA 94549

RE: Submittal of laboratory analysis report for Project T423.18, DDPH Analysis of seawater

This covered letter is to submit laboratory analysis report for Project T423.18, DDPH Analysis of seawater service provided according to the UAE Quotation No. 2023-001895-R1 dated on February 27th, 2023.

It includes analysis results, chain of custody records, and case narrative for this service. Overall, the service is complete against customer's requirements on traceability, and quality control and assurance.

If you have any question concerning this report, please feel free to contact me.

Sincerely,

Piyapat Suttamanutwong

Laboratory and Research Development Manager

Ship to:
Piyapat S.
UAE Consultant Co., Ltd.
3 Soi Udomsuk 41, Sukhumvit Rd
Bangchak, Phrakhanong, Bangkok

CHAIN OF CUSTODY


Dr. Ted Donn
Tetra Tech Inc.
3697 Mt. Diablo Blvd., Suite 150
Lafayette, CA
ted.donn@tetrattech.com

General Notes:


Please report all results to the MDL, J-flag results between MDL and RL
Please report results and invoice separately for each Project ID
Please report results in pdf format with Excel EDD deliverable
LabDup, MS, MSD samples are for laboratory; Not to be billed to TetraTech

Project	SampleID	Medium	Preservation	Date	Time	DDPH
T423.20	LAWA-3C3-SW-40	SW	COLD	18-Mar-23	2:17	1
T423.20	LAWA-3C3-SW-B	SW	COLD	18-Mar-23	2:33	1
T423.20	LAWA-3D1X-SW-1	SW	COLD	17-Mar-23	12:22	1
T423.20	LAWA-3D1X-SW-20	SW	COLD	17-Mar-23	12:29	1
T423.20	LAWA-3D1X-SW-40	SW	COLD	17-Mar-23	12:39	1
T423.20	LAWA-3D1X-SW-B	SW	COLD	17-Mar-23	12:51	1
T423.20	LAWA-3D2-SW-1	SW	COLD	17-Mar-23	4:33	1
T423.20	LAWA-3D2-SW-1-FD	SW	COLD	17-Mar-23	4:41	1
T423.20	LAWA-3D2-SW-20	SW	COLD	17-Mar-23	4:48	1
T423.20	LAWA-3D2-SW-40	SW	COLD	17-Mar-23	4:58	1
T423.20	LAWA-3D2-SW-B	SW	COLD	17-Mar-23	5:10	1
T423.20	LAWA-3D3-SW-1	SW	COLD	17-Mar-23	3:38	1
T423.20	LAWA-3D3-SW-20	SW	COLD	17-Mar-23	3:49	1
T423.20	LAWA-3D3-SW-40	SW	COLD	17-Mar-23	3:59	1
T423.20	LAWA-3D3-SW-B	SW	COLD	17-Mar-23	4:13	1
T423.20	LAWA-EQ	SW	COLD	17-Mar-23	3:05	1
T423.20	LAWA-WB	SW	COLD	17-Mar-23	3:00	1

T423.18	MAWA-1C2-SW-1	SW	COLD	22-Mar-23	5:30	1
T423.18	MAWA-1C2-SW-20	SW	COLD	22-Mar-23	5:36	1
T423.18	MAWA-1C2-SW-40	SW	COLD	22-Mar-23	5:46	1
T423.18	MAWA-1C2-SW-B	SW	COLD	22-Mar-23	5:57	1
T423.18	MAWA-1CP2-SW-1	SW	COLD	22-Mar-23	12:26	1
T423.18	MAWA-1CP2-SW-20	SW	COLD	22-Mar-23	12:32	1
T423.18	MAWA-1CP2-SW-40	SW	COLD	22-Mar-23	12:41	1
T423.18	MAWA-1CP2-SW-B	SW	COLD	22-Mar-23	12:52	1
T423.18	MAWA-2B2X-SW-1	SW	COLD	22-Mar-23	3:52	1
T423.18	MAWA-2B2X-SW-20	SW	COLD	22-Mar-23	3:58	1
T423.18	MAWA-2B2X-SW-40	SW	COLD	22-Mar-23	4:07	1
T423.18	MAWA-2B2X-SW-B	SW	COLD	22-Mar-23	4:19	1
T423.18	MAWA-3B2-SW-1	SW	COLD	22-Mar-23	2:12	1
T423.18	MAWA-3B2-SW-20	SW	COLD	22-Mar-23	2:19	1
T423.18	MAWA-3B2-SW-20-FD	SW	COLD	22-Mar-23	2:26	1
T423.18	MAWA-3B2-SW-40	SW	COLD	22-Mar-23	2:35	1
T423.18	MAWA-3B2-SW-B	SW	COLD	22-Mar-23	2:48	1
T423.18	MAWA-3C2-SW-1	SW	COLD	22-Mar-23	0:21	1
T423.18	MAWA-3C2-SW-20	SW	COLD	22-Mar-23	0:27	1
T423.18	MAWA-3C2-SW-40	SW	COLD	22-Mar-23	0:36	1
T423.18	MAWA-3C2-SW-B	SW	COLD	22-Mar-23	0:47	1
T423.18	MAWA-4B2X-SW-1	SW	COLD	21-Mar-23	21:43	1

Relinquished by: 
27 Mar 2023

Relinquished by:

Received by: 
29 Mar 2023

Received by:

Ship to:
Piyapat S.
UAE Consultant Co., Ltd.
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ted.donn@tetrattech.com

General Notes:

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Project	SampleID	Medium	Preservation	Date	Time	DDPH
T423.18	MAWA-4B2X-SW-20	SW	COLD	21-Mar-23	21:49	1
T423.18	MAWA-4B2X-SW-40	SW	COLD	21-Mar-23	21:57	1
T423.18	MAWA-4B2X-SW-B	SW	COLD	21-Mar-23	22:09	1
T423.18	MAWA-EQ	SW	COLD	21-Mar-23	21:33	1
T423.18	MAWA-WB	SW	COLD	21-Mar-23	21:28	1
T423.18	MAWB-1B2X-SW-1	SW	COLD	21-Mar-23	3:08	1
T423.18	MAWB-1B2X-SW-1-FD	SW	COLD	21-Mar-23	3:13	1
T423.18	MAWB-1B2X-SW-20	SW	COLD	21-Mar-23	3:19	1
T423.18	MAWB-1B2X-SW-40	SW	COLD	21-Mar-23	3:27	1
T423.18	MAWB-1B2X-SW-B	SW	COLD	21-Mar-23	3:38	1
T423.18	MAWB-1C2X-SW-1	SW	COLD	20-Mar-23	16:42	1
T423.18	MAWB-1C2X-SW-20	SW	COLD	20-Mar-23	16:48	1
T423.18	MAWB-1C2X-SW-40	SW	COLD	20-Mar-23	16:59	1
T423.18	MAWB-1C2X-SW-B	SW	COLD	20-Mar-23	17:11	1
T423.18	MAWB-2B2X-SW-1	SW	COLD	21-Mar-23	1:06	1
T423.18	MAWB-2B2X-SW-20	SW	COLD	21-Mar-23	1:11	1
T423.18	MAWB-2B2X-SW-20-FD	SW	COLD	21-Mar-23	1:18	1
T423.18	MAWB-2B2X-SW-40	SW	COLD	21-Mar-23	1:26	1
T423.18	MAWB-2B2X-SW-B	SW	COLD	21-Mar-23	1:37	1
T423.18	MAWB-3B2X-SW-1	SW	COLD	20-Mar-23	19:17	1
T423.18	MAWB-3B2X-SW-20	SW	COLD	20-Mar-23	19:23	1
T423.18	MAWB-3B2X-SW-40	SW	COLD	20-Mar-23	19:31	1
T423.18	MAWB-3B2X-SW-B	SW	COLD	20-Mar-23	19:43	1
T423.18	MAWB-3C2-SW-1	SW	COLD	20-Mar-23	10:55	1
T423.18	MAWB-3C2-SW-20	SW	COLD	20-Mar-23	11:00	1
T423.18	MAWB-3C2-SW-40	SW	COLD	20-Mar-23	11:13	1
T423.18	MAWB-3C2-SW-B	SW	COLD	20-Mar-23	11:24	1
T423.18	MAWB-4B2X-SW-1	SW	COLD	20-Mar-23	20:25	1
T423.18	MAWB-4B2X-SW-20	SW	COLD	20-Mar-23	20:30	1
T423.18	MAWB-4B2X-SW-40	SW	COLD	20-Mar-23	20:39	1
T423.18	MAWB-4B2X-SW-B	SW	COLD	20-Mar-23	20:50	1
T423.18	MAWB-4B2X-SW-B-FD	SW	COLD	20-Mar-23	21:03	1
T423.18	MAWC-1B2X-SW-1	SW	COLD	20-Mar-23	2:37	1
T423.18	MAWC-1B2X-SW-20	SW	COLD	20-Mar-23	2:43	1
T423.18	MAWC-1B2X-SW-40	SW	COLD	20-Mar-23	2:52	1
T423.18	MAWC-1B2X-SW-B	SW	COLD	20-Mar-23	3:04	1
T423.18	MAWC-1C2-SW-1	SW	COLD	20-Mar-23	4:37	1
T423.18	MAWC-1C2-SW-20	SW	COLD	20-Mar-23	4:43	1
T423.18	MAWC-1C2-SW-40	SW	COLD	20-Mar-23	4:51	1
T423.18	MAWC-1C2-SW-B	SW	COLD	20-Mar-23	5:04	1

Relinquished by:


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Project	SampleID	Medium	Preservation	Date	Time	DDPH
T423.18	MAWC-2B2X-SW-1	SW	COLD	20-Mar-23	1:02	1
T423.18	MAWC-2B2X-SW-20	SW	COLD	20-Mar-23	1:08	1
T423.18	MAWC-2B2X-SW-40	SW	COLD	20-Mar-23	1:17	1
T423.18	MAWC-2B2X-SW-B	SW	COLD	20-Mar-23	1:28	1
T423.18	MAWC-3B2X-SW-1	SW	COLD	19-Mar-23	20:13	1
T423.18	MAWC-3B2X-SW-20	SW	COLD	19-Mar-23	20:23	1
T423.18	MAWC-3B2X-SW-40	SW	COLD	19-Mar-23	20:32	1
T423.18	MAWC-3B2X-SW-B	SW	COLD	19-Mar-23	20:43	1
T423.18	MAWC-3C2-SW-1	SW	COLD	19-Mar-23	19:19	1
T423.18	MAWC-3C2-SW-20	SW	COLD	19-Mar-23	19:26	1
T423.18	MAWC-3C2-SW-40	SW	COLD	19-Mar-23	19:34	1
T423.18	MAWC-3C2-SW-B	SW	COLD	19-Mar-23	19:46	1
T423.18	MAWC-4B2X-SW-1	SW	COLD	19-Mar-23	21:42	1
T423.18	MAWC-4B2X-SW-20	SW	COLD	19-Mar-23	21:52	1
T423.18	MAWC-4B2X-SW-40	SW	COLD	19-Mar-23	22:01	1
T423.18	MAWC-4B2X-SW-B	SW	COLD	19-Mar-23	22:12	1
T423.18	MAWC-4B2X-SW-B-FD	SW	COLD	19-Mar-23	22:25	1
T423.18	MAWC-EQ	SW	COLD	19-Mar-23	19:07	1
T423.18	MAWC-WB	SW	COLD	19-Mar-23	19:00	1
T423.18	MAWD-1B2X-SW-1	SW	COLD	23-Mar-23	0:50	1
T423.18	MAWD-1B2X-SW-20	SW	COLD	23-Mar-23	0:56	1
T423.18	MAWD-1B2X-SW-40	SW	COLD	23-Mar-23	1:05	1
T423.18	MAWD-1B2X-SW-B	SW	COLD	23-Mar-23	1:17	1
T423.18	MAWD-1C2-SW-1	SW	COLD	23-Mar-23	2:22	1
T423.18	MAWD-1C2-SW-20	SW	COLD	23-Mar-23	2:28	1
T423.18	MAWD-1C2-SW-40	SW	COLD	23-Mar-23	2:37	1
T423.18	MAWD-1C2-SW-B	SW	COLD	23-Mar-23	2:48	1
T423.18	MAWD-2C2X-SW-1	SW	COLD	23-Mar-23	4:27	1
T423.18	MAWD-2C2X-SW-20	SW	COLD	23-Mar-23	4:34	1
T423.18	MAWD-2C2X-SW-40	SW	COLD	23-Mar-23	4:43	1
T423.18	MAWD-2C2X-SW-B	SW	COLD	23-Mar-23	4:55	1
T423.18	MAWD-3B2-SW-1	SW	COLD	22-Mar-23	20:25	1
T423.18	MAWD-3B2-SW-20	SW	COLD	22-Mar-23	20:31	1
T423.18	MAWD-3B2-SW-40	SW	COLD	22-Mar-23	20:42	1
T423.18	MAWD-3B2-SW-B	SW	COLD	22-Mar-23	20:54	1
T423.18	MAWD-3C2X-SW-1	SW	COLD	22-Mar-23	19:15	1
T423.18	MAWD-3C2X-SW-20	SW	COLD	22-Mar-23	19:24	1
T423.18	MAWD-3C2X-SW-40	SW	COLD	22-Mar-23	19:33	1
T423.18	MAWD-3C2X-SW-B	SW	COLD	22-Mar-23	19:44	1
T423.18	MAWD-4B2X-SW-1	SW	COLD	22-Mar-23	22:18	1

Relinquished by:


27 Mar 2023

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T423.18	MAWD-4B2X-SW-40	SW	COLD	22-Mar-23	22:33	1
T423.18	MAWD-4B2X-SW-B	SW	COLD	22-Mar-23	22:44	1

T423.19	Control-3-SW-1	SW	COLD	23-Mar-23	19:18	1
T423.19	Control-3-SW-20	SW	COLD	23-Mar-23	19:27	1
T423.19	Control-3-SW-40	SW	COLD	23-Mar-23	19:39	1
T423.19	Control-3-SW-B	SW	COLD	23-Mar-23	19:50	1
T423.19	MAWG-1B2X-SW-1	SW	COLD	21-Mar-23	15:44	1
T423.19	MAWG-1B2X-SW-20	SW	COLD	21-Mar-23	15:50	1
T423.19	MAWG-1B2X-SW-40	SW	COLD	21-Mar-23	16:01	1
T423.19	MAWG-1B2X-SW-B	SW	COLD	21-Mar-23	16:16	1
T423.19	MAWG-3B2X-SW-1	SW	COLD	21-Mar-23	5:13	1
T423.19	MAWG-3B2X-SW-1-FD	SW	COLD	21-Mar-23	5:18	1
T423.19	MAWG-3B2X-SW-20	SW	COLD	21-Mar-23	5:24	1
T423.19	MAWG-3B2X-SW-40	SW	COLD	21-Mar-23	5:39	1
T423.19	MAWG-3B2X-SW-B	SW	COLD	21-Mar-23	5:50	1
T423.19	MAWG-EQ	SW	COLD	21-Mar-23	4:05	1
T423.19	MAWG-WB	SW	COLD	21-Mar-23	5:00	1

T423.21	TFPSO-1B2-SW-1	SW	COLD	25-Mar-23	2:57	1
T423.21	TFPSO-1B2-SW-20	SW	COLD	25-Mar-23	3:04	1
T423.21	TFPSO-1B2-SW-20-FD	SW	COLD	25-Mar-23	3:10	1
T423.21	TFPSO-1B2-SW-40	SW	COLD	25-Mar-23	3:17	1
T423.21	TFPSO-1B2-SW-B	SW	COLD	25-Mar-23	3:28	1
T423.21	TFPSO-3B2-SW-1	SW	COLD	25-Mar-23	4:51	1
T423.21	TFPSO-3B2-SW-20	SW	COLD	25-Mar-23	4:57	1
T423.21	TFPSO-3B2-SW-40	SW	COLD	25-Mar-23	5:05	1
T423.21	TFPSO-3B2-SW-B	SW	COLD	25-Mar-23	5:21	1
T423.21	TFPSO-EQ	SW	COLD	25-Mar-23	1:00	1
T423.21	TFPSO-WB	SW	COLD	25-Mar-23	1:05	1
T423.21	YAREF-SW-1	SW	COLD	25-Mar-23	12:15	1
T423.21	YAREF-SW-20	SW	COLD	25-Mar-23	12:23	1
T423.21	YAREF-SW-40	SW	COLD	25-Mar-23	12:30	1
T423.21	YAREF-SW-B	SW	COLD	25-Mar-23	12:41	1

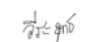
T423.17	CBREF-SW-1	SW	COLD	25-Mar-23	17:03	1
T423.17	CBREF-SW-20	SW	COLD	25-Mar-23	17:10	1
T423.17	CBREF-SW-40	SW	COLD	25-Mar-23	17:18	1
T423.17	CBREF-SW-B	SW	COLD	25-Mar-23	17:30	1

Relinquished by:


27 Mar 2023

Relinquished by:

Received by:


29 Mar 2023

Received by:


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Number : 1

 e-mail : lab@uaeconsultant.com <<mailto:lab@uaeconsultant.com>>

 <<http://www.uaeconsultant.com>>

FOR CLIENT
FOR UAE

CLIENT	: TETRA TECH INC.	ANALYSIS NO.	: T23AF866-0001 - T23AF866-0241	PROJECT CODE	: 23-00305	CLIENT ID	: 16-00432
ADDRESS	: 77 SOI UDOMSUK 39/1 SUKHUMVIT 103 ROAD BANG CHAK BANGKOK 10260	QUOTATION NUMBER	: 2023-001895-R1	SAMPLING BY	: Customer		
TELEPHONE	: +66 (0) 86-990-9863	FAX	:	PAYMENT TERM	: 1 / 1	WITNESS	:
CONTACT PERSON	: Mr.SUKSAN JINANARONG	SECTION	:	UAE CONTACT	: MissSUDARAT SONGKRATHOK	LOCATION	:
PROJECT NAME	: Analysis of Seawater Quality 1st 2023	SECTION	:				

ITEM	ANALYSIS NUMBER	SAMPLE NAME	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	SAMPLING METHOD	CONTAINER TYPE	QUANTITY	REQUIRED PARAMETER
49	T23AF866-0049	LAWA-3D2-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
50	T23AF866-0050	LAWA-3D2-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
51	T23AF866-0051	LAWA-3D2-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
52	T23AF866-0052	LAWA-3D3-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
53	T23AF866-0053	LAWA-3D3-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
54	T23AF866-0054	LAWA-3D3-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
55	T23AF866-0055	LAWA-3D3-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
56	T23AF866-0056	LAWA-EQ			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
57	T23AF866-0057	LAWA-WB			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
58	T23AF866-0058	MAWA-1C2-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
59	T23AF866-0059	MAWA-1C2-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
60	T23AF866-0060	MAWA-1C2-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment

TRANSFER RECORD	NAME	SIGNATURE	DATE	TIME	CHECKMARK RELEASED	CHECKMARK RECEIVED	EXTERNAL SAMPLE CONDITION
1	M. J. J.	Lmy	3/4/66	14.16		<input checked="" type="checkbox"/> Complete	<input type="checkbox"/> Incomplete
						<input type="checkbox"/> Complete	<input type="checkbox"/> Incomplete
						<input type="checkbox"/> Complete	<input type="checkbox"/> Incomplete
Analysis Method		Delivery Analysis		Sample Return		Remarks	
<input type="radio"/> standard Method <input type="radio"/> Quation		<input type="radio"/> Mail/Messenger <input type="radio"/> Receive by Hand <input type="radio"/> Report		<input type="radio"/> Yes <input type="radio"/> No (Disposal sample afer send analysis report to customer 15 days)			


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Number : 1


 e-mail : lab@uaeconsultant.com <<mailto:lab@uaeconsultant.com>>

 <<http://www.uaeconsultant.com>>

FOR CLIENT
FOR UAE

CLIENT	: TETRA TECH INC.	ANALYSIS NO.	: T23AF866-0001 - T23AF866-0241	PROJECT CODE	: 23-00305	CLIENT ID	: 16-00432
ADDRESS	: 77 SOI UDOMSUK 39/1 SUKHUMVIT 103 ROAD BANG CHAK BANGKOK 10260	QUOTATION NUMBER	: 2023-001895-R1	SAMPLING BY	: Customer		
TELEPHONE	: +66 (0) 86-990-9863	FAX	:	PAYMENT TERM	: 1 / 1	WITNESS	:
CONTACT PERSON	: Mr.SUKSAN JINANARONG	SECTION	:	UAE. CONTACT	: MissSUDARAT SONGKRATHOK	LOCATION	:
PROJECT NAME	: Analysis of Seawater Quality 1st 2023	SECTION	:				

ITEM	ANALYSIS NUMBER	SAMPLE NAME	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	SAMPLING METHOD	CONTAINER TYPE	QUANTITY	REQUIRED PARAMETER
61	T23AF866-0061	MAWA-1C2-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
62	T23AF866-0062	MAWA-1CP2-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
63	T23AF866-0063	MAWA-1CP2-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
64	T23AF866-0064	MAWA-1CP2-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
65	T23AF866-0065	MAWA-1CP2-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
66	T23AF866-0066	MAWA-1CP2-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
67	T23AF866-0067	MAWA-1CP2-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
68	T23AF866-0068	MAWA-1CP2-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
69	T23AF866-0069	MAWA-1CP2-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
70	T23AF866-0070	MAWA-3B2-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
71	T23AF866-0071	MAWA-3B2-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
72	T23AF866-0072	MAWA-3B2-SW-20-FD			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment

TRANSFER RECORD	NAME	SIGNATURE	DATE	TIME	CHECKMARK RELEASED	CHECKMARK RECEIVED	EXTERNAL SAMPLE CONDITION
1	นางสาว	นาง	3/4/61	14.16		<input checked="" type="checkbox"/> Complete	<input type="checkbox"/> Incomplete
						<input type="checkbox"/> Complete	<input type="checkbox"/> Incomplete
						<input type="checkbox"/> Complete	<input type="checkbox"/> Incomplete
Analysis Method	Delivery Analysis	Sample Return	Remarks				
<input type="radio"/> standard Method <input type="radio"/> Quotation	<input type="radio"/> Mail/Messenger <input type="radio"/> Receive by Hand <input type="radio"/> Report	<input type="radio"/> Yes <input type="radio"/> No (Dispose sample after send analysis report to customer 15 days)					

เอกสารควบคุม

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UNITED ANALYST AND ENGINEERING e-mail : lab@uaeconsultant.com <<mailto:lab@uaeconsultant.com>>

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FOR UAE

CLIENT	: TETRA TECH INC.	ANALYSIS NO.	: T23AF866-0001 - T23AF866-0241	PROJECT CODE	: 23-00305	CLIENT ID	: 16-00432
ADDRESS	: 77 SOI UDOMSUK 39/1 SUKHUMVIT 103 ROAD BANG CHAK BANGKOK 10260	QUOTATION NUMBER	: 2023-001895-R1	SAMPLING BY	: Customer		
TELEPHONE	: +66 (0) 86-990-9863	FAX	:	PAYMENT TERM	: 1 / 1	WITNESS	:
CONTACT PERSON	: Mr.SUKSAN JINANARONG	SECTION	:	UAE. CONTACT	: MissSUDARAT SONGKRATHOK	LOCATION	:
PROJECT NAME	: Analysis of Seawater Quality 1st 2023	SECTION	:				

ITEM	ANALYSIS NUMBER	SAMPLE NAME	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	SAMPLING METHOD	CONTAINER TYPE	QUANTITY	REQUIRED PARAMETER
73	T23AF866-0073	MAWA-3B2-SW-40			SEAWATER	-	40 ml Seawater Vial	1	Attachment
74	T23AF866-0074	MAWA-3B2-SW-B			SEAWATER	-	40 ml Seawater Vial	1	Attachment
75	T23AF866-0075	MAWA-3C2-SW-1			SEAWATER	-	40 ml Seawater Vial	1	Attachment
76	T23AF866-0076	MAWA-3C2-SW-20			SEAWATER	-	40 ml Seawater Vial	1	Attachment
77	T23AF866-0077	MAWA-3C2-SW-40			SEAWATER	-	40 ml Seawater Vial	1	Attachment
78	T23AF866-0078	MAWA-3C2-SW-B			SEAWATER	-	40 ml Seawater Vial	1	Attachment
79	T23AF866-0079	MAWA-4B2X-SW-1			SEAWATER	-	40 ml Seawater Vial	1	Attachment
80	T23AF866-0080	MAWA-4B2X-SW-20			SEAWATER	-	40 ml Seawater Vial	1	Attachment
81	T23AF866-0081	MAWA-4B2X-SW-40			SEAWATER	-	40 ml Seawater Vial	1	Attachment
82	T23AF866-0082	MAWA-4B2X-SW-B			SEAWATER	-	40 ml Seawater Vial	1	Attachment
83	T23AF866-0083	MAWA-EQ			SEAWATER	-	40 ml Seawater Vial	1	Attachment
84	T23AF866-0084	MAWA-WB			SEAWATER	-	40 ml Seawater Vial	1	Attachment

TRANSFER RECORD	NAME	SIGNATURE	DATE	TIME	CHECKMARK RELEASED	CHECKMARK RECEIVED	EXTERNAL SAMPLE CONDITION
1	Mason Lutz	[Signature]	3/4/06	14:16		<input checked="" type="checkbox"/> Complete	<input type="checkbox"/> Incomplete
						<input type="checkbox"/> Complete	<input type="checkbox"/> Incomplete
						<input type="checkbox"/> Complete	<input type="checkbox"/> Incomplete
Analysis Method		Delivery Analysis		Sample Return		Remarks	
<input type="radio"/> standard Method <input type="radio"/> Quation		<input type="radio"/> Mail/Messenger <input type="radio"/> Receive by Hand <input type="radio"/> Report		<input type="radio"/> Yes <input type="radio"/> No (Disposal sample after send analysis report to customer 15 days)			


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Number : 1


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FOR UAE

CLIENT : TETRA TECH INC.					ANALYSIS NO. : T23AF866-0001 - T23AF866-0241		PROJECT CODE : 23-00305		CLIENT ID : 16-00432	
ADDRESS : 77 SOI UDOMSUK 39/1 SUKHUMVIT 103 ROAD BANG CHAK BANGKOK 10260					QUOTATION NUMBER : 2023-001895-R1		SAMPLING BY : Customer			
TELEPHONE : +66 (0) 86-990-9863 FAX :					PAYMENT TERM : 1 / 1		WITNESS :			
CONTACT PERSON : Mr.SUKSAN JINANARONG SECTION :					UAE. CONTACT : MissSUDARAT SONGKRATHOK		LOCATION :			
PROJECT NAME : Analysis of Seawater Quality 1st 2023					SECTION :					

ITEM	ANALYSIS NUMBER	SAMPLE NAME	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	SAMPLING METHOD	CONTAINER TYPE	QUANTITY	REQUIRED PARAMETER
85	T23AF866-0085	MAWB-1B2X-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
86	T23AF866-0086	MAWB-1B2X-SW-1-FD			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
87	T23AF866-0087	MAWB-1B2X-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
88	T23AF866-0088	MAWB-1B2X-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
89	T23AF866-0089	MAWB-1B2X-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
90	T23AF866-0090	MAWB-1C2X-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
91	T23AF866-0091	MAWB-1C2X-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
92	T23AF866-0092	MAWB-1C2X-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
93	T23AF866-0093	MAWB-1C2X-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
94	T23AF866-0094	MAWB-2B2X-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
95	T23AF866-0095	MAWB-2B2X-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
96	T23AF866-0096	MAWB-2B2X-SW-20-FD			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment

TRANSFER RECORD	NAME	SIGNATURE	DATE	TIME	CHECKMARK RELEASED	CHECKMARK RECEIVED	EXTERNAL SAMPLE CONDITION
1	นาย ภูมิ	[Signature]	3/4/66	14.16		[Signature]	<input checked="" type="radio"/> Complete <input type="radio"/> Incomplete
							<input type="radio"/> Complete <input type="radio"/> Incomplete
							<input type="radio"/> Complete <input type="radio"/> Incomplete

Analysis Method	Delivery Analysis	Sample Return	Remarks
<input type="radio"/> standard Method <input type="radio"/> Quotation	<input type="radio"/> Mail/Messenger <input type="radio"/> Receive by Hand <input type="radio"/> Report	<input type="radio"/> Yes <input type="radio"/> No (Disposal sample after send analysis report to customer 15 days)	


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Number : 1


FOR CLIENT
FOR UAE

CLIENT : TETRA TECH INC.	ANALYSIS NO. : T23AF800-0001 - T23AF800-0241	PROJECT CODE : 23-00305	CLIENT ID : 16-00432
ADDRESS : 77 SOI UDOMSUK 39/1 SUKHUMVIT 103 ROAD BANG CHAK BANGKOK 10260	QUOTATION NUMBER : 2023-001895-R1	SAMPLING BY : Customer	
TELEPHONE : +66 (0) 86-990-9863	FAX :	PAYMENT TERM : 1 / 1	WITNESS :
CONTACT PERSON : Mr.SUKSAN JINANARONG	SECTION :	UAE. CONTACT : MissSUDARAT SONGKRATHOK	LOCATION :
PROJECT NAME : Analysis of Seawater Quality 1st 2023	SECTION :		

ITEM	ANALYSIS NUMBER	SAMPLE NAME	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	SAMPLING METHOD	CONTAINER TYPE	QUANTITY	REQUIRED PARAMETER
97	T23AF866-0097	MAWB-2B2X-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
98	T23AF866-0098	MAWB-2B2X-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
99	T23AF866-0099	MAWB-3B2X-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
100	T23AF866-0100	MAWB-3B2X-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
101	T23AF866-0101	MAWB-3B2X-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
102	T23AF866-0102	MAWB-3B2X-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
103	T23AF866-0103	MAWB-3C2-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
104	T23AF866-0104	MAWB-3C2-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
105	T23AF866-0105	MAWB-3C2-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
106	T23AF866-0106	MAWB-3C2-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
107	T23AF866-0107	MAWB-4B2X-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
108	T23AF866-0108	MAWB-4B2X-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment

TRANSFER RECORD	NAME	SIGNATURE	DATE	TIME	CHECKMARK RELEASED	CHECKMARK RECEIVED	EXTERNAL SAMPLE CONDITION
1	Mr. Sudarat Songkrathok	[Signature]	3/4/23	14.16		<input checked="" type="checkbox"/>	<input checked="" type="radio"/> Complete <input type="radio"/> Incomplete
						<input type="checkbox"/>	<input type="radio"/> Complete <input type="radio"/> Incomplete
						<input type="checkbox"/>	<input type="radio"/> Complete <input type="radio"/> Incomplete
Analysis Method	Delivery Analysis	Sample Return			Remarks		
<input type="radio"/> standard Method <input type="radio"/> Quotation	<input type="radio"/> Mail/Messenger <input type="radio"/> Receive by Hand <input type="radio"/> Report	<input type="radio"/> Yes <input type="radio"/> No (Disposal sample after send analysis report to customer 15 days)					


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Number : 1


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FOR UAE

CLIENT : TETRA TECH INC.	ANALYSIS NO. : T23AF866-0001 - T23AF866-0241	PROJECT CODE : 23-00305	CLIENT ID : 16-00432
ADDRESS : 77 SOI UDOMSUK 39/1 SUKHUMVIT 103 ROAD BANG CHAK BANGKOK 10260	QUOTATION NUMBER : 2023-001895-R1	SAMPLING BY : Customer	
TELEPHONE : +66 (0) 86-990-9863 FAX :	PAYMENT TERM : 1 / 1	WITNESS :	
CONTACT PERSON : Mr.SUKSAN JINANARONG SECTION :	UAE CONTACT : MissSUDARAT SONGKRATHOK	LOCATION :	
PROJECT NAME : Analysis of Seawater Quality 1st 2023	SECTION :		

ITEM	ANALYSIS NUMBER	SAMPLE NAME	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	SAMPLING METHOD	CONTAINER TYPE	QUANTITY	REQUIRED PARAMETER
109	T23AF866-0109	MAWB-4B2X-SW-40			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
110	T23AF866-0110	MAWB-4B2X-SW-B			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
111	T23AF866-0111	MAWB-4B2X-SW-B-FD			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
112	T23AF866-0112	MAWC-1B2X-SW-1			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
113	T23AF866-0113	MAWC-1B2X-SW-20			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
114	T23AF866-0114	MAWC-1B2X-SW-40			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
115	T23AF866-0115	MAWC-1B2X-SW-B			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
116	T23AF866-0116	MAWC-1C2-SW-1			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
117	T23AF866-0117	MAWC-1C2-SW-20			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
118	T23AF866-0118	MAWC-1C2-SW-40			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
119	T23AF866-0119	MAWC-1C2-SW-B			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
120	T23AF866-0120	MAWC-2B2X-SW-1			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment

TRANSFER RECORD	NAME	SIGNATURE	DATE	TIME	CHECKMARK RELEASED	CHECKMARK RECEIVED	EXTERNAL SAMPLE CONDITION
1	ม.ร.ว.ค.ม.		2/4/6	14.16			<input checked="" type="radio"/> Complete <input type="radio"/> Incomplete
							<input type="radio"/> Complete <input type="radio"/> Incomplete
							<input type="radio"/> Complete <input type="radio"/> Incomplete
Analysis Method	Delivery Analysis	Sample Return	Remarks				
<input type="radio"/> standard Method <input type="radio"/> Quotion	<input type="radio"/> Mail/Messenger <input type="radio"/> Receive by Hand <input type="radio"/> Report	<input type="radio"/> Yes <input type="radio"/> No (Disposal sample afer send analysis report to customer 15 days)					


United Analyst and Engineering Consultant Co., Ltd.

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CHAIN-OF-CUSTODY

Number : 1


FOR CLIENT
FOR UAE

CLIENT : TETRA TECH INC.	ANALYSIS NO. : T23AF866-0001 - T23AF866-0241	PROJECT CODE : 23-00305	CLIENT ID : 16-00432
ADDRESS : 77 SOI UDOMSUK 39/1 SUKHUMVIT 103 ROAD BANG CHAK BANGKOK 10260	QUOTATION NUMBER : 2023-001895-R1	SAMPLING BY : Customer	
TELEPHONE : +66 (0) 86-990-9863 FAX :	PAYMENT TERM : 1 / 1	WITNESS :	
CONTACT PERSON : Mr.SUKSAN JINANARONG SECTION :	UAE. CONTACT : MissSUDARAT SONGKRATHOK	LOCATION :	
PROJECT NAME : Analysis of Seawater Quality 1st 2023	SECTION :		

ITEM	ANALYSIS NUMBER	SAMPLE NAME	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	SAMPLING METHOD	CONTAINER TYPE	QUANTITY	REQUIRED PARAMETER
121	T23AF866-0121	MAWC-2B2X-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
122	T23AF866-0122	MAWC-2B2X-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
123	T23AF866-0123	MAWC-2B2X-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
124	T23AF866-0124	MAWC-3B2X-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
125	T23AF866-0125	MAWC-3B2X-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
126	T23AF866-0126	MAWC-3B2X-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
127	T23AF866-0127	MAWC-3B2X-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
128	T23AF866-0128	MAWC-3C2-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
129	T23AF866-0129	MAWC-3C2-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
130	T23AF866-0130	MAWC-3C2-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
131	T23AF866-0131	MAWC-3C2-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
132	T23AF866-0132	MAWC-4B2X-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment

TRANSFER RECORD	NAME	SIGNATURE	DATE	TIME	CHECKMARK RELEASED	CHECKMARK RECEIVED	EXTERNAL SAMPLE CONDITION
1	Mr. Suksan Jinanarong	[Signature]	31/6/23	14.16		[Signature]	<input checked="" type="radio"/> Complete <input type="radio"/> Incomplete
							<input type="radio"/> Complete <input type="radio"/> Incomplete
							<input type="radio"/> Complete <input type="radio"/> Incomplete
Analysis Method		Delivery Analysis		Sample Return		Remarks	
<input type="radio"/> standard Method <input type="radio"/> Quotation		<input type="radio"/> Mail/Messenger <input type="radio"/> Receive by Hand <input type="radio"/> Report		<input type="radio"/> Yes <input type="radio"/> No (Disposal sample after send analysis report to customer 15 days)			


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CLIENT : TETRA TECH INC.	ANALYSIS NO. : T23AF866-0001 - T23AF866-0241	PROJECT CODE : 23-00305	CLIENT ID : 16-00432
ADDRESS : 77 SOI UDOMSUK 39/1 SUKHUMVIT 103 ROAD BANG CHAK BANGKOK 10260	QUOTATION NUMBER : 2023-001895-R1	SAMPLING BY : Customer	
TELEPHONE : +66 (0) 86-990-9863 FAX :	PAYMENT TERM : 1 / 1	WITNESS :	
CONTACT PERSON : Mr.SUKSAN JINANARONG SECTION :	UAE. CONTACT : MissSUDARAT SONGKRATHOK	LOCATION :	
PROJECT NAME : Analysis of Seawater Quality 1st 2023	SECTION :		

ITEM	ANALYSIS NUMBER	SAMPLE NAME	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	SAMPLING METHOD	CONTAINER TYPE	QUANTITY	REQUIRED PARAMETER
133	T23AF866-0133	MAWC-4B2X-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
134	T23AF866-0134	MAWC-4B2X-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
135	T23AF866-0135	MAWC-4B2X-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
136	T23AF866-0136	MAWC-4B2X-SW-B-FD			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
137	T23AF866-0137	MAWC-EQ			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
138	T23AF866-0138	MAWC-WB			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
139	T23AF866-0139	MAWD-1B2X-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
140	T23AF866-0140	MAWD-1B2X-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
141	T23AF866-0141	MAWD-1B2X-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
142	T23AF866-0142	MAWD-1B2X-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
143	T23AF866-0143	MAWD-1C2-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
144	T23AF866-0144	MAWD-1C2-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment

TRANSFER RECORD	NAME	SIGNATURE	DATE	TIME	CHECKMARK RELEASED	CHECKMARK RECEIVED	EXTERNAL SAMPLE CONDITION
1	นางสาว นก		3/4/17	14.11		<input checked="" type="checkbox"/> Complete	<input type="checkbox"/> Incomplete
						<input type="checkbox"/> Complete	<input type="checkbox"/> Incomplete
						<input type="checkbox"/> Complete	<input type="checkbox"/> Incomplete
Analysis Method	Delivery Analysis	Sample Return	Remarks				
<input type="radio"/> standard Method <input type="radio"/> Quotion	<input type="radio"/> Mail/Messenger <input type="radio"/> Receive by Hand <input type="radio"/> Report	<input type="radio"/> Yes <input type="radio"/> No (Disposal sample after send analysis report to customer 15 days)					


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CLIENT : TETRA TECH INC.				ANALYSIS NO. : T23AF866-0001 - T23AF866-0241				PROJECT CODE : 23-00305		CLIENT ID : 16-00432	
ADDRESS : 77 SOI UDOMSUK 39/1 SUKHUMVIT 103 ROAD BANG CHAK BANGKOK 10260				QUOTATION NUMBER : 2023-001895-R1				SAMPLING BY : Customer			
TELEPHONE : +66 (0) 86-990-9863				FAX :				PAYMENT TERM : 1 / 1			
CONTACT PERSON : Mr.SUKSAN JINANARONG				SECTION :				WITNESS :			
PROJECT NAME : Analysis of Seawater Quality 1st 2023				UAE CONTACT : MissSUDARAT SONGKRATHOK				LOCATION :			
SECTION :											

ITEM	ANALYSIS NUMBER	SAMPLE NAME	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	SAMPLING METHOD	CONTAINER TYPE	QUANTITY	REQUIRED PARAMETER
145	T23AF866-0145	MAWD-1C2-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
146	T23AF866-0146	MAWD-1C2-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
147	T23AF866-0147	MAWD-2C2X-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
148	T23AF866-0148	MAWD-2C2X-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
149	T23AF866-0149	MAWD-2C2X-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
150	T23AF866-0150	MAWD-2C2X-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
151	T23AF866-0151	MAWD-3B2-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
152	T23AF866-0152	MAWD-3B2-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
153	T23AF866-0153	MAWD-3B2-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
154	T23AF866-0154	MAWD-3B2-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
155	T23AF866-0155	MAWD-3C2X-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
156	T23AF866-0156	MAWD-3C2X-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment

TRANSFER RECORD	NAME	SIGNATURE	DATE	TIME	CHECKMARK RELEASED	CHECKMARK RECEIVED	EXTERNAL SAMPLE CONDITION
1	นาย	นาย	3/4/66	14.16			<input type="radio"/> Complete <input type="radio"/> Incomplete <input type="radio"/> Complete <input type="radio"/> Incomplete <input type="radio"/> Complete <input type="radio"/> Incomplete
Analysis Method		Delivery Analysis		Sample Return		Remarks	
<input type="radio"/> standard Method <input type="radio"/> Quotation		<input type="radio"/> Mail/Messenger <input type="radio"/> Receive by Hand <input type="radio"/> Report		<input type="radio"/> Yes <input type="radio"/> No (Disposal sample after send analysis report to customer 15 days)			


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CLIENT : TETRA TECH INC.	ANALYSIS NO. : T23AF866-0001 - T23AF866-0241	PROJECT CODE : 23-00305	CLIENT ID : 16-00432
ADDRESS : 77 SOI UDOMSUK 39/1 SUKHUMVIT 103 ROAD BANG CHAK BANGKOK 10260	QUOTATION NUMBER : 2023-001895-R1	SAMPLING BY : Customer	
TELEPHONE : +66 (0) 86-990-9863	FAX :	PAYMENT TERM : 1 / 1	WITNESS :
CONTACT PERSON : Mr.SUKSAN JINANARONG	SECTION :	UAE CONTACT : MissSUDARAT SONGKRATHOK	LOCATION :
PROJECT NAME : Analysis of Seawater Quality 1st 2023	SECTION :		

ITEM	ANALYSIS NUMBER	SAMPLE NAME	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	SAMPLING METHOD	CONTAINER TYPE	QUANTITY	REQUIRED PARAMETER
157	T23AF866-0157	MAWD-3C2X-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
158	T23AF866-0158	MAWD-3C2X-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
159	T23AF866-0159	MAWD-4B2X-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
160	T23AF866-0160	MAWD-4B2X-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
161	T23AF866-0161	MAWD-4B2X-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
162	T23AF866-0162	MAWD-4B2X-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
163	T23AF866-0163	CONTROL-3-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
164	T23AF866-0164	CONTROL-3-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
165	T23AF866-0165	CONTROL-3-SW-40			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
166	T23AF866-0166	CONTROL-3-SW-B			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
167	T23AF866-0167	MAWG-1B2X-SW-1			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment
168	T23AF866-0168	MAWG-1B2X-SW-20			SEAWATER	-	ขวด Vial สีขาว 40 มล.	1	Attachment

TRANSFER RECORD	NAME	SIGNATURE	DATE	TIME	CHECKMARK RELEASED	CHECKMARK RECEIVED	EXTERNAL SAMPLE CONDITION
1	นางสาว	นาง	3/4/66	14/16		Complete	<input type="radio"/> Complete <input type="radio"/> Incomplete
						Complete	<input type="radio"/> Complete <input type="radio"/> Incomplete
						Complete	<input type="radio"/> Complete <input type="radio"/> Incomplete
Analysis Method	Delivery Analysis		Sample Return		Remarks		
<input type="radio"/> standard Method <input type="radio"/> Quotation	<input type="radio"/> Mail/Messenger <input type="radio"/> Receive by Hand <input type="radio"/> Report		<input type="radio"/> Yes <input type="radio"/> No (Disposal sample after send analysis report to customer 15 days)				

Attachment

CLIENT ID : 16-00432



COC ID : 1

2023-001895-R1

ITEM	SAMPLE NAME	REQUIRED PARAMETER
43	LAWA-3D1X-SW-1	TPH
44	LAWA-3D1X-SW-20	TPH
45	LAWA-3D1X-SW-40	TPH
46	LAWA-3D1X-SW-B	TPH
47	LAWA-3D2-SW-1	TPH
48	LAWA-3D2-SW-1-FD	TPH
49	LAWA-3D2-SW-20	TPH
50	LAWA-3D2-SW-40	TPH
51	LAWA-3D2-SW-B	TPH
52	LAWA-3D3-SW-1	TPH
53	LAWA-3D3-SW-20	TPH
54	LAWA-3D3-SW-40	TPH
55	LAWA-3D3-SW-B	TPH
56	LAWA-EQ	TPH
57	LAWA-WB	TPH
58	MAWA-1C2-SW-1	TPH
59	MAWA-1C2-SW-20	TPH
60	MAWA-1C2-SW-40	TPH
61	MAWA-1C2-SW-B	TPH
62	MAWA-1CP2-SW-1	TPH
63	MAWA-1CP2-SW-20	TPH
64	MAWA-1CP2-SW-40	TPH
65	MAWA-1CP2-SW-B	TPH
66	MAWA-1CP2-SW-1	TPH
67	MAWA-1CP2-SW-20	TPH
68	MAWA-1CP2-SW-40	TPH
69	MAWA-1CP2-SW-B	TPH
70	MAWA-3B2-SW-1	TPH
71	MAWA-3B2-SW-20	TPH
72	MAWA-3B2-SW-20-FD	TPH
73	MAWA-3B2-SW-40	TPH
74	MAWA-3B2-SW-B	TPH
75	MAWA-3C2-SW-1	TPH
76	MAWA-3C2-SW-20	TPH
77	MAWA-3C2-SW-40	TPH
78	MAWA-3C2-SW-B	TPH
79	MAWA-4B2X-SW-1	TPH
80	MAWA-4B2X-SW-20	TPH
81	MAWA-4B2X-SW-40	TPH
82	MAWA-4B2X-SW-B	TPH
83	MAWA-EQ	TPH
84	MAWA-WB	TPH

Attachment

CLIENT ID : 16-00432



COC ID : 1

2023-001895-R1

ITEM	SAMPLE NAME	REQUIRED PARAMETER
85	MAWB-1B2X-SW-1	TPH
86	MAWB-1B2X-SW-1-FD	TPH
87	MAWB-1B2X-SW-20	TPH
88	MAWB-1B2X-SW-40	TPH
89	MAWB-1B2X-SW-B	TPH
90	MAWB-1C2X-SW-1	TPH
91	MAWB-1C2X-SW-20	TPH
92	MAWB-1C2X-SW-40	TPH
93	MAWB-1C2X-SW-B	TPH
94	MAWB-2B2X-SW-1	TPH
95	MAWB-2B2X-SW-20	TPH
96	MAWB-2B2X-SW-20-FD	TPH
97	MAWB-2B2X-SW-40	TPH
98	MAWB-2B2X-SW-B	TPH
99	MAWB-3B2X-SW-1	TPH
100	MAWB-3B2X-SW-20	TPH
101	MAWB-3B2X-SW-40	TPH
102	MAWB-3B2X-SW-B	TPH
103	MAWB-3C2-SW-1	TPH
104	MAWB-3C2-SW-20	TPH
105	MAWB-3C2-SW-40	TPH
106	MAWB-3C2-SW-B	TPH
107	MAWB-4B2X-SW-1	TPH
108	MAWB-4B2X-SW-20	TPH
109	MAWB-4B2X-SW-40	TPH
110	MAWB-4B2X-SW-B	TPH
111	MAWB-4B2X-SW-B-FD	TPH
112	MAWC-1B2X-SW-1	TPH
113	MAWC-1B2X-SW-20	TPH
114	MAWC-1B2X-SW-40	TPH
115	MAWC-1B2X-SW-B	TPH
116	MAWC-1C2-SW-1	TPH
117	MAWC-1C2-SW-20	TPH
118	MAWC-1C2-SW-40	TPH
119	MAWC-1C2-SW-B	TPH
120	MAWC-2B2X-SW-1	TPH
121	MAWC-2B2X-SW-20	TPH
122	MAWC-2B2X-SW-40	TPH
123	MAWC-2B2X-SW-B	TPH
124	MAWC-3B2X-SW-1	TPH
125	MAWC-3B2X-SW-20	TPH
126	MAWC-3B2X-SW-40	TPH

Attachment

CLIENT ID : 16-00432



COC ID : 1

2023-001895-R1

ITEM	SAMPLE NAME	REQUIRED PARAMETER
127	MAWC-3B2X-SW-B	TPH
128	MAWC-3C2-SW-1	TPH
129	MAWC-3C2-SW-20	TPH
130	MAWC-3C2-SW-40	TPH
131	MAWC-3C2-SW-B	TPH
132	MAWC-4B2X-SW-1	TPH
133	MAWC-4B2X-SW-20	TPH
134	MAWC-4B2X-SW-40	TPH
135	MAWC-4B2X-SW-B	TPH
136	MAWC-4B2X-SW-B-FD	TPH
137	MAWC-EQ	TPH
138	MAWC-WB	TPH
139	MAWD-1B2X-SW-1	TPH
140	MAWD-1B2X-SW-20	TPH
141	MAWD-1B2X-SW-40	TPH
142	MAWD-1B2X-SW-B	TPH
143	MAWD-1C2-SW-1	TPH
144	MAWD-1C2-SW-20	TPH
145	MAWD-1C2-SW-40	TPH
146	MAWD-1C2-SW-B	TPH
147	MAWD-2C2X-SW-1	TPH
148	MAWD-2C2X-SW-20	TPH
149	MAWD-2C2X-SW-40	TPH
150	MAWD-2C2X-SW-B	TPH
151	MAWD-3B2-SW-1	TPH
152	MAWD-3B2-SW-20	TPH
153	MAWD-3B2-SW-40	TPH
154	MAWD-3B2-SW-B	TPH
155	MAWD-3C2X-SW-1	TPH
156	MAWD-3C2X-SW-20	TPH
157	MAWD-3C2X-SW-40	TPH
158	MAWD-3C2X-SW-B	TPH
159	MAWD-4B2X-SW-1	TPH
160	MAWD-4B2X-SW-20	TPH
161	MAWD-4B2X-SW-40	TPH
162	MAWD-4B2X-SW-B	TPH
163	CONTROL-3-SW-1	TPH
164	CONTROL-3-SW-20	TPH
165	CONTROL-3-SW-40	TPH
166	CONTROL-3-SW-B	TPH
167	MAWG-1B2X-SW-1	TPH
168	MAWG-1B2X-SW-20	TPH

CASE NARRATIVE

Project T423.18 - :

All water samples were received and registered by United Analyst and Engineering Consultant Co, Ltd. on March 29, 2023 in a proper preservation condition; sealed cooler with a temperature of 4 °C. Sample conditions are ready for sample testing according to agreed standard test method.

The samples were prepared and analyzed by pre-concentration and fluorescence Spectrophotometric method in accordance with required international test method referred to Intergovernmental Oceanographic Commission (MARPOLMON-P). Analytical batches are in quality control status and trend. Analysis results are measured correctly and precisely against established acceptance criteria.

Overall, the analysis results is traceable, accurate and precise to meet customer's need and requirement. Non-compliance has not observed.

ANALYSIS REPORT

PROJECT NAME : CHEVRON ENVIRONMENTAL MONITORING CAMPAIGN DURING 6 MARCH - 28 MARCH 2023.

CUSTOMER NAME : TETRA TECH INC.

ADDRESS : 77 SOI UDOMSUK 39/1, SUKHUMVIT 103 ROAD, BANGCHAK, PRAKHANONG, BANGKOK 10260.
TEL. 0 2361 3767 FAX 0 2361 3768

SAMPLING SOURCE : -

SAMPLE TYPE : SEAWATER **RECEIVED DATE** : 29-03-2023

SAMPLING DATE : * **ANALYTICAL DATE** : 24-04-2023 - 27-04-2023

SAMPLING TIME : * **ANALYSIS NO.** : **

SAMPLING METHOD : - **WORK NO.** : LAB1895-R1/2023

ANALYZED BY : MR WEERAYUT SARAPAGDEE **REPORT NO.** : L2023-U040666

PROJECT	SAMPLE NAME	ANALYSIS NO.**	MATRIX	SAMPLING DATE*
T423.18	MAWA-1C2-SW-1	T23AF866-0058	SEAWATER	22-03-2023 05:30:00
T423.18	MAWA-1C2-SW-20	T23AF866-0059	SEAWATER	22-03-2023 05:36:00
T423.18	MAWA-1C2-SW-40	T23AF866-0060	SEAWATER	22-03-2023 05:46:00
T423.18	MAWA-1C2-SW-B	T23AF866-0061	SEAWATER	22-03-2023 05:57:00
T423.18	MAWA-1CP2-SW-1	T23AF866-0062	SEAWATER	22-03-2023 12:26:00
T423.18	MAWA-1CP2-SW-20	T23AF866-0063	SEAWATER	22-03-2023 12:32:00
T423.18	MAWA-1CP2-SW-40	T23AF866-0064	SEAWATER	22-03-2023 12:41:00
T423.18	MAWA-1CP2-SW-B	T23AF866-0065	SEAWATER	22-03-2023 12:52:00
T423.18	MAWA-2B2X-SW-1	T23AF866-0066	SEAWATER	22-03-2023 03:52:00
T423.18	MAWA-2B2X-SW-20	T23AF866-0067	SEAWATER	22-03-2023 03:58:00
T423.18	MAWA-2B2X-SW-40	T23AF866-0068	SEAWATER	22-03-2023 04:07:00
T423.18	MAWA-2B2X-SW-B	T23AF866-0069	SEAWATER	22-03-2023 04:19:00
T423.18	MAWA-3B2-SW-1	T23AF866-0070	SEAWATER	22-03-2023 02:12:00
T423.18	MAWA-3B2-SW-20	T23AF866-0071	SEAWATER	22-03-2023 02:19:00
T423.18	MAWA-3B2-SW-20-FD	T23AF866-0072	SEAWATER	22-03-2023 02:26:00
T423.18	MAWA-3B2-SW-40	T23AF866-0073	SEAWATER	22-03-2023 02:35:00
T423.18	MAWA-3B2-SW-B	T23AF866-0074	SEAWATER	22-03-2023 02:48:00
T423.18	MAWA-3C2-SW-1	T23AF866-0075	SEAWATER	22-03-2023 00:21:00
T423.18	MAWA-3C2-SW-20	T23AF866-0076	SEAWATER	22-03-2023 00:27:00
T423.18	MAWA-3C2-SW-40	T23AF866-0077	SEAWATER	22-03-2023 00:36:00
T423.18	MAWA-3C2-SW-B	T23AF866-0078	SEAWATER	22-03-2023 00:47:00
T423.18	MAWA-4B2X-SW-1	T23AF866-0079	SEAWATER	21-03-2023 21:43:00
T423.18	MAWA-4B2X-SW-20	T23AF866-0080	SEAWATER	21-03-2023 21:49:00
T423.18	MAWA-4B2X-SW-40	T23AF866-0081	SEAWATER	21-03-2023 21:57:00
T423.18	MAWA-4B2X-SW-B	T23AF866-0082	SEAWATER	21-03-2023 22:09:00
T423.18	MAWA-EQ	T23AF866-0083	SEAWATER	21-03-2023 21:33:00
T423.18	MAWA-WB	T23AF866-0084	SEAWATER	21-03-2023 21:28:00



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PROJECT	SAMPLE NAME	ANALYSIS NO.**	MATRIX	SAMPLING DATE*
T423.18	MAWB-1B2X-SW-1	T23AF866-0085	SEAWATER	21-03-2023 03:08:00
T423.18	MAWB-1B2X-SW-1-FD	T23AF866-0086	SEAWATER	21-03-2023 03:13:00
T423.18	MAWB-1B2X-SW-20	T23AF866-0087	SEAWATER	21-03-2023 03:19:00
T423.18	MAWB-1B2X-SW-40	T23AF866-0088	SEAWATER	21-03-2023 03:27:00
T423.18	MAWB-1B2X-SW-B	T23AF866-0089	SEAWATER	21-03-2023 03:38:00
T423.18	MAWB-1C2X-SW-1	T23AF866-0090	SEAWATER	20-03-2023 16:42:00
T423.18	MAWB-1C2X-SW-20	T23AF866-0091	SEAWATER	20-03-2023 16:48:00
T423.18	MAWB-1C2X-SW-40	T23AF866-0092	SEAWATER	20-03-2023 16:59:00
T423.18	MAWB-1C2X-SW-B	T23AF866-0093	SEAWATER	20-03-2023 17:11:00
T423.18	MAWB-2B2X-SW-1	T23AF866-0094	SEAWATER	21-03-2023 01:06:00
T423.18	MAWB-2B2X-SW-20	T23AF866-0095	SEAWATER	21-03-2023 01:11:00
T423.18	MAWB-2B2X-SW-20-FD	T23AF866-0096	SEAWATER	21-03-2023 01:18:00
T423.18	MAWB-2B2X-SW-40	T23AF866-0097	SEAWATER	21-03-2023 01:26:00
T423.18	MAWB-2B2X-SW-B	T23AF866-0098	SEAWATER	21-03-2023 0137:00
T423.18	MAWB-3B2X-SW-1	T23AF866-0099	SEAWATER	20-03-2023 19:17:00
T423.18	MAWB-3B2X-SW-20	T23AF866-0100	SEAWATER	20-03-2023 19:23:00
T423.18	MAWB-3B2X-SW-40	T23AF866-0101	SEAWATER	20-03-2023 19:31:00
T423.18	MAWB-3B2X-SW-B	T23AF866-0102	SEAWATER	20-03-2023 19:43:00
T423.18	MAWB-3C2-SW-1	T23AF866-0103	SEAWATER	20-03-2023 10:55:00
T423.18	MAWB-3C2-SW-20	T23AF866-0104	SEAWATER	20-03-2023 11:00:00
T423.18	MAWB-3C2-SW-40	T23AF866-0105	SEAWATER	20-03-2023 11:13:00
T423.18	MAWB-3C2-SW-B	T23AF866-0106	SEAWATER	20-03-2023 11:24:00
T423.18	MAWB-4B2X-SW-1	T23AF866-0107	SEAWATER	20-03-2023 20:25:00
T423.18	MAWB-4B2X-SW-20	T23AF866-0108	SEAWATER	20-03-2023 20:30:00
T423.18	MAWB-4B2X-SW-40	T23AF866-0109	SEAWATER	20-03-2023 20:39:00
T423.18	MAWB-4B2X-SW-B	T23AF866-0110	SEAWATER	20-03-2023 20:50:00
T423.18	MAWB-4B2X-SW-B-FD	T23AF866-0111	SEAWATER	20-03-2023 21:03:00
T423.18	MAWC-1B2X-SW-1	T23AF866-0112	SEAWATER	20-03-2023 02:37:00
T423.18	MAWC-1B2X-SW-20	T23AF866-0113	SEAWATER	20-03-2023 02:43:00
T423.18	MAWC-1B2X-SW-40	T23AF866-0114	SEAWATER	20-03-2023 02:52:00
T423.18	MAWC-1B2X-SW-B	T23AF866-0115	SEAWATER	20-03-2023 03:04:00
T423.18	MAWC-1C2-SW-1	T23AF866-0116	SEAWATER	20-03-2023 04:37:00
T423.18	MAWC-1C2-SW-20	T23AF866-0117	SEAWATER	20-03-2023 04:43:00



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PROJECT	SAMPLE NAME	ANALYSIS NO.**	MATRIX	SAMPLING DATE*
T423.18	MAWC-1C2-SW-40	T23AF866-0118	SEAWATER	20-03-2023 04:51:00
T423.18	MAWC-1C2-SW-B	T23AF866-0119	SEAWATER	20-03-2023 05:03:00
T423.18	MAWC-2B2X-SW-1	T23AF866-0120	SEAWATER	20-03-2023 01:02:00
T423.18	MAWC-2B2X-SW-20	T23AF866-0121	SEAWATER	20-03-2023 01:08:00
T423.18	MAWC-2B2X-SW-40	T23AF866-0122	SEAWATER	20-03-2023 01:17:00
T423.18	MAWC-2B2X-SW-B	T23AF866-0123	SEAWATER	20-03-2023 01:28:00
T423.18	MAWC-3B2X-SW-1	T23AF866-0124	SEAWATER	19-03-2023 20:13:00
T423.18	MAWC-3B2X-SW-20	T23AF866-0125	SEAWATER	19-03-2023 20:23:00
T423.18	MAWC-3B2X-SW-40	T23AF866-0126	SEAWATER	19-03-2023 20:32:00
T423.18	MAWC-3B2X-SW-B	T23AF866-0127	SEAWATER	19-03-2023 20:43:00
T423.18	MAWC-3C2-SW-1	T23AF866-0128	SEAWATER	19-03-2023 19:19:00
T423.18	MAWC-3C2-SW-20	T23AF866-0129	SEAWATER	19-03-2023 19:26:00
T423.18	MAWC-3C2-SW-40	T23AF866-0130	SEAWATER	19-03-2023 19:34:00
T423.18	MAWC-3C2-SW-B	T23AF866-0131	SEAWATER	19-03-2023 19:46:00
T423.18	MAWC-4B2X-SW-1	T23AF866-0132	SEAWATER	19-03-2023 21:42:00
T423.18	MAWC-4B2X-SW-20	T23AF866-0133	SEAWATER	19-03-2023 21:52:00
T423.18	MAWC-4B2X-SW-40	T23AF866-0134	SEAWATER	19-03-2023 22:01:00
T423.18	MAWC-4B2X-SW-B	T23AF866-0135	SEAWATER	19-03-2023 22:12:00
T423.18	MAWC-4B2X-SW-B-FD	T23AF866-0136	SEAWATER	19-03-2023 22:25:00
T423.18	MAWC-EQ	T23AF866-0137	SEAWATER	19-03-2023 19:07:00
T423.18	MAWC-WB	T23AF866-0138	SEAWATER	19-03-2023 19:00:00
T423.18	MAWD-1B2X-SW-1	T23AF866-0139	SEAWATER	23-03-2023 00:50:00
T423.18	MAWD-1B2X-SW-20	T23AF866-0140	SEAWATER	23-03-2023 00:56:00
T423.18	MAWD-1B2X-SW-40	T23AF866-0141	SEAWATER	23-03-2023 01:05:00
T423.18	MAWD-1B2X-SW-B	T23AF866-0142	SEAWATER	23-03-2023 01:17:00
T423.18	MAWD-1C2-SW-1	T23AF866-0143	SEAWATER	23-03-2023 02:22:00
T423.18	MAWD-1C2-SW-20	T23AF866-0144	SEAWATER	23-03-2023 02:28:00
T423.18	MAWD-1C2-SW-40	T23AF866-0145	SEAWATER	23-03-2023 02:37:00
T423.18	MAWD-1C2-SW-B	T23AF866-0146	SEAWATER	23-03-2023 02:48:00
T423.18	MAWD-2C2X-SW-1	T23AF866-0147	SEAWATER	23-03-2023 04:27:00
T423.18	MAWD-2C2X-SW-20	T23AF866-0148	SEAWATER	23-03-2023 04:34:00
T423.18	MAWD-2C2X-SW-40	T23AF866-0149	SEAWATER	23-03-2023 04:43:00
T423.18	MAWD-2C2X-SW-B	T23AF866-0150	SEAWATER	23-03-2023 04:55:00



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PROJECT	SAMPLE NAME	ANALYSIS NO.**	MATRIX	SAMPING DATE*
T423.18	MAWD-3B2-SW-1	T23AF866-0151	SEAWATER	22-03-2023 20:25:00
T423.18	MAWD-3B2-SW-20	T23AF866-0152	SEAWATER	22-03-2023 20:31:00
T423.18	MAWD-3B2-SW-40	T23AF866-0153	SEAWATER	22-03-2023 20:42:00
T423.18	MAWD-3B2-SW-B	T23AF866-0154	SEAWATER	22-03-2023 20:54:00
T423.18	MAWD-3C2X-SW-1	T23AF866-0155	SEAWATER	22-03-2023 19:15:00
T423.18	MAWD-3C2X-SW-20	T23AF866-0156	SEAWATER	22-03-2023 19:24:00
T423.18	MAWD-3C2X-SW-40	T23AF866-0157	SEAWATER	22-03-2023 19:33:00
T423.18	MAWD-3C2X-SW-B	T23AF866-0158	SEAWATER	22-03-2023 19:44:00
T423.18	MAWD-4B2X-SW-1	T23AF866-0159	SEAWATER	22-03-2023 22:18:00
T423.18	MAWD-4B2X-SW-20	T23AF866-0160	SEAWATER	22-03-2023 22:24:00
T423.18	MAWD-4B2X-SW-40	T23AF866-0161	SEAWATER	22-03-2023 22:33:00
T423.18	MAWD-4B2X-SW-B	T23AF866-0162	SEAWATER	22-03-2023 22:44:00



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PROJECT T423.18

ANALYTE	METHOD
DISSOLVED/DISPERSED PETROLEUM HYDROCARBON	IOC MARPOLMON-P

SAMPLE NAME	ANALYSIS NO.	PREPARED	ANALYZED	BATCH	RESULT	MDL	RL	UNITS	DILUTION	NOTES
MAWA-1C2-SW-1	T23AF866-0058	22-03-2023	27-04-2023	335269	0.18	0.04	0.10	ug/L as Chrysene	1	
MAWA-1C2-SW-20	T23AF866-0059	22-03-2023	27-04-2023	335269	0.43	0.04	0.10	ug/L as Chrysene	1	
MAWA-1C2-SW-40	T23AF866-0060	22-03-2023	27-04-2023	335269	0.16	0.04	0.10	ug/L as Chrysene	1	
MAWA-1C2-SW-B	T23AF866-0061	22-03-2023	27-04-2023	335269	0.23	0.04	0.10	ug/L as Chrysene	1	
MAWA-1CP2-SW-1	T23AF866-0062	22-03-2023	27-04-2023	335269	0.48	0.04	0.10	ug/L as Chrysene	1	
MAWA-1CP2-SW-20	T23AF866-0063	22-03-2023	27-04-2023	335269	0.16	0.04	0.10	ug/L as Chrysene	1	
MAWA-1CP2-SW-40	T23AF866-0064	22-03-2023	27-04-2023	335269	0.37	0.04	0.10	ug/L as Chrysene	1	
MAWA-1CP2-SW-B	T23AF866-0065	22-03-2023	27-04-2023	335269	0.19	0.04	0.10	ug/L as Chrysene	1	
MAWA-2B2X-SW-1	T23AF866-0066	22-03-2023	27-04-2023	335269	0.23	0.04	0.10	ug/L as Chrysene	1	
MAWA-2B2X-SW-20	T23AF866-0067	22-03-2023	27-04-2023	335269	0.18	0.04	0.10	ug/L as Chrysene	1	
MAWA-2B2X-SW-40	T23AF866-0068	22-03-2023	27-04-2023	335269	0.18	0.04	0.10	ug/L as Chrysene	1	
MAWA-2B2X-SW-B	T23AF866-0069	22-03-2023	27-04-2023	335269	0.28	0.04	0.10	ug/L as Chrysene	1	
MAWA-3B2-SW-1	T23AF866-0070	22-03-2023	27-04-2023	335265	0.21	0.04	0.10	ug/L as Chrysene	1	
MAWA-3B2-SW-20	T23AF866-0071	22-03-2023	27-04-2023	335265	0.24	0.04	0.10	ug/L as Chrysene	1	
MAWA-3B2-SW-20-FD	T23AF866-0072	22-03-2023	27-04-2023	335265	0.25	0.04	0.10	ug/L as Chrysene	1	
MAWA-3B2-SW-40	T23AF866-0073	22-03-2023	27-04-2023	335265	0.25	0.04	0.10	ug/L as Chrysene	1	
MAWA-3B2-SW-B	T23AF866-0074	22-03-2023	27-04-2023	335265	0.28	0.04	0.10	ug/L as Chrysene	1	
MAWA-3C2-SW-1	T23AF866-0075	22-03-2023	27-04-2023	335269	0.49	0.04	0.10	ug/L as Chrysene	1	
MAWA-3C2-SW-20	T23AF866-0076	22-03-2023	27-04-2023	335269	0.31	0.04	0.10	ug/L as Chrysene	1	
MAWA-3C2-SW-40	T23AF866-0077	22-03-2023	27-04-2023	335269	0.28	0.04	0.10	ug/L as Chrysene	1	
MAWA-3C2-SW-B	T23AF866-0078	22-03-2023	27-04-2023	335269	0.19	0.04	0.10	ug/L as Chrysene	1	
MAWA-4B2X-SW-1	T23AF866-0079	21-03-2023	27-04-2023	335269	0.14	0.04	0.10	ug/L as Chrysene	1	
MAWA-4B2X-SW-20	T23AF866-0080	21-03-2023	27-04-2023	335269	0.22	0.04	0.10	ug/L as Chrysene	1	
MAWA-4B2X-SW-40	T23AF866-0081	21-03-2023	27-04-2023	335269	0.24	0.04	0.10	ug/L as Chrysene	1	
MAWA-4B2X-SW-B	T23AF866-0082	21-03-2023	27-04-2023	335269	0.21	0.04	0.10	ug/L as Chrysene	1	
MAWA-EQ	T23AF866-0083	21-03-2023	27-04-2023	335265	ND	0.04	0.10	ug/L as Chrysene	1	
MAWA-WB	T23AF866-0084	21-03-2023	27-04-2023	335265	ND	0.04	0.10	ug/L as Chrysene	1	
MAWB-1B2X-SW-1	T23AF866-0085	21-03-2023	27-04-2023	335265	0.28	0.04	0.10	ug/L as Chrysene	1	
MAWB-1B2X-SW-1-FD	T23AF866-0086	21-03-2023	27-04-2023	335265	0.28	0.04	0.10	ug/L as Chrysene	1	
MAWB-1B2X-SW-20	T23AF866-0087	21-03-2023	27-04-2023	335265	0.36	0.04	0.10	ug/L as Chrysene	1	

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PROJECT**T423.18**

ANALYTE					METHOD					
DISSOLVED/DISPERSED PETROLEUM HYDROCARBON					IOC MARPOLMON-P					
SAMPLE NAME	ANALYSIS NO.	PREPARED	ANALYZED	BATCH	RESULT	MDL	RL	UNITS	DILUTION	NOTES
MAWB-1B2X-SW-40	T23AF866-0088	21-03-2023	27-04-2023	335265	0.21	0.04	0.10	ug/L as Chrysene	1	
MAWB-1B2X-SW-B	T23AF866-0089	21-03-2023	27-04-2023	335265	0.35	0.04	0.10	ug/L as Chrysene	1	
MAWB-1C2X-SW-1	T23AF866-0090	20-03-2023	26-04-2023	335255	0.06	0.04	0.10	ug/L as Chrysene	1	J
MAWB-1C2X-SW-20	T23AF866-0091	20-03-2023	26-04-2023	335255	0.07	0.04	0.10	ug/L as Chrysene	1	J
MAWB-1C2X-SW-40	T23AF866-0092	20-03-2023	26-04-2023	335255	0.06	0.04	0.10	ug/L as Chrysene	1	J
MAWB-1C2X-SW-B	T23AF866-0093	20-03-2023	26-04-2023	335255	0.10	0.04	0.10	ug/L as Chrysene	1	J
MAWB-2B2X-SW-1	T23AF866-0094	21-03-2023	26-04-2023	335259	0.18	0.04	0.10	ug/L as Chrysene	1	
MAWB-2B2X-SW-20	T23AF866-0095	21-03-2023	26-04-2023	335259	0.15	0.04	0.10	ug/L as Chrysene	1	
MAWB-2B2X-SW-20-FD	T23AF866-0096	21-03-2023	26-04-2023	335259	0.15	0.04	0.10	ug/L as Chrysene	1	
MAWB-2B2X-SW-40	T23AF866-0097	21-03-2023	26-04-2023	335259	0.12	0.04	0.10	ug/L as Chrysene	1	
MAWB-2B2X-SW-B	T23AF866-0098	21-03-2023	26-04-2023	335259	0.14	0.04	0.10	ug/L as Chrysene	1	
MAWB-3B2X-SW-1	T23AF866-0099	20-03-2023	26-04-2023	335255	0.09	0.04	0.10	ug/L as Chrysene	1	J
MAWB-3B2X-SW-20	T23AF866-0100	20-03-2023	26-04-2023	335255	0.06	0.04	0.10	ug/L as Chrysene	1	J
MAWB-3B2X-SW-40	T23AF866-0101	20-03-2023	26-04-2023	335255	0.09	0.04	0.10	ug/L as Chrysene	1	J
MAWB-3B2X-SW-B	T23AF866-0102	20-03-2023	26-04-2023	335255	0.08	0.04	0.10	ug/L as Chrysene	1	J
MAWB-3C2-SW-1	T23AF866-0103	20-03-2023	26-04-2023	335259	0.43	0.04	0.10	ug/L as Chrysene	1	
MAWB-3C2-SW-20	T23AF866-0104	20-03-2023	26-04-2023	335259	0.19	0.04	0.10	ug/L as Chrysene	1	
MAWB-3C2-SW-40	T23AF866-0105	20-03-2023	26-04-2023	335259	0.25	0.04	0.10	ug/L as Chrysene	1	
MAWB-3C2-SW-B	T23AF866-0106	20-03-2023	26-04-2023	335259	0.17	0.04	0.10	ug/L as Chrysene	1	
MAWB-4B2X-SW-1	T23AF866-0107	20-03-2023	26-04-2023	335259	0.06	0.04	0.10	ug/L as Chrysene	1	J
MAWB-4B2X-SW-20	T23AF866-0108	20-03-2023	26-04-2023	335259	0.07	0.04	0.10	ug/L as Chrysene	1	J
MAWB-4B2X-SW-40	T23AF866-0109	20-03-2023	26-04-2023	335259	0.06	0.04	0.10	ug/L as Chrysene	1	J
MAWB-4B2X-SW-B	T23AF866-0110	20-03-2023	26-04-2023	335259	0.11	0.04	0.10	ug/L as Chrysene	1	
MAWB-4B2X-SW-B-FD	T23AF866-0111	20-03-2023	26-04-2023	335259	0.11	0.04	0.10	ug/L as Chrysene	1	
MAWC-1B2X-SW-1	T23AF866-0112	20-03-2023	26-04-2023	335255	0.11	0.04	0.10	ug/L as Chrysene	1	
MAWC-1B2X-SW-20	T23AF866-0113	20-03-2023	26-04-2023	335255	0.18	0.04	0.10	ug/L as Chrysene	1	
MAWC-1B2X-SW-40	T23AF866-0114	20-03-2023	26-04-2023	335255	0.18	0.04	0.10	ug/L as Chrysene	1	
MAWC-1B2X-SW-B	T23AF866-0115	20-03-2023	26-04-2023	335255	0.22	0.04	0.10	ug/L as Chrysene	1	
MAWC-1C2-SW-1	T23AF866-0116	20-03-2023	26-04-2023	335255	0.13	0.04	0.10	ug/L as Chrysene	1	



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PROJECT T423.18

ANALYTE					METHOD					
DISSOLVED/DISPERSED PETROLEUM HYDROCARBON					IOC MARPOLMON-P					
SAMPLE NAME	ANALYSIS NO.	PREPARED	ANALYZED	BATCH	RESULT	MDL	RL	UNITS	DILUTION	NOTES
MAWC-1C2-SW-20	T23AF866-0117	20-03-2023	26-04-2023	335255	0.12	0.04	0.10	ug/L as Chrysene	1	
MAWC-1C2-SW-40	T23AF866-0118	20-03-2023	26-04-2023	335255	0.13	0.04	0.10	ug/L as Chrysene	1	
MAWC-1C2-SW-B	T23AF866-0119	20-03-2023	26-04-2023	335255	0.11	0.04	0.10	ug/L as Chrysene	1	
MAWC-2B2X-SW-1	T23AF866-0120	20-03-2023	24-04-2023	334612	0.29	0.04	0.10	ug/L as Chrysene	1	
MAWC-2B2X-SW-20	T23AF866-0121	20-03-2023	24-04-2023	334612	0.20	0.04	0.10	ug/L as Chrysene	1	
MAWC-2B2X-SW-40	T23AF866-0122	20-03-2023	24-04-2023	334612	0.36	0.04	0.10	ug/L as Chrysene	1	
MAWC-2B2X-SW-B	T23AF866-0123	20-03-2023	24-04-2023	334612	0.32	0.04	0.10	ug/L as Chrysene	1	
MAWC-3B2X-SW-1	T23AF866-0124	19-03-2023	24-04-2023	334612	0.17	0.04	0.10	ug/L as Chrysene	1	
MAWC-3B2X-SW-20	T23AF866-0125	19-03-2023	24-04-2023	334612	0.13	0.04	0.10	ug/L as Chrysene	1	
MAWC-3B2X-SW-40	T23AF866-0126	19-03-2023	24-04-2023	334612	0.22	0.04	0.10	ug/L as Chrysene	1	
MAWC-3B2X-SW-B	T23AF866-0127	19-03-2023	24-04-2023	334612	0.08	0.04	0.10	ug/L as Chrysene	1	J
MAWC-3C2-SW-1	T23AF866-0128	19-03-2023	24-04-2023	334612	0.19	0.04	0.10	ug/L as Chrysene	1	
MAWC-3C2-SW-20	T23AF866-0129	19-03-2023	24-04-2023	334612	0.39	0.04	0.10	ug/L as Chrysene	1	
MAWC-3C2-SW-40	T23AF866-0130	19-03-2023	24-04-2023	334612	0.12	0.04	0.10	ug/L as Chrysene	1	
MAWC-3C2-SW-B	T23AF866-0131	19-03-2023	24-04-2023	334612	0.16	0.04	0.10	ug/L as Chrysene	1	
MAWC-4B2X-SW-1	T23AF866-0132	19-03-2023	26-04-2023	335255	0.11	0.04	0.10	ug/L as Chrysene	1	
MAWC-4B2X-SW-20	T23AF866-0133	19-03-2023	26-04-2023	335255	0.08	0.04	0.10	ug/L as Chrysene	1	J
MAWC-4B2X-SW-40	T23AF866-0134	19-03-2023	26-04-2023	335255	0.13	0.04	0.10	ug/L as Chrysene	1	
MAWC-4B2X-SW-B	T23AF866-0135	19-03-2023	26-04-2023	335255	0.07	0.04	0.10	ug/L as Chrysene	1	J
MAWC-4B2X-SW-B-FD	T23AF866-0136	19-03-2023	26-04-2023	335255	0.08	0.04	0.10	ug/L as Chrysene	1	J
MAWC-EQ	T23AF866-0137	19-03-2023	24-04-2023	334612	ND	0.04	0.10	ug/L as Chrysene	1	
MAWC-WB	T23AF866-0138	19-03-2023	24-04-2023	334612	ND	0.04	0.10	ug/L as Chrysene	1	
MAWD-1B2X-SW-1	T23AF866-0139	23-03-2023	27-04-2023	335280	0.31	0.04	0.10	ug/L as Chrysene	1	
MAWD-1B2X-SW-20	T23AF866-0140	23-03-2023	27-04-2023	335280	0.21	0.04	0.10	ug/L as Chrysene	1	
MAWD-1B2X-SW-40	T23AF866-0141	23-03-2023	27-04-2023	335280	0.32	0.04	0.10	ug/L as Chrysene	1	
MAWD-1B2X-SW-B	T23AF866-0142	23-03-2023	27-04-2023	335280	0.26	0.04	0.10	ug/L as Chrysene	1	
MAWD-1C2-SW-1	T23AF866-0143	23-03-2023	27-04-2023	335280	0.18	0.04	0.10	ug/L as Chrysene	1	
MAWD-1C2-SW-20	T23AF866-0144	23-03-2023	27-04-2023	335280	0.21	0.04	0.10	ug/L as Chrysene	1	
MAWD-1C2-SW-40	T23AF866-0145	23-03-2023	27-04-2023	335280	0.30	0.04	0.10	ug/L as Chrysene	1	



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PROJECT T423.18

ANALYTE					METHOD					
DISSOLVED/DISPERSED PETROLEUM HYDROCARBON					IOC MARPOLMON-P					
SAMPLE NAME	ANALYSIS NO.	PREPARED	ANALYZED	BATCH	RESULT	MDL	RL	UNITS	DILUTION	NOTES
MAWD-1C2-SW-B	T23AF866-0146	23-03-2023	27-04-2023	335280	0.29	0.04	0.10	ug/L as Chrysene	1	
MAWD-2C2X-SW-1	T23AF866-0147	23-03-2023	27-04-2023	335285	0.29	0.04	0.10	ug/L as Chrysene	1	
MAWD-2C2X-SW-20	T23AF866-0148	23-03-2023	27-04-2023	335285	0.30	0.04	0.10	ug/L as Chrysene	1	
MAWD-2C2X-SW-40	T23AF866-0149	23-03-2023	27-04-2023	335285	0.23	0.04	0.10	ug/L as Chrysene	1	
MAWD-2C2X-SW-B	T23AF866-0150	23-03-2023	27-04-2023	335285	0.25	0.04	0.10	ug/L as Chrysene	1	
MAWD-3B2-SW-1	T23AF866-0151	22-03-2023	27-04-2023	335280	0.27	0.04	0.10	ug/L as Chrysene	1	
MAWD-3B2-SW-20	T23AF866-0152	22-03-2023	27-04-2023	335280	0.16	0.04	0.10	ug/L as Chrysene	1	
MAWD-3B2-SW-40	T23AF866-0153	22-03-2023	27-04-2023	335280	0.23	0.04	0.10	ug/L as Chrysene	1	
MAWD-3B2-SW-B	T23AF866-0154	22-03-2023	27-04-2023	335280	0.20	0.04	0.10	ug/L as Chrysene	1	
MAWD-3C2X-SW-1	T23AF866-0155	22-03-2023	27-04-2023	335280	0.32	0.04	0.10	ug/L as Chrysene	1	
MAWD-3C2X-SW-20	T23AF866-0156	22-03-2023	27-04-2023	335280	0.28	0.04	0.10	ug/L as Chrysene	1	
MAWD-3C2X-SW-40	T23AF866-0157	22-03-2023	27-04-2023	335280	0.32	0.04	0.10	ug/L as Chrysene	1	
MAWD-3C2X-SW-B	T23AF866-0158	22-03-2023	27-04-2023	335280	0.21	0.04	0.10	ug/L as Chrysene	1	
MAWD-4B2X-SW-1	T23AF866-0159	22-03-2023	27-04-2023	335280	0.32	0.04	0.10	ug/L as Chrysene	1	
MAWD-4B2X-SW-20	T23AF866-0160	22-03-2023	27-04-2023	335280	0.25	0.04	0.10	ug/L as Chrysene	1	
MAWD-4B2X-SW-40	T23AF866-0161	22-03-2023	27-04-2023	335280	0.31	0.04	0.10	ug/L as Chrysene	1	
MAWD-4B2X-SW-B	T23AF866-0162	22-03-2023	27-04-2023	335280	0.26	0.04	0.10	ug/L as Chrysene	1	

QUALITY CONTROL

PROJECT T423.18

ANALYTE	METHOD
DISSOLVED/DISPERSED PETROLEUM HYDROCARBON	IOC MARPOLMON-P

BATCH 334612 PREPARED 18-03-2023 ANALYZED 24-04-2023

QC TYPE	ANALYSIS NO.	RESULT	MDL	RL	UNITS	SOURCE RESULT	SPIKE LEVEL	%REC	%REC LIMITS	RPD	RPD LIMIT	NOTES
Blank		ND	0.04	0.10	ug/L as Chrysene							
CCS		0.51	0.04	0.10	ug/L as Chrysene		0.50	102	90-110			
CCV		0.49	0.04	0.10	ug/L as Chrysene		0.50	99	90-110	4.00	20	
LCS		0.55	0.04	0.10	ug/L as Chrysene		0.59	93	80-120			
LCS Dup		0.54	0.04	0.10	ug/L as Chrysene		0.59	92	80-120	1.85	20	
Sample	T23AF866-0026	0.30	0.04	0.10	ug/L as Chrysene							
Sample LabDup	T23AF866-0026.1	0.29	0.04	0.10	ug/L as Chrysene					3.33	20	
Matrix Spike		0.67	0.04	0.10	ug/L as Chrysene	0.17	0.59	85	80-120			
Matrix Spike Dup		0.67	0.04	0.10	ug/L as Chrysene	T23AF866-0124	0.58	86	80-120	0.00	20	

BATCH 335255 PREPARED 19-03-2023 ANALYZED 26-04-2023

QC TYPE	ANALYSIS NO.	RESULT	MDL	RL	UNITS	SOURCE RESULT	SPIKE LEVEL	%REC	%REC LIMITS	RPD	RPD LIMIT	NOTES
Blank		ND	0.04	0.10	ug/L as Chrysene							
CCS		0.49	0.04	0.10	ug/L as Chrysene		0.50	99	90-110			
CCV		0.50	0.04	0.10	ug/L as Chrysene		0.50	100	90-110	2.00	20	
LCS		0.55	0.04	0.10	ug/L as Chrysene		0.59	93	80-120			
LCS Dup		0.54	0.04	0.10	ug/L as Chrysene		0.59	92	80-120	1.85	20	
Sample	T23AF866-0132	0.11	0.04	0.10	ug/L as Chrysene							
Sample LabDup	T23AF866-0132.1	0.12	0.04	0.10	ug/L as Chrysene					8.33	20	
Matrix Spike		0.58	0.04	0.10	ug/L as Chrysene	0.07	0.59	86	80-120			
Matrix Spike Dup		0.56	0.04	0.10	ug/L as Chrysene	T23AF866-0091	0.59	83	80-120	3.51	20	

QUALITY CONTROL

PROJECT T423.18

ANALYTE						METHOD						
DISSOLVED/DISPERSED PETROLEUM HYDROCARBON						IOC MARPOLMON-P						
BATCH 335259		PREPARED 20-03-2023			ANALYZED		26-04-2023					

QC TYPE	ANALYSIS NO.	RESULT	MDL	RL	UNITS	SOURCE RESULT	SPIKE LEVEL	%REC	%REC LIMITS	RPD	RPD LIMIT	NOTES
Blank		ND	0.04	0.10	ug/L as Chrysene							
CCS		0.50	0.04	0.10	ug/L as Chrysene		0.50	100	90-110			
CCV		0.51	0.04	0.10	ug/L as Chrysene		0.50	101	90-110	2.00	20	
LCS		0.56	0.04	0.10	ug/L as Chrysene		0.58	97	80-120			
LCS Dup		0.56	0.04	0.10	ug/L as Chrysene		0.58	97	80-120	0.00	20	
Sample	T23AF866-0104	0.19	0.04	0.10	ug/L as Chrysene							
Sample LabDup	T23AF866-0104.1	0.18	0.04	0.10	ug/L as Chrysene					5.55	20	
Matrix Spike		0.67	0.04	0.10	ug/L as Chrysene	0.11	0.59	95	80-120			
Matrix Spike Dup		0.66	0.04	0.10	ug/L as Chrysene	T23AF866-0173	0.59	93	80-120	1.52	20	

BATCH 335265 PREPARED 21-03-2023 ANALYZED 27-04-2023

QC TYPE	ANALYSIS NO.	RESULT	MDL	RL	UNITS	SOURCE RESULT	SPIKE LEVEL	%REC	%REC LIMITS	RPD	RPD LIMIT	NOTES
Blank		ND	0.04	0.10	ug/L as Chrysene							
CCS		0.51	0.04	0.10	ug/L as Chrysene		0.50	104	90-110			
CCV		0.50	0.04	0.10	ug/L as Chrysene		0.50	101	90-110	2.00	20	
LCS		0.56	0.04	0.10	ug/L as Chrysene		0.59	95	80-120			
LCS Dup		0.57	0.04	0.10	ug/L as Chrysene		0.59	97	80-120	1.79	20	
Sample	T23AF866-0089	0.35	0.04	0.10	ug/L as Chrysene							
Sample LabDup	T23AF866-0089.1	0.34	0.04	0.10	ug/L as Chrysene					2.94	20	
Matrix Spike		0.87	0.04	0.10	ug/L as Chrysene	0.35	0.58	90	80-120			
Matrix Spike Dup		0.87	0.04	0.10	ug/L as Chrysene	T23AF866-0169	0.58	90	80-120	0.00	20	

QUALITY CONTROL

PROJECT T423.18

ANALYTE						METHOD						
DISSOLVED/DISPERSED PETROLEUM HYDROCARBON						IOC MARPOLMON-P						
BATCH 335269		PREPARED 21-03-2023			ANALYZED		27-04-2023					

QC TYPE	ANALYSIS NO.	RESULT	MDL	RL	UNITS	SOURCE RESULT	SPIKE LEVEL	%REC	%REC LIMITS	RPD	RPD LIMIT	NOTES
Blank		ND	0.04	0.10	ug/L as Chrysene							
CCS		0.51	0.04	0.10	ug/L as Chrysene		0.50	102	90-110			
CCV		0.49	0.04	0.10	ug/L as Chrysene		0.50	99	90-110	4.00	20	
LCS		0.58	0.04	0.10	ug/L as Chrysene		0.59	98	80-120			
LCS Dup		0.57	0.04	0.10	ug/L as Chrysene		0.59	97	80-120	1.72	20	
Sample	T23AF866-0061	0.23	0.04	0.10	ug/L as Chrysene							
Sample LabDup	T23AF866-0061.1	0.22	0.04	0.10	ug/L as Chrysene					4.55	20	
Matrix Spike		0.78	0.04	0.10	ug/L as Chrysene	0.28	0.59	85	80-120			
Matrix Spike Dup		0.79	0.04	0.10	ug/L as Chrysene	T23AF866-0069	0.58	88	80-120	1.28	20	

BATCH 335280 PREPARED 22-03-2023 ANALYZED 27-04-2023

QC TYPE	ANALYSIS NO.	RESULT	MDL	RL	UNITS	SOURCE RESULT	SPIKE LEVEL	%REC	%REC LIMITS	RPD	RPD LIMIT	NOTES
Blank		ND	0.04	0.10	ug/L as Chrysene							
CCS		0.50	0.04	0.10	ug/L as Chrysene		0.50	99	90-110			
CCV		0.49	0.04	0.10	ug/L as Chrysene		0.50	97	90-110	2.00	20	
LCS		0.57	0.04	0.10	ug/L as Chrysene		0.59	97	80-120			
LCS Dup		0.57	0.04	0.10	ug/L as Chrysene		0.59	97	80-120	0.00	20	
Sample	T23AF866-0152	0.16	0.04	0.10	ug/L as Chrysene							
Sample LabDup	T23AF866-0152.1	0.16	0.04	0.10	ug/L as Chrysene					0.00	20	
Matrix Spike		0.88	0.04	0.10	ug/L as Chrysene	0.32	0.58	97	80-120			
Matrix Spike Dup		0.89	0.04	0.10	ug/L as Chrysene	T23AF866-0155	0.59	97	80-120	1.14	20	

QUALITY CONTROL

PROJECT T423.18

ANALYTE						METHOD							
DISSOLVED/DISPERSED PETROLEUM HYDROCARBON						IOC MARPOLMON-P							
BATCH 335285		PREPARED 23-03-2023			ANALYZED		27-04-2023						
QC TYPE	ANALYSIS NO.	RESULT	MDL	RL	UNITS	SOURCE RESULT	SPIKE LEVEL	%REC	%REC LIMITS	RPD	RPD LIMIT	NOTES	
Blank		ND	0.04	0.10	ug/L as Chrysene								
CCS		0.50	0.04	0.10	ug/L as Chrysene		0.50	100	90-110				
CCV		0.50	0.04	0.10	ug/L as Chrysene		0.50	100	90-110	0.00	20		
LCS		0.59	0.04	0.10	ug/L as Chrysene		0.59	100	80-120				
LCS Dup		0.58	0.04	0.10	ug/L as Chrysene		0.59	98	80-120	1.72	20		
Sample	T23AF866-0163	0.21	0.04	0.10	ug/L as Chrysene								
Sample LabDup	T23AF866-0163.1	0.21	0.04	0.10	ug/L as Chrysene					0.00	20		
Matrix Spike		0.84	0.04	0.10	ug/L as Chrysene	0.29	0.58	95	80-120				
Matrix Spike Dup		0.86	0.04	0.10	ug/L as Chrysene	T23AF866-0164	0.59	97	80-120	2.35	20		

NOTES AND DEFINITIONS :

ND Analyte NOT DETECTED at or above the MDL

Karnphong B.

(MR KARNPHONG BOONPUANG)

TECHNICAL MANAGEMENT

16-05-2023

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)

LABORATORY SUPERVISOR

16-05-2023

DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL.

REPORTED ANALYSIS REFERS TO SUBMITTED SAMPLE ONLY.

July 02, 2023

Dr. Ted Donn

Tetra Tech, Inc.

3697 Mt. Diablo Blvd., Suite 150, Lafayette, CA 94549

RE: Submittal of laboratory analysis report for Project T423.19, DDPH Analysis of seawater

This covered letter is to submit laboratory analysis report for Project T423.19, DDPH Analysis of seawater service provided according to the UAE Quotation No. 2023-001895-R1 dated on February 27th, 2023.

It includes analysis results, chain of custody records, and case narrative for this service. Overall, the service is complete against customer's requirements on traceability, and quality control and assurance.

If you have any question concerning this report, please feel free to contact me.

Sincerely,



Piyapat Suttamanutwong

Laboratory and Research Development Manager

Ship to:
Piyapat S.
UAE Consultant Co., Ltd.
3 Soi Udomsuk 41, Sukhumvit Rd
Bangchak, Phrakhanong, Bangkok

CHAIN OF CUSTODY

Dr. Ted Donn
Tetra Tech Inc.
3697 Mt. Diablo Blvd., Suite 150
Lafayette, CA
ted.donn@tetrattech.com

General Notes:

Please report all results to the MDL, J-flag results between MDL and RL
Please report results and invoice separately for each Project ID
Please report results in pdf format with Excel EDD deliverable
LabDup, MS, MSD samples are for laboratory; Not to be billed to TetraTech

Project	SampleID	Medium	Preservation	Date	Time	DDPH
T423.18	MAWD-4B2X-SW-20	SW	COLD	22-Mar-23	22:24	1
T423.18	MAWD-4B2X-SW-40	SW	COLD	22-Mar-23	22:33	1
T423.18	MAWD-4B2X-SW-B	SW	COLD	22-Mar-23	22:44	1

T423.19	Control-3-SW-1	SW	COLD	23-Mar-23	19:18	1
T423.19	Control-3-SW-20	SW	COLD	23-Mar-23	19:27	1
T423.19	Control-3-SW-40	SW	COLD	23-Mar-23	19:39	1
T423.19	Control-3-SW-B	SW	COLD	23-Mar-23	19:50	1
T423.19	MAWG-1B2X-SW-1	SW	COLD	21-Mar-23	15:44	1
T423.19	MAWG-1B2X-SW-20	SW	COLD	21-Mar-23	15:50	1
T423.19	MAWG-1B2X-SW-40	SW	COLD	21-Mar-23	16:01	1
T423.19	MAWG-1B2X-SW-B	SW	COLD	21-Mar-23	16:16	1
T423.19	MAWG-3B2X-SW-1	SW	COLD	21-Mar-23	5:13	1
T423.19	MAWG-3B2X-SW-1-FD	SW	COLD	21-Mar-23	5:18	1
T423.19	MAWG-3B2X-SW-20	SW	COLD	21-Mar-23	5:24	1
T423.19	MAWG-3B2X-SW-40	SW	COLD	21-Mar-23	5:39	1
T423.19	MAWG-3B2X-SW-B	SW	COLD	21-Mar-23	5:50	1
T423.19	MAWG-EQ	SW	COLD	21-Mar-23	4:05	1
T423.19	MAWG-WB	SW	COLD	21-Mar-23	5:00	1

T423.21	TFPSO-1B2-SW-1	SW	COLD	25-Mar-23	2:57	1
T423.21	TFPSO-1B2-SW-20	SW	COLD	25-Mar-23	3:04	1
T423.21	TFPSO-1B2-SW-20-FD	SW	COLD	25-Mar-23	3:10	1
T423.21	TFPSO-1B2-SW-40	SW	COLD	25-Mar-23	3:17	1
T423.21	TFPSO-1B2-SW-B	SW	COLD	25-Mar-23	3:28	1
T423.21	TFPSO-3B2-SW-1	SW	COLD	25-Mar-23	4:51	1
T423.21	TFPSO-3B2-SW-20	SW	COLD	25-Mar-23	4:57	1
T423.21	TFPSO-3B2-SW-40	SW	COLD	25-Mar-23	5:05	1
T423.21	TFPSO-3B2-SW-B	SW	COLD	25-Mar-23	5:21	1
T423.21	TFPSO-EQ	SW	COLD	25-Mar-23	1:00	1
T423.21	TFPSO-WB	SW	COLD	25-Mar-23	1:05	1
T423.21	YAREF-SW-1	SW	COLD	25-Mar-23	12:15	1
T423.21	YAREF-SW-20	SW	COLD	25-Mar-23	12:23	1
T423.21	YAREF-SW-40	SW	COLD	25-Mar-23	12:30	1
T423.21	YAREF-SW-B	SW	COLD	25-Mar-23	12:41	1

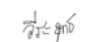
T423.17	CBREF-SW-1	SW	COLD	25-Mar-23	17:03	1
T423.17	CBREF-SW-20	SW	COLD	25-Mar-23	17:10	1
T423.17	CBREF-SW-40	SW	COLD	25-Mar-23	17:18	1
T423.17	CBREF-SW-B	SW	COLD	25-Mar-23	17:30	1

Relinquished by:


27 Mar 2023

Relinquished by:

Received by:


29 Mar 2023

Received by:


United Analyst and Engineering Consultant Co., Ltd.

3 Soi Udomsuk 41, Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260 Tel. : 0-2763-2828, Fax. : 0-2763-2800

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CONSULTANT COMPANY LIMITED

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 <<http://www.uaeconsultant.com>>


CHAIN-OF-CUSTODY

Number : 1


FOR CLIENT
FOR UAE

CLIENT : TETRA TECH INC.	ANALYSIS NO. : T23AF866-0001 - T23AF866-0241	PROJECT CODE : 23-00305	CLIENT ID : 16-00432
ADDRESS : 77 SOI UDOMSUK 39/1 SUKHUMVIT 103 ROAD BANG CHAK BANGKOK 10260	QUOTATION NUMBER : 2023-001895-R1	SAMPLING BY : Customer	
TELEPHONE : +66 (0) 86-990-9863 FAX :	PAYMENT TERM : 1 / 1	WITNESS :	
CONTACT PERSON : Mr.SUKSAN JINANARONG SECTION :	UAE CONTACT : MissSUDARAT SONGKRATHOK	LOCATION :	
PROJECT NAME : Analysis of Seawater Quality 1st 2023	SECTION :		

ITEM	ANALYSIS NUMBER	SAMPLE NAME	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	SAMPLING METHOD	CONTAINER TYPE	QUANTITY	REQUIRED PARAMETER
157	T23AF866-0157	MAWD-3C2X-SW-40			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
158	T23AF866-0158	MAWD-3C2X-SW-B			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
159	T23AF866-0159	MAWD-4B2X-SW-1			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
160	T23AF866-0160	MAWD-4B2X-SW-20			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
161	T23AF866-0161	MAWD-4B2X-SW-40			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
162	T23AF866-0162	MAWD-4B2X-SW-B			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
163	T23AF866-0163	CONTROL-3-SW-1			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
164	T23AF866-0164	CONTROL-3-SW-20			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
165	T23AF866-0165	CONTROL-3-SW-40			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
166	T23AF866-0166	CONTROL-3-SW-B			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
167	T23AF866-0167	MAWG-1B2X-SW-1			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
168	T23AF866-0168	MAWG-1B2X-SW-20			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment

TRANSFER RECORD	NAME		SIGNATURE	DATE	TIME	CHECKMARK RELEASED	CHECKMARK RECEIVED	EXTERNAL SAMPLE CONDITION
1	นางสาว	นาง		3/4/66	14/16		<input checked="" type="checkbox"/>	<input type="radio"/> Complete <input type="radio"/> Incomplete
								<input type="radio"/> Complete <input type="radio"/> Incomplete
								<input type="radio"/> Complete <input type="radio"/> Incomplete
Analysis Method		Delivery Analysis		Sample Return			Remarks	
<input type="radio"/> standard Method <input type="radio"/> Quation		<input type="radio"/> Mail/Messenger <input type="radio"/> Receive by Hand <input type="radio"/> Report		<input type="radio"/> Yes <input type="radio"/> No (Disposal sample afer send analysis report to customer 15 days)				


United Analyst and Engineering Consultant Co., Ltd.

3 Soi Udomsuk 41, Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260 Tel. : 0-2763-2828, Fax. : 0-2763-2800

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CHAIN-OF-CUSTODY

Number : 1


FOR CLIENT
FOR UAE

CLIENT : TETRA TECH INC.	ANALYSIS NO. : T23AF866-0001 - T23AF866-0241	PROJECT CODE : 23-00305	CLIENT ID : 16-00432
ADDRESS : 77 SOI UDOMSUK 39/1 SUKHUMVIT 103 ROAD BANG CHAK BANGKOK 10260	QUOTATION NUMBER : 2023-001895-R1	SAMPLING BY : Customer	
TELEPHONE : +66 (0) 86-990-9863 FAX :	PAYMENT TERM : 1 / 1	WITNESS :	
CONTACT PERSON : Mr.SUKSAN JINANARONG SECTION :	UAE CONTACT : MissSUDARAT SONGKRATHOK	LOCATION :	
PROJECT NAME : Analysis of Seawater Quality 1st 2023	SECTION :		

ITEM	ANALYSIS NUMBER	SAMPLE NAME	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	SAMPLING METHOD	CONTAINER TYPE	QUANTITY	REQUIRED PARAMETER
169	T23AF866-0169	MAWG-1B2X-SW-40			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
170	T23AF866-0170	MAWG-1B2X-SW-B			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
171	T23AF866-0171	MAWG-3B2X-SW-1			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
172	T23AF866-0172	MAWG-3B2X-SW-1-FD			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
173	T23AF866-0173	MAWG-3B2X-SW-20			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
174	T23AF866-0174	MAWG-3B2X-SW-40			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
175	T23AF866-0175	MAWG-3B2X-SW-B			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
176	T23AF866-0176	MAWG-EQ			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
177	T23AF866-0177	MAWG-WB			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
178	T23AF866-0178	TFPSO-1B2-SW-1			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
179	T23AF866-0179	TFPSO-1B2-SW-20			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment
180	T23AF866-0180	TFPSO-1B2-SW-20-FD			SEAWATER	-	ขวด Vial สีชา 40 มล.	1	Attachment

TRANSFER RECORD	NAME	SIGNATURE	DATE	TIME	CHECKMARK RELEASED	CHECKMARK RECEIVED	EXTERNAL SAMPLE CONDITION
1	M. S. J.	U. J.	3/4/66	14.16		<input checked="" type="checkbox"/> Complete	<input type="checkbox"/> Incomplete
						<input type="checkbox"/> Complete	<input type="checkbox"/> Incomplete
						<input type="checkbox"/> Complete	<input type="checkbox"/> Incomplete
Analysis Method	Delivery Analysis	Sample Return	Remarks				
<input type="radio"/> standard Method <input type="radio"/> Quotation	<input type="radio"/> Mail/Messenger <input type="radio"/> Receive by Hand <input type="radio"/> Report	<input type="radio"/> Yes <input type="radio"/> No (Disposal sample after send analysis report to customer 15 days)					

Attachment

CLIENT ID : 16-00432



COC ID : 1

2023-001895-R1

ITEM	SAMPLE NAME	REQUIRED PARAMETER
127	MAWC-3B2X-SW-B	TPH
128	MAWC-3C2-SW-1	TPH
129	MAWC-3C2-SW-20	TPH
130	MAWC-3C2-SW-40	TPH
131	MAWC-3C2-SW-B	TPH
132	MAWC-4B2X-SW-1	TPH
133	MAWC-4B2X-SW-20	TPH
134	MAWC-4B2X-SW-40	TPH
135	MAWC-4B2X-SW-B	TPH
136	MAWC-4B2X-SW-B-FD	TPH
137	MAWC-EQ	TPH
138	MAWC-WB	TPH
139	MAWD-1B2X-SW-1	TPH
140	MAWD-1B2X-SW-20	TPH
141	MAWD-1B2X-SW-40	TPH
142	MAWD-1B2X-SW-B	TPH
143	MAWD-1C2-SW-1	TPH
144	MAWD-1C2-SW-20	TPH
145	MAWD-1C2-SW-40	TPH
146	MAWD-1C2-SW-B	TPH
147	MAWD-2C2X-SW-1	TPH
148	MAWD-2C2X-SW-20	TPH
149	MAWD-2C2X-SW-40	TPH
150	MAWD-2C2X-SW-B	TPH
151	MAWD-3B2-SW-1	TPH
152	MAWD-3B2-SW-20	TPH
153	MAWD-3B2-SW-40	TPH
154	MAWD-3B2-SW-B	TPH
155	MAWD-3C2X-SW-1	TPH
156	MAWD-3C2X-SW-20	TPH
157	MAWD-3C2X-SW-40	TPH
158	MAWD-3C2X-SW-B	TPH
159	MAWD-4B2X-SW-1	TPH
160	MAWD-4B2X-SW-20	TPH
161	MAWD-4B2X-SW-40	TPH
162	MAWD-4B2X-SW-B	TPH
163	CONTROL-3-SW-1	TPH
164	CONTROL-3-SW-20	TPH
165	CONTROL-3-SW-40	TPH
166	CONTROL-3-SW-B	TPH
167	MAWG-1B2X-SW-1	TPH
168	MAWG-1B2X-SW-20	TPH

Attachment

CLIENT ID : 16-00432



COC ID : 1

2023-001895-R1

ITEM	SAMPLE NAME	REQUIRED PARAMETER
169	MAWG-1B2X-SW-40	TPH
170	MAWG-1B2X-SW-B	TPH
171	MAWG-3B2X-SW-1	TPH
172	MAWG-3B2X-SW-1-FD	TPH
173	MAWG-3B2X-SW-20	TPH
174	MAWG-3B2X-SW-40	TPH
175	MAWG-3B2X-SW-B	TPH
176	MAWG-EQ	TPH
177	MAWG-WB	TPH
178	TFPSO-1B2-SW-1	TPH
179	TFPSO-1B2-SW-20	TPH
180	TFPSO-1B2-SW-20-FD	TPH
181	TFPSO-1B2-SW-40	TPH
182	TFPSO-1B2-SW-B	TPH
183	TFPSO-3B2-SW-1	TPH
184	TFPSO-3B2-SW-20	TPH
185	TFPSO-3B2-SW-40	TPH
186	TFPSO-3B2-SW-B	TPH
187	TFPSO-EQ	TPH
188	TFPSO-WB	TPH
189	YAREF-SW-1	TPH
190	YAREF-SW-20	TPH
191	YAREF-SW-40	TPH
192	YAREF-SW-B	TPH
193	CBREF-SW-1	TPH
194	CBREF-SW-20	TPH
195	CBREF-SW-40	TPH
196	CBREF-SW-B	TPH
197	YUWA-1B2X-SW-1	TPH
198	YUWA-1B2X-SW-20	TPH
199	YUWA-1B2X-SW-40	TPH
200	YUWA-1B2X-SW-40-FD	TPH
201	YUWA-1B2X-SW-B	TPH
202	YUWA-3B2X-SW-1	TPH
203	YUWA-3B2X-SW-20	TPH
204	YUWA-3B2X-SW-40	TPH
205	YUWA-3B2X-SW-B	TPH
206	YUWA-EQ	TPH
207	YUWA-WB	TPH
208	LAWA-1C2-SW-B-WS	TPH
209	LAWA-1C2-SW-B-WSD	TPH
210	LAWA-1C1-SW-20-LABDUP	TPH

CASE NARRATIVE

Project T423.19 - :

All water samples were received and registered by United Analyst and Engineering Consultant Co, Ltd. on March 29, 2023 in a proper preservation condition; sealed cooler with a temperature of 5 °C. Sample conditions are ready for sample testing according to agreed standard test method.

The samples were prepared and analyzed by pre-concentration and fluorescence Spectrophotometric method in accordance with required international test method referred to Intergovernmental Oceanographic Commission (MARPOLMON-P). Analytical batches are in quality control status and trend. Analysis results are measured correctly and precisely against established acceptance criteria.

Overall, the analysis results is traceable, accurate and precise to meet customer's need and requirement. Non-compliance has not observed.



United Analyst and Engineering Consultant Co., Ltd.

3 Soi Udomsuk 41, Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260

Tel. 0 2763 2828 Fax 0 2763 2800 www.uaeconsultant.com E-mail: uae@uaeconsultant.com

ANALYSIS REPORT

PROJECT NAME : CHEVRON ENVIRONMENTAL MONITORING CAMPAIGN DURING 6 MARCH - 28 MARCH 2023.

CUSTOMER NAME : TETRA TECH INC.

ADDRESS : 77 SOI UDOMSUK 39/1, SUKHUMVIT 103 ROAD, BANGCHAK, PRAKHANONG, BANGKOK 10260.
TEL. 0 2361 3767 FAX 0 2361 3768

SAMPLING SOURCE : -

SAMPLE TYPE : SEAWATER **RECEIVED DATE** : 29-03-2023

SAMPLING DATE : * **ANALYTICAL DATE** : 26-04-2023 - 27-04-2023

SAMPLING TIME : * **ANALYSIS NO.** : **

SAMPLING METHOD : - **WORK NO.** : LAB1895-R1/2023

ANALYZED BY : MR WEERAYUT SARAPAGDEE **REPORT NO.** : L2023-U040667

PROJECT	SAMPLE NAME	ANALYSIS NO.**	MATRIX	SAMPLING DATE*
T423.19	CONTROL-3-SW-1	T23AF866-0163	SEAWATER	23-03-2023 19:18:00
T423.19	CONTROL-3-SW-20	T23AF866-0164	SEAWATER	23-03-2023 19:27:00
T423.19	CONTROL-3-SW-40	T23AF866-0165	SEAWATER	23-03-2023 19:39:00
T423.19	CONTROL-3-SW-B	T23AF866-0166	SEAWATER	23-03-2023 19:50:00
T423.19	MAWG-1B2X-SW-1	T23AF866-0167	SEAWATER	21-03-2023 15:44:00
T423.19	MAWG-1B2X-SW-20	T23AF866-0168	SEAWATER	21-03-2023 15:50:00
T423.19	MAWG-1B2X-SW-40	T23AF866-0169	SEAWATER	21-03-2023 16:01:00
T423.19	MAWG-1B2X-SW-B	T23AF866-0170	SEAWATER	21-03-2023 16:16:00
T423.19	MAWG-3B2X-SW-1	T23AF866-0171	SEAWATER	21-03-2023 05:13:00
T423.19	MAWG-3B2X-SW-1-FD	T23AF866-0172	SEAWATER	21-03-2023 05:18:00
T423.19	MAWG-3B2X-SW-20	T23AF866-0173	SEAWATER	21-03-2023 05:24:00
T423.19	MAWG-3B2X-SW-40	T23AF866-0174	SEAWATER	21-03-2023 05:39:00
T423.19	MAWG-3B2X-SW-B	T23AF866-0176	SEAWATER	21-03-2023 05:50:00
T423.19	MAWG-EQ	T23AF866-0176	SEAWATER	21-03-2023 04:55:00
T423.19	MAWG-WB	T23AF866-0177	SEAWATER	21-03-2023 05:00:00

**United Analyst and Engineering Consultant Co., Ltd.**

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Tel. 0 2763 2828 Fax 0 2763 2800 www.uaeconsultant.com E-mail: uae@uaeconsultant.com

PROJECT T423.19**ANALYTE****METHOD**

DISSOLVED/DISPERSED PETROLEUM HYDROCARBON

IOC MARPOLMON-P

SAMPLE NAME	ANALYSIS NO.	PREPARED	ANALYZED	BATCH	RESULT	MDL	RL	UNITS	DILUTION	NOTES
CONTROL-3-SW-1	T23AF866-0163	23-03-2023	27-04-2023	335285	0.21	0.04	0.10	ug/L as Chrysene	1	
CONTROL-3-SW-20	T23AF866-0164	23-03-2023	27-04-2023	335285	0.29	0.04	0.10	ug/L as Chrysene	1	
CONTROL-3-SW-40	T23AF866-0165	23-03-2023	27-04-2023	335285	0.29	0.04	0.10	ug/L as Chrysene	1	
CONTROL-3-SW-B	T23AF866-0166	23-03-2023	27-04-2023	335285	0.21	0.04	0.10	ug/L as Chrysene	1	
MAWG-1B2X-SW-1	T23AF866-0167	21-03-2023	27-04-2023	335265	0.35	0.04	0.10	ug/L as Chrysene	1	
MAWG-1B2X-SW-20	T23AF866-0168	21-03-2023	27-04-2023	335265	0.18	0.04	0.10	ug/L as Chrysene	1	
MAWG-1B2X-SW-40	T23AF866-0169	21-03-2023	27-04-2023	335265	0.35	0.04	0.10	ug/L as Chrysene	1	
MAWG-1B2X-SW-B	T23AF866-0170	21-03-2023	27-04-2023	335265	0.16	0.04	0.10	ug/L as Chrysene	1	
MAWG-3B2X-SW-1	T23AF866-0171	21-03-2023	26-04-2023	335259	ND	0.04	0.10	ug/L as Chrysene	1	
MAWG-3B2X-SW-1-FD	T23AF866-0172	21-03-2023	26-04-2023	335259	ND	0.04	0.10	ug/L as Chrysene	1	
MAWG-3B2X-SW-20	T23AF866-0173	21-03-2023	26-04-2023	335259	0.11	0.04	0.10	ug/L as Chrysene	1	
MAWG-3B2X-SW-40	T23AF866-0174	21-03-2023	26-04-2023	335259	0.18	0.04	0.10	ug/L as Chrysene	1	
MAWG-3B2X-SW-B	T23AF866-0176	21-03-2023	26-04-2023	335259	0.17	0.04	0.10	ug/L as Chrysene	1	
MAWG-EQ	T23AF866-0176	21-03-2023	27-04-2023	335265	ND	0.04	0.10	ug/L as Chrysene	1	
MAWG-WB	T23AF866-0177	21-03-2023	27-04-2023	335265	ND	0.04	0.10	ug/L as Chrysene	1	

QUALITY CONTROL

PROJECT T423.19

ANALYTE						METHOD							
DISSOLVED/DISPERSED PETROLEUM HYDROCARBON						IOC MARPOLMON-P							
BATCH 335259		PREPARED 20-03-2023			ANALYZED		26-04-2023						

QC TYPE	ANALYSIS NO.	RESULT	MDL	RL	UNITS	SOURCE RESULT	SPIKE LEVEL	%REC	%REC LIMITS	RPD	RPD LIMIT	NOTES
Blank		ND	0.04	0.10	ug/L as Chrysene							
CCS		0.50	0.04	0.10	ug/L as Chrysene		0.50	100	90-110			
CCV		0.51	0.04	0.10	ug/L as Chrysene		0.50	101	90-110	2.00	20	
LCS		0.56	0.04	0.10	ug/L as Chrysene		0.58	97	80-120			
LCS Dup		0.56	0.04	0.10	ug/L as Chrysene		0.58	97	80-120	0.00	20	
Sample	T23AF866-0104	0.19	0.04	0.10	ug/L as Chrysene							
Sample LabDup	T23AF866-0104.1	0.18	0.04	0.10	ug/L as Chrysene					5.55	20	
Matrix Spike		0.67	0.04	0.10	ug/L as Chrysene	0.11	0.59	95	80-120			
Matrix Spike Dup		0.66	0.04	0.10	ug/L as Chrysene	T23AF866-0173	0.59	93	80-120	1.52	20	

BATCH 335265 PREPARED 21-03-2023 ANALYZED 27-04-2023

QC TYPE	ANALYSIS NO.	RESULT	MDL	RL	UNITS	SOURCE RESULT	SPIKE LEVEL	%REC	%REC LIMITS	RPD	RPD LIMIT	NOTES
Blank		ND	0.04	0.10	ug/L as Chrysene							
CCS		0.51	0.04	0.10	ug/L as Chrysene		0.50	104	90-110			
CCV		0.50	0.04	0.10	ug/L as Chrysene		0.50	101	90-110	2.00	20	
LCS		0.56	0.04	0.10	ug/L as Chrysene		0.59	95	80-120			
LCS Dup		0.57	0.04	0.10	ug/L as Chrysene		0.59	97	80-120	1.79	20	
Sample	T23AF866-0089	0.35	0.04	0.10	ug/L as Chrysene							
Sample LabDup	T23AF866-0089.1	0.34	0.04	0.10	ug/L as Chrysene					2.94	20	
Matrix Spike		0.87	0.04	0.10	ug/L as Chrysene	0.35	0.58	90	80-120			
Matrix Spike Dup		0.87	0.04	0.10	ug/L as Chrysene	T23AF866-0169	0.58	90	80-120	0.00	20	

QUALITY CONTROL

PROJECT T423.19

ANALYTE						METHOD							
DISSOLVED/DISPERSED PETROLEUM HYDROCARBON						IOC MARPOLMON-P							
BATCH 335285		PREPARED 23-03-2023			ANALYZED		27-04-2023						
QC TYPE	ANALYSIS NO.	RESULT	MDL	RL	UNITS	SOURCE RESULT	SPIKE LEVEL	%REC	%REC LIMITS	RPD	RPD LIMIT	NOTES	
Blank		ND	0.04	0.10	ug/L as Chrysene								
CCS		0.50	0.04	0.10	ug/L as Chrysene		0.50	100	90-110				
CCV		0.50	0.04	0.10	ug/L as Chrysene		0.50	100	90-110	0.00	20		
LCS		0.59	0.04	0.10	ug/L as Chrysene		0.59	100	80-120				
LCS Dup		0.58	0.04	0.10	ug/L as Chrysene		0.59	98	80-120	1.72	20		
Sample	T23AF866-0163	0.21	0.04	0.10	ug/L as Chrysene								
Sample LabDup	T23AF866-0163.1	0.21	0.04	0.10	ug/L as Chrysene					0.00	20		
Matrix Spike		0.84	0.04	0.10	ug/L as Chrysene	0.29	0.58	95	80-120				
Matrix Spike Dup		0.86	0.04	0.10	ug/L as Chrysene	T23AF866-0164	0.59	97	80-120	2.35	20		

NOTES AND DEFINITIONS :

ND Analyte NOT DETECTED at or above the MDL

Karnphong B.

(MR KARNPHONG BOONPUANG)

TECHNICAL MANAGEMENT

16-05-2023

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)

LABORATORY SUPERVISOR

16-05-2023

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Analysis / Test Report

Report to : Tetra Tech Inc.

77 Soi Udomsuk 39/1, Sukhumvit 103, Bangchak, Prakanong, Bangkok Thailand 10260

P/O :

Project Name : T423.19

Project Location :

Lot ID: 2335053

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

Report Number : 2606979-1

Page 1 of 17

Summary Samples

Sample Location	ALS Sample ID	Sample Description	Sampling Date / Time	Received Date / Time
Control-3-SW-1	2335053-11	Seawater	Mar 23, 2023 07:18 PM	Mar 28, 2023 01:00 PM
Control-3-SW-1-LabDup	2335053-15	Seawater	Mar 23, 2023 07:18 PM	Mar 28, 2023 01:00 PM
Control-3-SW-20	2335053-12	Seawater	Mar 23, 2023 07:27 PM	Mar 28, 2023 01:00 PM
Control-3-SW-40	2335053-13	Seawater	Mar 23, 2023 07:39 PM	Mar 28, 2023 01:00 PM
Control-3-SW-B	2335053-14	Seawater	Mar 23, 2023 07:50 PM	Mar 28, 2023 01:00 PM
MAWG-1B2X-SW-1	2335053-1	Seawater	Mar 21, 2023 03:44 PM	Mar 28, 2023 01:00 PM
MAWG-1B2X-SW-20	2335053-2	Seawater	Mar 21, 2023 03:50 PM	Mar 28, 2023 01:00 PM
MAWG-1B2X-SW-20-LabDup	2335053-3	Seawater	Mar 21, 2023 03:50 PM	Mar 28, 2023 01:00 PM
MAWG-1B2X-SW-40	2335053-4	Seawater	Mar 21, 2023 04:01 PM	Mar 28, 2023 01:00 PM
MAWG-1B2X-SW-B	2335053-5	Seawater	Mar 21, 2023 04:16 PM	Mar 28, 2023 01:00 PM
MAWG-3B2X-SW-1	2335053-6	Seawater	Mar 21, 2023 05:13 AM	Mar 28, 2023 01:00 PM
MAWG-3B2X-SW-1-FD	2335053-7	Seawater	Mar 21, 2023 05:18 AM	Mar 28, 2023 01:00 PM
MAWG-3B2X-SW-20	2335053-8	Seawater	Mar 21, 2023 05:24 AM	Mar 28, 2023 01:00 PM
MAWG-3B2X-SW-40	2335053-9	Seawater	Mar 21, 2023 05:39 AM	Mar 28, 2023 01:00 PM
MAWG-3B2X-SW-B	2335053-10	Seawater	Mar 21, 2023 05:50 AM	Mar 28, 2023 01:00 PM

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P/O :

Project Name : T423.19

Project Location :

Lot ID: 2335053

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

Report Number : 2606979-1

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General Comments

Analysis Test Report contains Summary samples, General Comments and Analytical Results. Quality Control Report will be found in the following separate attachments. The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where the LOD and LOQ of a reported result differs from standard, this may be due to high moisture content or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

LOD : Limit of detection.

LOQ : Limit of Quantitation.

ND : The result is not detected.

U : Indicates the result is less than LOD.

J : Indicates an estimated value, The reported value was obtained from a reading that was less than the LOQ but greater than or equal to the LOD.

The samples received on Mar 28, 2023 were intact, on-ice within 4 sealed cooler at

Cooler 1 : Temperature 3.1 degree C

Cooler 2 : Temperature 2.5 degree C

Cooler 3 : Temperature 3.2 degree C

Cooler 4 : Temperature 4.4 degree C

Sample Preparation and Analysis

Total suspended solids

A well-mixed sample is filtered through a weighed 1.2 µm pore size glass fibre filter paper and the residue retained on the filter is dried at 103-105 degree C. The increase in the weight of the filter paper represents the total suspended solids.

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P/O :

Project Name : T423.19

Project Location :

Lot ID: 2335053

Date Received : Mar 28, 2023

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Reference Number 2335053-1
Sampling Date Mar 21, 2023 3:44 PM
Sample Description Seawater
Location MAWG-1B2X-SW-1
Condition of Sample Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08323	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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P/O :

Project Name : T423.19

Project Location :

Lot ID: 2335053

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335053-2
Sampling Date Mar 21, 2023 3:50 PM
Sample Description Seawater
Location MAWG-1B2X-SW-20
Condition of Sample Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08323	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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P/O :

Project Name : T423.19

Project Location :

Lot ID: 2335053

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

Report Number : 2606979-1

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Reference Number 2335053-3
Sampling Date Mar 21, 2023 3:50 PM
Sample Description Seawater
Location MAWG-1B2X-SW-20-LabDup
Condition of Sample Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08323	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.19

Project Location :

Lot ID: 2335053

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

Report Number : 2606979-1

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Reference Number 2335053-4
Sampling Date Mar 21, 2023 4:01 PM
Sample Description Seawater
Location MAWG-1B2X-SW-40
Condition of Sample Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08323	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.19

Project Location :

Lot ID: 2335053

Date Received : Mar 28, 2023

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Reference Number 2335053-5
Sampling Date Mar 21, 2023 4:16 PM
Sample Description Seawater
Location MAWG-1B2X-SW-B
Condition of Sample Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08324	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.19

Project Location :

Lot ID: 2335053

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335053-6
Sampling Date Mar 21, 2023 5:13 AM
Sample Description Seawater
Location MAWG-3B2X-SW-1
Condition of Sample Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08324	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.19

Project Location :

Lot ID: 2335053

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335053-7
Sampling Date Mar 21, 2023 5:18 AM
Sample Description Seawater
Location MAWG-3B2X-SW-1-FD
Condition of Sample Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08324	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.19

Project Location :

Lot ID: 2335053

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335053-8
Sampling Date Mar 21, 2023 5:24 AM
Sample Description Seawater
Location MAWG-3B2X-SW-20
Condition of Sample Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08324	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.19

Project Location :

Lot ID: 2335053

Date Received : Mar 28, 2023

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Reference Number 2335053-9
Sampling Date Mar 21, 2023 5:39 AM
Sample Description Seawater
Location MAWG-3B2X-SW-40
Condition of Sample Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08324	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.19

Project Location :

Lot ID: 2335053

Date Received : Mar 28, 2023

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Reference Number 2335053-10
Sampling Date Mar 21, 2023 5:50 AM
Sample Description Seawater
Location MAWG-3B2X-SW-B
Condition of Sample Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08324	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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P/O :

Project Name : T423.19

Project Location :

Lot ID: 2335053

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335053-11
Sampling Date Mar 23, 2023 7:18 PM
Sample Description Seawater
Location Control-3-SW-1
Condition of Sample Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08324	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.19

Project Location :

Lot ID: 2335053

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335053-12
Sampling Date Mar 23, 2023 7:27 PM
Sample Description Seawater
Location Control-3-SW-20
Condition of Sample Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08324	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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P/O :

Project Name : T423.19

Project Location :

Lot ID: 2335053

Date Received : Mar 28, 2023

Date Reported : Mar 31, 2023

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Reference Number 2335053-13
Sampling Date Mar 23, 2023 7:39 PM
Sample Description Seawater
Location Control-3-SW-40
Condition of Sample Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08324	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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P/O :

Project Name : T423.19

Project Location :

Lot ID: 2335053

Date Received : Mar 28, 2023

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Reference Number 2335053-14
Sampling Date Mar 23, 2023 7:50 PM
Sample Description Seawater
Location Control-3-SW-B
Condition of Sample Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08324	Mar 29, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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Project Name : T423.19

Project Location :

Lot ID: 2335053

Date Received : Mar 28, 2023

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Reference Number 2335053-15
Sampling Date Mar 23, 2023 7:18 PM
Sample Description Seawater
Location Control-3-SW-1-LabDup
Condition of Sample Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Result	LOD	LOQ	Unit	Dilution	Batch No.	Prepared Date	Analyzed Date	Method	Note
Water Testing										
Total Suspended Solids	ND	0.3	1	mg/L	1	WL23/08361	Mar 30, 2023	Mar 29, 2023	APHA (2017) ,2540 D	U

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P/O :

Project Name : T423.19

Project Location :

Lot ID: 2335053

Date Received : Mar 28, 2023

Date Reported : Apr 19, 2023

Report Number : 2606979-1

Page 1 of 1

Quality Control Data

QC Type	Parent	Result	LOD	LOQ	Unit	Parent Result	Spike Level	%Rec	%Rec Limit	%RPD	%RPD Limit	Note
Water Testing : WL23/08323 : Total Suspended Solids												
Blank		ND	0.3	1	mg/L							U
Duplicate	2335053-4	ND	0.3	1	mg/L	ND				n/a	5	U
LCS		99.6	0.3	1	mg/L		100	99.6	90 - 110			
Water Testing : WL23/08324 : Total Suspended Solids												
Blank		ND	0.3	1	mg/L							U
Duplicate	2335053-14	ND	0.3	1	mg/L	ND				n/a	5	U
LCS		99.6	0.3	1	mg/L		100	99.6	90 - 110			
Water Testing : WL23/08361 : Total Suspended Solids												
Blank		ND	0.3	1	mg/L							U
Duplicate	2335208-58	ND	0.3	1	mg/L	ND				n/a	5	U
LCS		100	0.3	1	mg/L		100	100.0	90 - 110			
Blank		ND	0.3	1	mg/L							U
Duplicate	2322757-1	82	0.3	1	mg/L	78				5	5	
LCS		98	0.3	1	mg/L		100	98.0	90 - 110			

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APPENDIX C
ANALYTICAL LABORATORY REPORTS:
BENTHIC COMMUNITY

Appendix E1
Benthic Community

Benthos density (individuals per 0.04 squaremeter)

TAXA	MAWA- 1C2	MAWA- 1CP2	MAWA- 2B2X	MAWA- 3B2	MAWA- 3C2	MAWA- 4B2X
Nematoda						
<i>Nematoda</i> sp.1						
Nemertea						
Anopla						
Palaeonemertea						
Tubulanidae						
<i>Callinera</i> sp.1			1		1	
Sipuncula						
Phascolosomatidea						
Aspidosiphoniformes						
Aspidosiphonidae						
<i>Aspidosiphon</i> sp.1						
Phascolosomatiformes						
Phascolosomatidae						
<i>Apionsoma</i> sp.2	1		1	1		
Sipunculidea						
Golfingiformes						
Phascolionidae						
<i>Phascolion</i> sp.1			1			
Annelida						
Polychaeta						
Aciculata						
Amphinomidae						
<i>Chloeia violacea</i>						
Dorvilleidae						
<i>Schistomeringos</i> sp.1						
Eunicidae						
<i>Euniphyssa</i> sp.1						
<i>Lysidice</i> sp.6				1		
Glyceridae						
<i>Glycera cinnamomea</i>						
<i>Glycera macrobranchia</i>						
<i>Glycera</i> sp.						
Hartmaniellidae						
<i>Hartmaniella</i> sp.1				1		
Hesionidae						
<i>Hesiospina</i> sp.1						
Lumbrineridae						
<i>Gallardoneris thailandensis</i>						
<i>Geseneris</i> sp.1			1			
<i>Lumbrineris latreilli</i>						
Nephtyidae						
<i>Aglaophamus cf. dicirroides</i>				1		1
<i>Aglaophamus orientalis</i>					1	
<i>Aglaophamus tepens</i>	1					1
Nereididae						
<i>Neanthes arenaceodentata</i>						
<i>Tambalagamia fauveli</i>		1		1		1



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 squaremeter)

TAXA	MAWA-1C2	MAWA-1CP2	MAWA-2B2X	MAWA-3B2	MAWA-3C2	MAWA-4B2X
Onuphidae						
<i>Onuphis</i> sp.			1			
<i>Onuphis</i> sp.1	2				2	
<i>Onuphis</i> sp.6	1				1	
Paralacydoniidae						
<i>Paralacydonia</i> sp.1						
Phyllodocidae						
<i>Phyllodoce</i> sp.2				1		
Pilargidae						
<i>Hermundura</i> sp.1					1	
<i>Litocorsa</i> nr. <i>antennata</i>			1			
<i>Sigambra</i> sp.						
<i>Sigambra</i> sp.1						
<i>Sigambra</i> sp.8						
<i>Synelmis albini</i>					2	2
<i>Synelmis rigida</i>		1	1	1		4
Polynoidae						
<i>Harmothoe</i> sp.						
<i>Harmothoe</i> sp.1					1	
Sigalionidae						
<i>Sthenolepis japonica</i>						
Syllidae						
<i>Exogone</i> (<i>Exogone</i>) sp.1	1					
Canalipalpata						
Ampharetidae						
<i>Amphicteis</i> sp.3						
<i>Anobothrus</i> sp.1						
<i>Lysippe labiata</i>						
<i>Sosane</i> sp.2						
Chaetopteridae						
<i>Spiochaetopterus</i> sp.1		2		1		
Cirratulidae						
<i>Aphelochaeta</i> sp.1						
<i>Chaetozone</i> sp.9				1		
<i>Kirkegaardia</i> sp.1				1		
<i>Kirkegaardia</i> sp.5						
<i>Kirkegaardia</i> sp.6						
<i>Kirkegaardia</i> sp.7						
Fabriciidae						
<i>Fabricinuda</i> sp.1						
<i>Pseudofabriciola</i> sp.						
<i>Pseudofabriciola</i> sp.1						
<i>Pseudofabriciola</i> sp.2						
Flabelligeridae						
<i>Diplocirrus</i> sp.1	1					1
Magelonidae						
<i>Magelona</i> sp.13						
Poecilochaetidae						
<i>Poecilochaetus</i> sp.3	1		1			



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 squaremeter)

TAXA	MAWA- 1C2	MAWA- 1CP2	MAWA- 2B2X	MAWA- 3B2	MAWA- 3C2	MAWA- 4B2X
Sabellidae						
<i>Euchone</i> sp.2						
<i>Euchonoides</i> sp.1						
Spionidae						
<i>Laonice</i> sp.1			1			
<i>Paraprionospio</i> sp.1						
<i>Paraprionospio</i> sp.2						
<i>Prionospio ehlersi</i>				5		
<i>Prionospio elegantula</i>			1			
<i>Prionospio</i> sp.						1
<i>Prionospio</i> sp.10						
<i>Spiophanes</i> sp.3	1		1			
<i>Spiophanes</i> sp.4						
<i>Spiophanes</i> sp.5						
Sternaspidae						
<i>Caulleryaspis</i> sp.1			1			
<i>Sternaspis</i> sp.1						
Terebellidae						
<i>Amaeana apheles</i>			1			
<i>Pista</i> sp.4	1					
Trichobranchidae						
<i>Terebellides</i> sp.1				1	3	
<i>Terebellides</i> sp.2	1		1			
<i>Trichobranchus roseus</i>						
Capitellidae						
<i>Barantolla</i> sp.1						1
<i>Capitella capitata</i>						
<i>Capitella capitata oculata</i>						
<i>Capitellethus</i> sp.1			1			
<i>Capitellethus</i> sp.2						
<i>Neomediomastus</i> sp.1	1					1
<i>Neomediomastus</i> sp.2			1			
<i>Notomastus latericeus</i>	1					
<i>Notomastus</i> sp.4						
<i>Promastobranhus huloti</i>			1			
<i>Rashgua lobatus</i>						
<i>Scyphoproctus nr. oculatus</i>						
Cossuridae						
<i>Cossura</i> sp.						
Maldanidae						
<i>Clymenella</i> sp.1						
<i>Euclymene</i> sp.1						
<i>Euclymene</i> sp.3						
<i>Lumbriclymene</i> sp.1						
<i>Praxillella nr. gracilis</i>	1		1			
<i>Praxillella</i> sp.3						
<i>Praxillella</i> sp.4	1					



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 squaremeter)

TAXA	MAWA- 1C2	MAWA- 1CP2	MAWA- 2B2X	MAWA- 3B2	MAWA- 3C2	MAWA- 4B2X
Paraonidae						
<i>Aricidea (Acmira)</i> sp.3						
<i>Aricidea (Aricidea)</i> sp.3						
<i>Aricidea (Strelzovia)</i> sp.1						
<i>Levinsenia</i> sp.						
<i>Levinsenia</i> sp.1						
<i>Levinsenia</i> sp.2		1	1	2	1	
<i>Levinsenia</i> sp.5						
<i>Levinsenia</i> sp.9						
Arthropoda						
Crustacea						
Amphipoda						
Ampeliscaidae						
<i>Ampelisca bocki</i>						
<i>Ampelisca chinensis</i>						
<i>Ampelisca cyclops</i>			1		2	
<i>Byblis febris</i>		1	1			
<i>Byblis</i> sp.						
Caprellidae						
<i>Caprella</i> sp.1	1	1				
Dexaminidae						
Dexaminidae sp.2						
Oedicerotidae						
<i>Periculodes</i> sp.1						
Photidae						
<i>Gammaropsis</i> sp.4					1	
<i>Photis</i> sp.2					3	
Tryphosidae						
<i>Tryphosella</i> sp.1			3			
<i>Tryphosella</i> sp.2						
Urothoidae						
<i>Urothoe gelasina</i>						1
Cumacea						
Leuconidae						
<i>Eudorella</i> sp.1				1		
<i>Eudorella</i> sp.2						
Nannastacidae						
<i>Campylaspis</i> sp.1						
<i>Campylaspis</i> sp.5						
<i>Campylaspis</i> sp.6			1			
Decapoda						
Alpheidae						
Alpheidae sp.4						
<i>Alpheus acutocarinatus</i>						
<i>Alpheus rapacida</i>						
<i>Alpheus</i> sp.				1		
<i>Athanas</i> sp.						
<i>Bermudacaris</i> sp.			1		1	
<i>Bermudacaris</i> sp.1			1			



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 squaremeter)

TAXA	MAWA- 1C2	MAWA- 1CP2	MAWA- 2B2X	MAWA- 3B2	MAWA- 3C2	MAWA- 4B2X
Callianassidae						
Callianassidae						
<i>Lipkecallianassa</i> sp.1			4	1	1	5
Ogyrididae						
<i>Ogyrides</i> sp.4	1					
Palaemonidae						
<i>Palaemon</i> sp.				1		
<i>Palaemon</i> sp.3			1			
<i>Palaemonidae</i>						
<i>Periclimenes</i> sp.2						1
Pasiphaeidae						
<i>Leptochela pugnax</i>						
Pilumnidae						
<i>Ceratoplax fulgida</i>	1					
<i>Typhlocarcinops transversus</i>						
Portunidae						
<i>Alionectes pulchricristatus</i>						
<i>Libystes edwardsi</i>						
<i>Thalamita admete</i>						
Processidae						
<i>Processa</i> sp.1						
Upogebiidae						
<i>Gebiacantha</i> sp.1						
<i>Gebicula</i> sp.4						
Isopoda						
Anthuridae						
<i>Amakusanthura</i> sp.1						
Gnathiidae						
<i>Caecognathia andamanensis</i>	1		1		1	
Hyssuridae						
<i>Hyssuridae</i> sp.1			1			
Mysidacea						
Mysidae						
<i>Siriella</i> sp.1			1			
Tanaidacea						
Apseudidae						
<i>Apseudes</i> sp.1			2			
<i>Apseudes</i> sp.2						
<i>Apseudes</i> sp.4			2		2	
Leptocheliidae						
<i>Leptochelia</i> sp.1						
<i>Leptochelia</i> sp.2						
<i>Leptochelia</i> sp.3						
Pagurapseudidae						
<i>Pagurapseudidae</i> sp.2						1
Parapseudidae						
<i>Parapseudidae</i> sp.1						



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 squaremeter)

TAXA	MAWA- 1C2	MAWA- 1CP2	MAWA- 2B2X	MAWA- 3B2	MAWA- 3C2	MAWA- 4B2X
Echinodermata						
Ophiuroidea						
Ophiurida						
Amphiuridae						
<i>Amphioplus (Lymanella) andreae</i>						
<i>Amphiura</i> sp.2						1
Amphiuridae sp.1			1			
Amphiuridae sp.4						
Mollusca						
Aplacophora						
Cavibelonia						
Simrothiellidae						
<i>Helicoradomenia</i> sp.1			1		1	
Bivalvia						
Cardiida						
Psammobiidae						
<i>Gari</i> sp.1						
Semelidae						
<i>Abra</i> sp.3				1		
Lucinida						
Lucinidae						
<i>Anodontia edentula</i>						
<i>Cavatidens imajimai</i>						
Myoida						
Corbulidae						
<i>Corbula</i> sp.1						
Nuculoida						
Nuculidae						
<i>Ennucula niponica</i>						
Yoldiidae						
<i>Yoldiella</i> sp.1						
Pholadomyoida						
Cuspidariidae						
<i>Plectodon</i> sp.1						
Pterioida						
Pinnidae						
<i>Pinna</i> sp.						
Gastropoda						
Archaeogastropoda						
Fissurellidae						
<i>Fissurellidae</i> sp.1						
Orbitestellidae						
<i>Microdiscula</i> sp.1						
Heterostropha						
Pyramidellidae						
<i>Menesho</i> sp.1						
Neogastropoda						
Nassariidae						
<i>Nassarius</i> sp.1						
Total	19	7	41	23	25	22



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 squa

TAXA	MAWB- 1B2X	MAWB- 1C2X	MAWB- 2B2X	MAWB- 3B2X	MAWB- 3C2	MAWB- 4B2X
Nematoda						
<i>Nematoda</i> sp.1						
Nemertea						
Anopla						
Palaeonemertea						
Tubulanidae						
<i>Callinera</i> sp.1	1	1	1		1	
Sipuncula						
Phascolosomatidea						
Aspidosiphoniformes						
Aspidosiphonidae						
<i>Aspidosiphon</i> sp.1						1
Phascolosomatiformes						
Phascolosomatidae						
<i>Apionsoma</i> sp.2			1		1	
Sipunculidea						
Golfingiformes						
Phascolionidae						
<i>Phascolion</i> sp.1						
Annelida						
Polychaeta						
Aciculata						
Amphinomidae						
<i>Chloeia violacea</i>						
Dorvilleidae						
<i>Schistomeringos</i> sp.1	1					
Eunicidae						
<i>Euniphysa</i> sp.1						1
<i>Lysidice</i> sp.6						
Glyceridae						
<i>Glycera cinnamomea</i>					1	
<i>Glycera macrobranchia</i>						
<i>Glycera</i> sp.						
Hartmaniellidae						
<i>Hartmaniella</i> sp.1	2					
Hesionidae						
<i>Hesiospina</i> sp.1						
Lumbrineridae						
<i>Gallardoneris thailandensis</i>	1					
<i>Gesaneris</i> sp.1						
<i>Lumbrineris latreilli</i>						
Nephtyidae						
<i>Aglaophamus cf. dicirroides</i>						
<i>Aglaophamus orientalis</i>					1	
<i>Aglaophamus tepens</i>						
Nereididae						
<i>Neanthes arenaceodentata</i>				3		
<i>Tambalagamia fauveli</i>						



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 squa

TAXA	MAWB- 1B2X	MAWB- 1C2X	MAWB- 2B2X	MAWB- 3B2X	MAWB- 3C2	MAWB- 4B2X
Onuphidae						
<i>Onuphis</i> sp.						
<i>Onuphis</i> sp.1						
<i>Onuphis</i> sp.6						
Paralacydoniidae						
<i>Paralacydonia</i> sp.1						
Phyllodocidae						
<i>Phyllodoce</i> sp.2						
Pilargidae						
<i>Hermundura</i> sp.1						
<i>Litocorsa</i> nr. <i>antennata</i>						
<i>Sigambra</i> sp.				1		
<i>Sigambra</i> sp.1		1				
<i>Sigambra</i> sp.8						
<i>Synelmis albini</i>		1	3		1	1
<i>Synelmis rigida</i>			2			
Polynoidae						
<i>Harmothoe</i> sp.						
<i>Harmothoe</i> sp.1						
Sigalionidae						
<i>Sthenolepis japonica</i>					1	
Syllidae						
<i>Exogone (Exogone)</i> sp.1						
Canalipalpata						
Ampharetidae						
<i>Amphicteis</i> sp.3						
<i>Anobothrus</i> sp.1						
<i>Lysippe labiata</i>						
<i>Sosane</i> sp.2						
Chaetopteridae						
<i>Spiochaetopterus</i> sp.1	1	1				
Cirratulidae						
<i>Aphelochaeta</i> sp.1						
<i>Chaetozone</i> sp.9					1	
<i>Kirkegaardia</i> sp.1	1		2			
<i>Kirkegaardia</i> sp.5	1					
<i>Kirkegaardia</i> sp.6						
<i>Kirkegaardia</i> sp.7	1					
Fabriciidae						
<i>Fabricinuda</i> sp.1						
<i>Pseudofabriciola</i> sp.						
<i>Pseudofabriciola</i> sp.1						
<i>Pseudofabriciola</i> sp.2						
Flabelligeridae						
<i>Diplocirrus</i> sp.1						
Magelonidae						
<i>Magelona</i> sp.13						
Poecilochaetidae						
<i>Poecilochaetus</i> sp.3						



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 squa

TAXA	MAWB- 1B2X	MAWB- 1C2X	MAWB- 2B2X	MAWB- 3B2X	MAWB- 3C2	MAWB- 4B2X
Sabellidae						
<i>Euchone</i> sp.2						
<i>Euchonoides</i> sp.1						
Spionidae						
<i>Laonice</i> sp.1	1					
<i>Paraprionospio</i> sp.1						
<i>Paraprionospio</i> sp.2						
<i>Prionospio ehlersi</i>	1				2	
<i>Prionospio elegantula</i>			1			
<i>Prionospio</i> sp.						
<i>Prionospio</i> sp.10						
<i>Spiophanes</i> sp.3						
<i>Spiophanes</i> sp.4						
<i>Spiophanes</i> sp.5						
Sternaspidae						
<i>Caulleryaspis</i> sp.1						
<i>Sternaspis</i> sp.1	1					
Terebellidae						
<i>Amaeana apheles</i>						
<i>Pista</i> sp.4						
Trichobranchidae						
<i>Terebellides</i> sp.1						
<i>Terebellides</i> sp.2	1					
<i>Trichobranchus roseus</i>						
Capitellidae						
<i>Barantolla</i> sp.1	1					
<i>Capitella capitata</i>				50		
<i>Capitella capitata oculata</i>				5		
<i>Capitellethus</i> sp.1						
<i>Capitellethus</i> sp.2	1					
<i>Neomediomastus</i> sp.1						
<i>Neomediomastus</i> sp.2		1				
<i>Notomastus latericeus</i>						
<i>Notomastus</i> sp.4						
<i>Promastobranchnus huloti</i>						
<i>Rashgua lobatus</i>						
<i>Scyphoproctus nr. oculatus</i>						
Cossuridae						
<i>Cossura</i> sp.					1	
Maldanidae						
<i>Clymenella</i> sp.1		1				
<i>Euclymene</i> sp.1						
<i>Euclymene</i> sp.3						
<i>Lumbriclymene</i> sp.1						
<i>Praxillella nr. gracilis</i>						
<i>Praxillella</i> sp.3						
<i>Praxillella</i> sp.4						



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 squa

TAXA	MAWB- 1B2X	MAWB- 1C2X	MAWB- 2B2X	MAWB- 3B2X	MAWB- 3C2	MAWB- 4B2X
Paraonidae						
<i>Aricidea (Acmira)</i> sp.3			1			
<i>Aricidea (Aricidea)</i> sp.3						
<i>Aricidea (Strelzovia)</i> sp.1						
<i>Levinsenia</i> sp.	1					
<i>Levinsenia</i> sp.1						
<i>Levinsenia</i> sp.2	2				2	
<i>Levinsenia</i> sp.5						
<i>Levinsenia</i> sp.9						
Arthropoda						
Crustacea						
Amphipoda						
Ampeliscidae						
<i>Ampelisca bocki</i>						
<i>Ampelisca chinensis</i>						
<i>Ampelisca cyclops</i>						
<i>Byblis febris</i>						
<i>Byblis</i> sp.						
Caprellidae						
<i>Caprella</i> sp.1						
Dexaminidae						
Dexaminidae sp.2						
Oedicerotidae						
<i>Perioculodes</i> sp.1						
Photidae						
<i>Gammaropsis</i> sp.4						
<i>Photis</i> sp.2						
Tryphosidae						
<i>Tryphosella</i> sp.1						
<i>Tryphosella</i> sp.2						
Urothoidae						
<i>Urothoe gelasina</i>						
Cumacea						
Leuconidae						
<i>Eudorella</i> sp.1						
<i>Eudorella</i> sp.2						
Nannastacidae						
<i>Campylaspis</i> sp.1						
<i>Campylaspis</i> sp.5					1	
<i>Campylaspis</i> sp.6						
Decapoda						
Alpheidae						
<i>Alpheidae</i> sp.4	1					
<i>Alpheus acutocarinatus</i>						
<i>Alpheus rapacida</i>						
<i>Alpheus</i> sp.					3	1
<i>Athanas</i> sp.						
<i>Bermudacaris</i> sp.						
<i>Bermudacaris</i> sp.1					1	



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 squa

TAXA	MAWB- 1B2X	MAWB- 1C2X	MAWB- 2B2X	MAWB- 3B2X	MAWB- 3C2	MAWB- 4B2X
Callianassidae						
Callianassidae						
<i>Lipkecallianassa</i> sp.1						
Ogyrididae						
<i>Ogyrides</i> sp.4						
Palaemonidae						
<i>Palaemon</i> sp.					1	
<i>Palaemon</i> sp.3						
<i>Palaemonidae</i>						
<i>Periclimenes</i> sp.2						
Pasiphaeidae						
<i>Leptochela pugnax</i>						
Pilumnidae						
<i>Ceratoplax fulgida</i>						
<i>Typhlocarcinops transversus</i>	1					
Portunidae						
<i>Alionectes pulchricristatus</i>			1			1
<i>Libystes edwardsi</i>	1					
<i>Thalamita admete</i>						
Processidae						
<i>Processa</i> sp.1						
Upogebiidae						
<i>Gebiacantha</i> sp.1						
<i>Gebicula</i> sp.4						
Isopoda						
Anthuridae						
<i>Amakusanthura</i> sp.1					1	
Gnathiidae						
<i>Caecognathia andamanensis</i>						
Hyssuridae						
<i>Hyssuridae</i> sp.1						
Mysidacea						
Mysidae						
<i>Siriella</i> sp.1					1	
Tanaidacea						
Apseudidae						
<i>Apseudes</i> sp.1						
<i>Apseudes</i> sp.2						
<i>Apseudes</i> sp.4						
Leptocheliidae						
<i>Leptochelia</i> sp.1						
<i>Leptochelia</i> sp.2	2					
<i>Leptochelia</i> sp.3			1			
Pagurapseudidae						
<i>Pagurapseudidae</i> sp.2						
Parapseudidae						
<i>Parapseudidae</i> sp.1						



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 squa

TAXA	MAWB- 1B2X	MAWB- 1C2X	MAWB- 2B2X	MAWB- 3B2X	MAWB- 3C2	MAWB- 4B2X
Echinodermata						
Ophiuroidea						
Ophiurida						
Amphiuridae						
<i>Amphioplus (Lymanella) andreae</i>						
<i>Amphiura</i> sp.2						
Amphiuridae sp.1			1		1	
Amphiuridae sp.4						
Mollusca						
Aplacophora						
Cavibelonia						
Simrothiellidae						
<i>Helicoradomenia</i> sp.1						
Bivalvia						
Cardiida						
Psammobiidae						
<i>Gari</i> sp.1						
Semelidae						
<i>Abra</i> sp.3						
Lucinida						
Lucinidae						
<i>Anodontia edentula</i>				18		
<i>Cavatidens imajimai</i>				115		
Myoida						
Corbulidae						
<i>Corbula</i> sp.1						
Nuculoida						
Nuculidae						
<i>Ennucula niponica</i>						
Yoldiidae						
<i>Yoldiella</i> sp.1						
Pholadomyoida						
Cuspidariidae						
<i>Plectodon</i> sp.1	1					
Pterioidea						
Pinnidae						
<i>Pinna</i> sp.						
Gastropoda						
Archaeogastropoda						
Fissurellidae						
<i>Fissurellidae</i> sp.1				3		
Orbitestellidae						
<i>Microdiscula</i> sp.1				31		
Heterostropha						
Pyramidellidae						
<i>Menesho</i> sp.1				1		
Neogastropoda						
Nassariidae						
<i>Nassarius</i> sp.1				7		
Total	24	6	14	234	21	5



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 squa

TAXA	MAWC- 1B2X	MAWC- 1C2	MAWC- 2B2X	MAWC- 3B2X	MAWC- 3C2	MAWC- 4B2X
Nematoda						
<i>Nematoda</i> sp.1					1	
Nemertea						
Anopla						
Palaeonemertea						
Tubulanidae						
<i>Callinera</i> sp.1		1	1		1	1
Sipuncula						
Phascolosomatidea						
Aspidosiphoniformes						
Aspidosiphonidae						
<i>Aspidosiphon</i> sp.1						
Phascolosomatiformes						
Phascolosomatidae						
<i>Apionsoma</i> sp.2						1
Sipunculidea						
Golfingiformes						
Phascolionidae						
<i>Phascolion</i> sp.1				1		3
Annelida						
Polychaeta						
Aciculata						
Amphinomidae						
<i>Chloeia violacea</i>						
Dorvilleidae						
<i>Schistomeringos</i> sp.1						
Eunicidae						
<i>Euniphysa</i> sp.1			1			
<i>Lysidice</i> sp.6						
Glyceridae						
<i>Glycera cinnamomea</i>					1	
<i>Glycera macrobranchia</i>					1	
<i>Glycera</i> sp.				1		
Hartmaniellidae						
<i>Hartmaniella</i> sp.1				1		
Hesionidae						
<i>Hesiospina</i> sp.1				1		
Lumbrineridae						
<i>Gallardoneris thailandensis</i>					2	
<i>Geseneris</i> sp.1						
<i>Lumbrineris latreilli</i>	1					
Nephtyidae						
<i>Aglaophamus cf. dicirroides</i>			2	2		
<i>Aglaophamus orientalis</i>		1	1	1		
<i>Aglaophamus tepens</i>				2		1
Nereididae						
<i>Neanthes arenaceodentata</i>						
<i>Tambalagamia fauveli</i>						2



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 squa

TAXA	MAWC- 1B2X	MAWC- 1C2	MAWC- 2B2X	MAWC- 3B2X	MAWC- 3C2	MAWC- 4B2X
Onuphidae						
<i>Onuphis</i> sp.						
<i>Onuphis</i> sp.1	2				2	
<i>Onuphis</i> sp.6						
Paralacydoniidae						
<i>Paralacydonia</i> sp.1					1	
Phyllodocidae						
<i>Phyllodoce</i> sp.2						
Pilargidae						
<i>Hermundura</i> sp.1				1		
<i>Litocorsa</i> nr. <i>antennata</i>						
<i>Sigambra</i> sp.						
<i>Sigambra</i> sp.1			2	1	2	
<i>Sigambra</i> sp.8	1					
<i>Synelmis albini</i>		2		1		1
<i>Synelmis rigida</i>	3	2	11			2
Polynoidae						
<i>Harmothoe</i> sp.					1	
<i>Harmothoe</i> sp.1						
Sigalionidae						
<i>Sthenolepis japonica</i>			1			1
Syllidae						
<i>Exogone</i> (<i>Exogone</i>) sp.1			1			
Canalipalpata						
Ampharetidae						
<i>Amphicteis</i> sp.3		1				
<i>Anobothrus</i> sp.1	1			1		1
<i>Lysippe labiata</i>				1		
<i>Sosane</i> sp.2						
Chaetopteridae						
<i>Spiochaetopterus</i> sp.1			5	2	3	2
Cirratulidae						
<i>Aphelochaeta</i> sp.1		1	1		2	
<i>Chaetozone</i> sp.9						
<i>Kirkegaardia</i> sp.1						
<i>Kirkegaardia</i> sp.5						2
<i>Kirkegaardia</i> sp.6				2	1	
<i>Kirkegaardia</i> sp.7			2			1
Fabriciidae						
<i>Fabricinuda</i> sp.1					1	
<i>Pseudofabriciola</i> sp.			1			
<i>Pseudofabriciola</i> sp.1			3		2	
<i>Pseudofabriciola</i> sp.2			1			
Flabelligeridae						
<i>Diplocirrus</i> sp.1				1		
Magelonidae						
<i>Magelona</i> sp.13			1			
Poecilochaetidae						
<i>Poecilochaetus</i> sp.3						



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 squa

TAXA	MAWC- 1B2X	MAWC- 1C2	MAWC- 2B2X	MAWC- 3B2X	MAWC- 3C2	MAWC- 4B2X
Sabellidae						
<i>Euchone</i> sp.2						
<i>Euchonoides</i> sp.1			1			
Spionidae						
<i>Laonice</i> sp.1						
<i>Paraprionospio</i> sp.1				1		
<i>Paraprionospio</i> sp.2					1	
<i>Prionospio ehlersi</i>			1	5		2
<i>Prionospio elegantula</i>			1			
<i>Prionospio</i> sp.						
<i>Prionospio</i> sp.10			2			
<i>Spiophanes</i> sp.3			1	1		
<i>Spiophanes</i> sp.4						1
<i>Spiophanes</i> sp.5					1	
Sternaspidae						
<i>Caulleryaspis</i> sp.1					1	1
<i>Sternaspis</i> sp.1						
Terebellidae						
<i>Amaeana apheles</i>			2			
<i>Pista</i> sp.4						
Trichobranchidae						
<i>Terebellides</i> sp.1						
<i>Terebellides</i> sp.2						2
<i>Trichobranchus roseus</i>			1			
Capitellidae						
<i>Barantolla</i> sp.1						
<i>Capitella capitata</i>						1
<i>Capitella capitata oculata</i>						
<i>Capitellethus</i> sp.1					1	1
<i>Capitellethus</i> sp.2				1		
<i>Neomediomastus</i> sp.1						
<i>Neomediomastus</i> sp.2			1	2		
<i>Notomastus latericeus</i>						
<i>Notomastus</i> sp.4			1			
<i>Promastobranchnus huloti</i>						
<i>Rashgua lobatus</i>			1		1	
<i>Scyphoproctus nr. oculatus</i>						
Cossuridae						
<i>Cossura</i> sp.						
Maldanidae						
<i>Clymenella</i> sp.1						
<i>Euclymene</i> sp.1					1	
<i>Euclymene</i> sp.3						
<i>Lumbriclymene</i> sp.1	1					
<i>Praxillella nr. gracilis</i>				1		1
<i>Praxillella</i> sp.3				1		
<i>Praxillella</i> sp.4						



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 squa

TAXA	MAWC- 1B2X	MAWC- 1C2	MAWC- 2B2X	MAWC- 3B2X	MAWC- 3C2	MAWC- 4B2X
Paraonidae						
<i>Aricidea (Acmira)</i> sp.3						
<i>Aricidea (Aricidea)</i> sp.3				2	3	
<i>Aricidea (Strelzovia)</i> sp.1						
<i>Levinsenia</i> sp.						
<i>Levinsenia</i> sp.1				1	2	
<i>Levinsenia</i> sp.2			1		1	1
<i>Levinsenia</i> sp.5				1		
<i>Levinsenia</i> sp.9				1		
Arthropoda						
Crustacea						
Amphipoda						
Ampeliscidae						
<i>Ampelisca bocki</i>						
<i>Ampelisca chinensis</i>					1	1
<i>Ampelisca cyclops</i>					3	
<i>Byblis febris</i>	1					2
<i>Byblis</i> sp.			3		1	
Caprellidae						
<i>Caprella</i> sp.1						
Dexaminidae						
Dexaminidae sp.2						
Oedicerotidae						
<i>Periculodes</i> sp.1						1
Photidae						
<i>Gammaropsis</i> sp.4						
<i>Photis</i> sp.2						
Tryphosidae						
<i>Tryphosella</i> sp.1						1
<i>Tryphosella</i> sp.2						2
Urothoidae						
<i>Urothoe gelasina</i>						
Cumacea						
Leuconidae						
<i>Eudorella</i> sp.1						
<i>Eudorella</i> sp.2						
Nannastacidae						
<i>Campylaspis</i> sp.1			2			
<i>Campylaspis</i> sp.5						
<i>Campylaspis</i> sp.6						
Decapoda						
Alpheidae						
<i>Alpheidae</i> sp.4						
<i>Alpheus acutocarinatus</i>						1
<i>Alpheus rapacida</i>				1	1	
<i>Alpheus</i> sp.						
<i>Athanas</i> sp.						
<i>Bermudacaris</i> sp.		1				
<i>Bermudacaris</i> sp.1						



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 squa

TAXA	MAWC- 1B2X	MAWC- 1C2	MAWC- 2B2X	MAWC- 3B2X	MAWC- 3C2	MAWC- 4B2X
Callianassidae						
Callianassidae						
<i>Lipkecallianassa</i> sp.1		1			1	
Ogyrididae						
<i>Ogyrides</i> sp.4						
Palaemonidae						
<i>Palaemon</i> sp.			1			
<i>Palaemon</i> sp.3				1		
<i>Palaemonidae</i>		1				
<i>Periclimenes</i> sp.2						
Pasiphaeidae						
<i>Leptochela pugnax</i>						
Pilumnidae						
<i>Ceratoplax fulgida</i>						
<i>Typhlocarcinops transversus</i>						
Portunidae						
<i>Alionectes pulchricristatus</i>				1	1	
<i>Libystes edwardsi</i>						
<i>Thalamita admete</i>						
Processidae						
<i>Processa</i> sp.1						
Upogebiidae						
<i>Gebiathantha</i> sp.1						
<i>Gebicula</i> sp.4			1			
Isopoda						
Anthuridae						
<i>Amakusanthura</i> sp.1				1		
Gnathiidae						
<i>Caecognathia andamanensis</i>	2			3	1	1
Hyssuridae						
<i>Hyssuridae</i> sp.1						
Mysidacea						
Mysidae						
<i>Siriella</i> sp.1						
Tanaidacea						
Apseudidae						
<i>Apseudes</i> sp.1				1	1	1
<i>Apseudes</i> sp.2				1		
<i>Apseudes</i> sp.4						1
Leptocheliidae						
<i>Leptochelia</i> sp.1						
<i>Leptochelia</i> sp.2						
<i>Leptochelia</i> sp.3						
Pagurapseudidae						
<i>Pagurapseudidae</i> sp.2						
Parapseudidae						
<i>Parapseudidae</i> sp.1				2		



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 squa

TAXA	MAWC- 1B2X	MAWC- 1C2	MAWC- 2B2X	MAWC- 3B2X	MAWC- 3C2	MAWC- 4B2X
Echinodermata						
Ophiuroidea						
Ophiurida						
Amphiuridae						
<i>Amphioplus (Lymanella) andreae</i>				1		
<i>Amphiura</i> sp.2						
Amphiuridae sp.1						
Amphiuridae sp.4			1			
Mollusca						
Aplacophora						
Cavibelonia						
Simrothiellidae						
<i>Helicoradomenia</i> sp.1						
Bivalvia						
Cardiida						
Psammobiidae						
<i>Gari</i> sp.1				1		
Semelidae						
<i>Abra</i> sp.3						
Lucinida						
Lucinidae						
<i>Anodontia edentula</i>						
<i>Cavatidens imajimai</i>						
Myoida						
Corbulidae						
<i>Corbula</i> sp.1					1	
Nuculoida						
Nuculidae						
<i>Ennucula niponica</i>					2	
Yoldiidae						
<i>Yoldiella</i> sp.1						
Pholadomyoida						
Cuspidariidae						
<i>Plectodon</i> sp.1						
Pterioida						
Pinnidae						
<i>Pinna</i> sp.	1					
Gastropoda						
Archaeogastropoda						
Fissurellidae						
<i>Fissurellidae</i> sp.1						
Orbitestellidae						
<i>Microdiscula</i> sp.1						
Heterostropha						
Pyramidellidae						
<i>Menesho</i> sp.1						
Neogastropoda						
Nassariidae						
<i>Nassarius</i> sp.1						
Total	13	11	55	49	46	39



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 squa

TAXA	MAWD- 1B2X	MAWD- 1C2	MAWD- 2C2X	MAWD- 3B2	MAWD- 3C2X	MAWD- 4B2X
Nematoda						
<i>Nematoda</i> sp.1	1					
Nemertea						
Anopla						
Palaeonemertea						
Tubulanidae						
<i>Callinera</i> sp.1						
Sipuncula						
Phascolosomatidea						
Aspidosiphoniformes						
Aspidosiphonidae						
<i>Aspidosiphon</i> sp.1						
Phascolosomatiformes						
Phascolosomatidae						
<i>Apionsoma</i> sp.2						
Sipunculidea						
Golfingiformes						
Phascolionidae						
<i>Phascolion</i> sp.1						
Annelida						
Polychaeta						
Aciculata						
Amphinomidae						
<i>Chloeia violacea</i>			1			
Dorvilleidae						
<i>Schistomeringos</i> sp.1						
Eunicidae						
<i>Euniphysa</i> sp.1		1				
<i>Lysidice</i> sp.6						
Glyceridae						
<i>Glycera cinnamomea</i>						
<i>Glycera macrobranchia</i>						
<i>Glycera</i> sp.						
Hartmaniellidae						
<i>Hartmaniella</i> sp.1		1				
Hesionidae						
<i>Hesiospina</i> sp.1						
Lumbrineridae						
<i>Gallardoneris thailandensis</i>						
<i>Gesaneris</i> sp.1						
<i>Lumbrineris latreilli</i>						
Nephtyidae						
<i>Aglaophamus cf. dicirroides</i>				2		1
<i>Aglaophamus orientalis</i>	1					
<i>Aglaophamus tepens</i>			1			
Nereididae						
<i>Neanthes arenaceodentata</i>						
<i>Tambalagamia fauveli</i>						



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 squa

TAXA	MAWD- 1B2X	MAWD- 1C2	MAWD- 2C2X	MAWD- 3B2	MAWD- 3C2X	MAWD- 4B2X
Onuphidae						
<i>Onuphis</i> sp.						
<i>Onuphis</i> sp.1			1			
<i>Onuphis</i> sp.6						
Paralacydoniidae						
<i>Paralacydonia</i> sp.1						
Phyllodocidae						
<i>Phyllodoce</i> sp.2						
Pilargidae						
<i>Hermundura</i> sp.1	1					1
<i>Litocorsa</i> nr. <i>antennata</i>						
<i>Sigambra</i> sp.						
<i>Sigambra</i> sp.1						
<i>Sigambra</i> sp.8						
<i>Synelmis</i> <i>albini</i>					1	
<i>Synelmis</i> <i>rigida</i>			2			
Polynoidae						
<i>Harmothoe</i> sp.						
<i>Harmothoe</i> sp.1						
Sigalionidae						
<i>Sthenolepis</i> <i>japonica</i>						
Syllidae						
<i>Exogone</i> (<i>Exogone</i>) sp.1						
Canalipalpata						
Ampharetidae						
<i>Amphicteis</i> sp.3						
<i>Anobothrus</i> sp.1		2		1		
<i>Lysippe</i> <i>labiata</i>						
<i>Sosane</i> sp.2				1		
Chaetopteridae						
<i>Spiochaetopterus</i> sp.1	1			5	1	
Cirratulidae						
<i>Aphelochaeta</i> sp.1						
<i>Chaetozone</i> sp.9						
<i>Kirkegaardia</i> sp.1						
<i>Kirkegaardia</i> sp.5				1		
<i>Kirkegaardia</i> sp.6						
<i>Kirkegaardia</i> sp.7						
Fabriciidae						
<i>Fabricinuda</i> sp.1						
<i>Pseudofabriciola</i> sp.						
<i>Pseudofabriciola</i> sp.1						
<i>Pseudofabriciola</i> sp.2						
Flabelligeridae						
<i>Diplocirrus</i> sp.1						
Magelonidae						
<i>Magelona</i> sp.13						
Poecilochaetidae						
<i>Poecilochaetus</i> sp.3						



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 squa

TAXA	MAWD- 1B2X	MAWD- 1C2	MAWD- 2C2X	MAWD- 3B2	MAWD- 3C2X	MAWD- 4B2X
Sabellidae						
<i>Euchone</i> sp.2				1		
<i>Euchonoides</i> sp.1						
Spionidae						
<i>Laonice</i> sp.1						
<i>Paraprionospio</i> sp.1						
<i>Paraprionospio</i> sp.2						
<i>Prionospio ehlersi</i>		1		1		
<i>Prionospio elegantula</i>						
<i>Prionospio</i> sp.				1		
<i>Prionospio</i> sp.10						
<i>Spiophanes</i> sp.3						
<i>Spiophanes</i> sp.4						
<i>Spiophanes</i> sp.5						
Sternaspidae						
<i>Caulleryaspis</i> sp.1						
<i>Sternaspis</i> sp.1				1		
Terebellidae						
<i>Amaeana apheles</i>						
<i>Pista</i> sp.4						
Trichobranchidae						
<i>Terebellides</i> sp.1				1		
<i>Terebellides</i> sp.2						
<i>Trichobranchus roseus</i>						
Capitellidae						
<i>Barantolla</i> sp.1						
<i>Capitella capitata</i>						
<i>Capitella capitata oculata</i>						
<i>Capitellethus</i> sp.1		2				
<i>Capitellethus</i> sp.2						
<i>Neomediomastus</i> sp.1			1			
<i>Neomediomastus</i> sp.2						
<i>Notomastus latericeus</i>						
<i>Notomastus</i> sp.4						
<i>Promastobranchnus huloti</i>						
<i>Rashgua lobatus</i>						
<i>Scyphoproctus nr. oculatus</i>	1					
Cossuridae						
<i>Cossura</i> sp.						
Maldanidae						
<i>Clymenella</i> sp.1						
<i>Euclymene</i> sp.1						
<i>Euclymene</i> sp.3	1					
<i>Lumbriclymene</i> sp.1						
<i>Praxillella nr. gracilis</i>						
<i>Praxillella</i> sp.3						
<i>Praxillella</i> sp.4						



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 squa

TAXA	MAWD- 1B2X	MAWD- 1C2	MAWD- 2C2X	MAWD- 3B2	MAWD- 3C2X	MAWD- 4B2X
Paraonidae						
<i>Aricidea (Acmira)</i> sp.3						
<i>Aricidea (Aricidea)</i> sp.3						
<i>Aricidea (Strelzovia)</i> sp.1				1		
<i>Levinsenia</i> sp.		1				
<i>Levinsenia</i> sp.1						
<i>Levinsenia</i> sp.2	3	1		4		
<i>Levinsenia</i> sp.5						
<i>Levinsenia</i> sp.9						
Arthropoda						
Crustacea						
Amphipoda						
Ampeliscaidae						
<i>Ampelisca bocki</i>					1	
<i>Ampelisca chinensis</i>						
<i>Ampelisca cyclops</i>					3	3
<i>Byblis febris</i>						
<i>Byblis</i> sp.				1		
Caprellidae						
<i>Caprella</i> sp.1			1			
Dexaminidae						
Dexaminidae sp.2			1			
Oedicerotidae						
<i>Periculodes</i> sp.1						
Photidae						
<i>Gammaropsis</i> sp.4						
<i>Photis</i> sp.2						
Tryphosidae						
<i>Tryphosella</i> sp.1			5			
<i>Tryphosella</i> sp.2						
Urothoidae						
<i>Urothoe gelasina</i>						
Cumacea						
Leuconidae						
<i>Eudorella</i> sp.1						
<i>Eudorella</i> sp.2				1		
Nannastacidae						
<i>Campylaspis</i> sp.1						
<i>Campylaspis</i> sp.5						
<i>Campylaspis</i> sp.6			1			
Decapoda						
Alpheidae						
Alpheidae sp.4						
<i>Alpheus acutocarinatus</i>						
<i>Alpheus rapacida</i>						
<i>Alpheus</i> sp.					1	
<i>Athanas</i> sp.						
<i>Bermudacaris</i> sp.				1		1
<i>Bermudacaris</i> sp.1			2		1	



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 squa

TAXA	MAWD- 1B2X	MAWD- 1C2	MAWD- 2C2X	MAWD- 3B2	MAWD- 3C2X	MAWD- 4B2X
Callianassidae						
Callianassidae				1		
<i>Lipkecallianassa</i> sp.1	1	3	2		1	
Ogyrididae						
<i>Ogyrides</i> sp.4						
Palaemonidae						
<i>Palaemon</i> sp.	1					
<i>Palaemon</i> sp.3						
<i>Palaemonidae</i>						
<i>Periclimenes</i> sp.2						
Pasiphaeidae						
<i>Leptochela pugnax</i>	1					1
Pilumnidae						
<i>Ceratoplax fulgida</i>						
<i>Typhlocarcinops transversus</i>						
Portunidae						
<i>Alionectes pulchricristatus</i>						
<i>Libystes edwardsi</i>						
<i>Thalamita admete</i>			2			
Processidae						
<i>Processa</i> sp.1		1				
Upogebiidae						
<i>Gebiacantha</i> sp.1			1			1
<i>Gebicula</i> sp.4						
Isopoda						
Anthuridae						
<i>Amakusanthura</i> sp.1						
Gnathiidae						
<i>Caecognathia andamanensis</i>						
Hyssuridae						
<i>Hyssuridae</i> sp.1						
Mysidacea						
Mysidae						
<i>Siriella</i> sp.1						
Tanaidacea						
Apseudidae						
<i>Apseudes</i> sp.1						
<i>Apseudes</i> sp.2						
<i>Apseudes</i> sp.4						
Leptocheliidae						
<i>Leptochelia</i> sp.1				1		
<i>Leptochelia</i> sp.2						
<i>Leptochelia</i> sp.3						
Pagurapseudidae						
<i>Pagurapseudidae</i> sp.2			1			
Parapseudidae						
<i>Parapseudidae</i> sp.1						



Appendix E1
Benthic Community

Benthos density (individuals per 0.04 squa

TAXA	MAWD- 1B2X	MAWD- 1C2	MAWD- 2C2X	MAWD- 3B2	MAWD- 3C2X	MAWD- 4B2X
Echinodermata						
Ophiuroidea						
Ophiurida						
Amphiuridae						
<i>Amphioplus (Lymanella) andreae</i>						
<i>Amphiura</i> sp.2						
Amphiuridae sp.1						
Amphiuridae sp.4						
Mollusca						
Aplacophora						
Cavibelonia						
Simrothiellidae						
<i>Helicoradomenia</i> sp.1	1					
Bivalvia						
Cardiida						
Psammobiidae						
<i>Gari</i> sp.1						
Semelidae						
<i>Abra</i> sp.3						
Lucinida						
Lucinidae						
<i>Anodontia edentula</i>						
<i>Cavatidens imajimai</i>						
Myoida						
Corbulidae						
<i>Corbula</i> sp.1						
Nuculoida						
Nuculidae						
<i>Ennucula niponica</i>						
Yoldiidae						
<i>Yoldiella</i> sp.1		1				
Pholadomyoida						
Cuspidariidae						
<i>Plectodon</i> sp.1						
Pterioida						
Pinnidae						
<i>Pinna</i> sp.						
Gastropoda						
Archaeogastropoda						
Fissurellidae						
<i>Fissurellidae</i> sp.1						
Orbitestellidae						
<i>Microdiscula</i> sp.1						
Heterostropha						
Pyramidellidae						
<i>Menesho</i> sp.1						
Neogastropoda						
Nassariidae						
<i>Nassarius</i> sp.1						
Total	13	14	22	25	9	8



Appendix E1a
Biomass

No.	Sample ID	Biomass (g)				
		Polychaete	Crustacea	Mollusc	Echinoderm	Other
1	MAWA-1C2	0.0698	0.0343	-	-	0.0001
2	MAWA-1CP2	0.0067	0.0016	-	-	-
3	MAWA-2B2X	0.0246	0.1253	0.0001	0.0184	0.0021
4	MAWA-3B2	0.0812	0.0240	0.0033	-	0.0016
5	MAWA-3C2	0.0279	0.0260	0.0001	-	0.0031
6	MAWA-4B2X	0.0322	0.0491	-	0.0001	-
7	MAWB-1B2X	0.0193	0.0027	0.0001	-	0.0001
8	MAWB-1C2X	0.0043	-	-	-	0.0001
9	MAWB-2B2X	0.0313	0.0001	-	0.0096	0.0025
10	MAWB-3B2X	0.1692	-	17.9472	-	-
11	MAWB-3C2	0.0232	0.0222	-	0.0272	0.0001
12	MAWB-4B2X	0.0351	0.0009	-	-	0.0008
13	MAWC-1B2X	0.0061	0.0016	0.0001	-	-
14	MAWC-1C2	0.0192	0.0089	-	-	0.003
15	MAWC-2B2X	0.2425	0.0066	-	0.0001	0.002
16	MAWC-3B2X	0.0817	0.0299	0.0947	0.0153	0.0052
17	MAWC-3C2	0.0916	0.0420	0.1529	-	0.0461
18	MAWC-4B2X	0.0688	0.0262	-	-	0.0023
19	MAWD-1B2X	0.0182	0.0264	0.0001	-	0.0001
20	MAWD-1C2	0.0518	0.0225	0.0048	-	-
21	MAWD-2C2X	0.0081	0.0734	-	-	-
22	MAWD-3B2	0.1041	0.0004	-	-	-
23	MAWD-3C2X	0.0070	0.0211	-	-	-
24	MAWD-4B2X	0.0086	0.0459	-	-	-

Appendix E2
Benthic Community

Benthos density (individuals per 0.04 squaremeter)

TAXA	MAWG- 1B2X	MAWG- 1C2	MAWG- 1D2	MAWG- 2B2X	MAWG- 2C2
Nemertea					
Anopla					
Heteronemertea					
Lineidae					
<i>Lineus</i> sp.1					
Palaeonemertea					
Tubulanidae					
<i>Callinera</i> sp.1	2		1		
Platyhelminthes					
Turbellaria					
<i>Turbellaria</i>					
Sipuncula					
Phascolosomatidea					
Aspidosiphoniformes					
Aspidosiphonidae					
<i>Aspidosiphon</i> sp.1					
Phascolosomatiformes					
Phascolosomatidae					
<i>Apionsoma</i> sp.2	4	1	1		
Annelida					
Polychaeta					
Aciculata					
Amphinomidae					
<i>Chloeia violacea</i>					
Dorvilleidae					
<i>Schistomeringos</i> sp.1	1				
Eunicidae					
<i>Marphysa</i> sp.1					
Glyceridae					
<i>Glycera alba</i>					
<i>Glycera tessellata</i>					1
Goniadidae					
<i>Glycinde cf. oligodon</i>					
Hartmaniellidae					
<i>Hartmaniella</i> sp.1					
Lumbrineridae					
<i>Gallardonneris thailandensis</i>					1
Nephtyidae					
<i>Aglaophamus cf. dicirroides</i>			1	1	
<i>Aglaophamus orientalis</i>	1	1			
<i>Aglaophamus tepens</i>					
Nereididae					
<i>Tambalagama fauveli</i>	1				
Oeonidae					
<i>Arabella</i> sp.1					1
Onuphidae					
<i>Onuphis</i> sp.1		1			



Appendix E2
Benthic Community

Benthos density (individuals per 0.04 squaremeter)

TAXA	MAWG- 1B2X	MAWG- 1C2	MAWG- 1D2	MAWG- 2B2X	MAWG- 2C2
Pilargidae					
<i>Hermundura</i> sp.1					
<i>Litocorsa</i> nr. <i>antennata</i>					
<i>Sigambra</i> sp.1	2	1			
<i>Sigambra</i> sp.8					1
<i>Synelmis albini</i>		2	2		2
<i>Synelmis rigida</i>					6
Polynoidae					
<i>Harmothoe</i> sp.			1		
Sigalionidae					
<i>Sthenolepis japonica</i>					
Syllidae					
<i>Exogone (Exogone)</i> sp.1					
<i>Syllis</i> sp.1					
Canalipalpata					
Ampharetidae					
<i>Anobothrus</i> sp.1					
<i>Auchenoplax crinita</i>					
<i>Sosane</i> sp.2					
Cirratulidae					
<i>Caulleriella</i> sp.1	1				
<i>Chaetozone</i> sp.1					1
<i>Kirkegaardia</i> sp.1					
<i>Kirkegaardia</i> sp.6					
<i>Kirkegaardia</i> sp.7					
Flabelligeridae					
<i>Diplocirrus</i> sp.1			2		1
Magelonidae					
<i>Magelona</i> sp.13		1			
Poecilochaetidae					
<i>Poecilochaetus</i> sp.3					
Sabellidae					
<i>Chone</i> sp.1					
Spionidae					
<i>Laonice</i> sp.1					1
<i>Prionospio ehlersi</i>	1				
<i>Prionospio elegantula</i>					1
<i>Prionospio</i> sp.10	1				
Sternaspidae					
<i>Caulleryaspis</i> sp.1					1
<i>Petersenaspis apinyae</i>					
<i>Sternaspis</i> sp.1					2
Terebellidae					
<i>Pista</i> sp.4					
Trichobranchidae					
<i>Terebellides</i> sp.1			1		
<i>Terebellides</i> sp.2	2				
<i>Trichobranchus roseus</i>			1		



Appendix E2
Benthic Community

Benthos density (individuals per 0.04 squaremeter)

TAXA	MAWG- 1B2X	MAWG- 1C2	MAWG- 1D2	MAWG- 2B2X	MAWG- 2C2
Capitellidae					
<i>Capitella capitata</i>	7				
<i>Capitellethus</i> sp.1					
<i>Capitellethus</i> sp.2					
<i>Neomediomastus</i> sp.1					
<i>Promastobranhus huloti</i>					
<i>Rashgua lobatus</i>				1	
<i>Scyphoproctus</i> sp.1					
Cossuridae					
<i>Cossura</i> sp.					1
Maldanidae					
<i>Clymenella</i> sp.1			1	1	
<i>Euclymene</i> sp.1		1			
<i>Euclymene</i> sp.3			1		
<i>Praxillella</i> nr. <i>gracilis</i>					
<i>Praxillella</i> sp.3					
Orbiniidae					
<i>Leodamas</i> sp.1					
Paraonidae					
<i>Cirrophorus</i> sp.4					
<i>Levinsenia</i> sp.2					2
<i>Levinsenia</i> sp.5		1			
<i>Levinsenia</i> sp.9	2				
Arthropoda					
Crustacea					
Amphipoda					
Ampeliscidae					
<i>Ampelisca bocki</i>			2		
<i>Ampelisca chinensis</i>					
<i>Ampelisca cyclops</i>					1
<i>Ampelisca maia</i>					
<i>Byblis calisto</i>					
<i>Byblis febris</i>		1			
<i>Byblis</i> sp.					
Aoridae					
<i>Grandidierella gilesi</i>					
Caprellidae					
<i>Caprella</i> sp.1	1				1
Dexaminidae					
Dexaminidae sp.2					
Eriopisidae					
<i>Cephalopisella propagatio</i>					
Photidae					
<i>Photis</i> sp.2					
Tryphosidae					
<i>Tryphosella</i> sp.1					
Urothoidae					
<i>Urothoe gelasina</i>		1			



Appendix E2
Benthic Community

Benthos density (individuals per 0.04 squaremeter)

TAXA	MAWG- 1B2X	MAWG- 1C2	MAWG- 1D2	MAWG- 2B2X	MAWG- 2C2
Cumacea					
Diastylidae					
<i>Diastylis</i> sp.2					
Nannastacidae					
<i>Campylaspis</i> sp.2			1		
<i>Campylaspis</i> sp.3					
Decapoda					
Alpheidae					
<i>Alpheus acutocarinatus</i>					
<i>Alpheus rapacida</i>					
<i>Alpheus</i> sp.				1	
<i>Athanas</i> sp.					
<i>Bermudacaris</i> sp.		3			1
<i>Bermudacaris</i> sp.1				1	
Axiidae					
<i>Calocaris</i> sp.1				1	
Callianassidae					
<i>Lipkecallianassa</i> sp.1		4	4		1
Euryplacidae					
<i>Platyozius laevis</i>					
Ogyrididae					
<i>Ogyrides</i> sp.4			1		
Palaemonidae					
<i>Palaemon</i> sp.		1			
<i>Palaemonidae</i> sp.7					
<i>Periclimenes</i> sp.2		1			
Pandalidae					
Pandalidae sp.1					
Pasiphaeidae					
<i>Leptochela pugnax</i>					
Pilumnidae					
<i>Ceratoplax fulgida</i>	1				
Portunidae					
<i>Alionectes pulchricristatus</i>				2	
<i>Charybdis (Archias) hongkongensis</i>					
<i>Libystes edwardsi</i>	1				
<i>Thalamita admete</i>					1
Processidae					
<i>Processa</i> sp.1	1				
Upogebiidae					
<i>Gebiacantha</i> sp.1	1				
<i>Gebiacantha</i> sp.3					
<i>Gebicula</i> sp.4			1		
Xanthidae					
Xanthidae sp.2					1
Isopoda					
Anthuridae					
<i>Amakusanthura</i> sp.1				1	
<i>Amakusanthura</i> sp.2	1				
Gnathiidae					
<i>Caecognathia andamanensis</i>					
Gnathiidae			1		



Appendix E2
Benthic Community

Benthos density (individuals per 0.04 squaremeter)

TAXA	MAWG- 1B2X	MAWG- 1C2	MAWG- 1D2	MAWG- 2B2X	MAWG- 2C2
Mysidacea					
Mysidae					
<i>Anchialina</i> sp.1		1		1	
<i>Anchialina</i> sp.2					
Stomatopoda					
Nannosquillidae					
<i>Acanthosquilla derijardi</i>					1
Tanaidacea					
Apseudidae					
<i>Apseudes</i> sp.1		1			
<i>Apseudidae</i> sp.4		1			
Echinodermata					
Ophiuroidea					
Ophiurida					
Amphiuridae					
<i>Amphioplus</i> sp.1			1		
<i>Amphiuridae</i> sp.4	1				
<i>Amphiuridae</i> sp.5					
Ophiuridae					
<i>Ophiura kinbergi</i>					
Mollusca					
Aplacophora					
Cavibelonia					
Simrothiellidae					
<i>Helicoradomenia</i> sp.1			1		
Bivalvia					
Lucinida					
Lucinidae					
<i>Cavatidens imajimai</i>	3				
Mytiloida					
Mytilidae					
<i>Amygdalum cf. soyae</i>			1		
Nuculoida					
Nuculidae					
<i>Ennucula niponica</i>			1		
Veneroida					
Pharidae					
<i>Siliqua</i> sp.	1				
Ungulinidae					
<i>Felaniella</i> sp.1		1			
Bivalvia		1			
Gastropoda					
Heterostropha					
Pyramidellidae					
<i>Turbonilla (Chemnitzia)</i> sp.1					
Neotaenioglossa					
Naticidae					
<i>Sinum japonicum</i>					
<i>Sinum</i> sp.1					
Total	36	25	26	10	29



Appendix E2
Benthic Community

Benthos density (individuals per 0.04 squarem

TAXA	MAWG- 3B2X	MAWG- 3C2	MAWG- 3D2	MAWG- 4B2X	MAWG- 4C2
Nemertea					
Anopla					
Heteronemertea					
Lineidae					
<i>Lineus</i> sp.1					
Palaeonemertea					
Tubulanidae					
<i>Callinera</i> sp.1	1	1			
Platyhelminthes					
Turbellaria					
<i>Turbellaria</i>					
Sipuncula					
Phascolosomatidea					
Aspidosiphoniformes					
Aspidosiphonidae					
<i>Aspidosiphon</i> sp.1	1				
Phascolosomatiformes					
Phascolosomatidae					
<i>Apionsoma</i> sp.2	3			1	
Annelida					
Polychaeta					
Aciculata					
Amphinomidae					
<i>Chloeia violacea</i>					
Dorvilleidae					
<i>Schistomeringos</i> sp.1	4				
Eunicidae					
<i>Marphysa</i> sp.1	1				
Glyceridae					
<i>Glycera alba</i>					
<i>Glycera tessellata</i>					
Goniadidae					
<i>Glycinde cf. oligodon</i>	1				
Hartmaniellidae					
<i>Hartmaniella</i> sp.1					
Lumbrineridae					
<i>Gallardoneris thailandensis</i>					
Nephtyidae					
<i>Aglaophamus cf. dicirroides</i>					1
<i>Aglaophamus orientalis</i>			2	1	
<i>Aglaophamus tepens</i>	1				
Nereididae					
<i>Tambalagamia fauveli</i>	1				1
Oeonidae					
<i>Arabella</i> sp.1					
Onuphidae					
<i>Onuphis</i> sp.1			1		



Appendix E2
Benthic Community

Benthos density (individuals per 0.04 squarem

TAXA	MAWG- 3B2X	MAWG- 3C2	MAWG- 3D2	MAWG- 4B2X	MAWG- 4C2
Pilargidae					
<i>Hermundura</i> sp.1			1		
<i>Litocorsa</i> nr. <i>antennata</i>					
<i>Sigambra</i> sp.1	2				
<i>Sigambra</i> sp.8					
<i>Synelmis</i> <i>albini</i>		2		3	1
<i>Synelmis</i> <i>rigida</i>		3	2	1	
Polynoidae					
<i>Harmothoe</i> sp.			1		
Sigalionidae					
<i>Sthenolepis</i> <i>japonica</i>					1
Syllidae					
<i>Exogone</i> (<i>Exogone</i>) sp.1					
<i>Syllis</i> sp.1	1				
Canalipalpata					
Ampharetidae					
<i>Anobothrus</i> sp.1					
<i>Auchenoplax</i> <i>crinita</i>					
<i>Sosane</i> sp.2					
Cirratulidae					
<i>Caulleriella</i> sp.1					
<i>Chaetozone</i> sp.1		1			
<i>Kirkegaardia</i> sp.1					
<i>Kirkegaardia</i> sp.6					
<i>Kirkegaardia</i> sp.7			1		
Flabelligeridae					
<i>Diplocirrus</i> sp.1					1
Magelonidae					
<i>Magelona</i> sp.13					
Poecilochaetidae					
<i>Poecilochaetus</i> sp.3					
Sabellidae					
<i>Chone</i> sp.1					
Spionidae					
<i>Laonice</i> sp.1					
<i>Prionospio</i> <i>ehlersi</i>	2				
<i>Prionospio</i> <i>elegantula</i>					
<i>Prionospio</i> sp.10					
Sternaspidae					
<i>Caulleryaspis</i> sp.1					
<i>Petersenaspis</i> <i>apinyae</i>					
<i>Sternaspis</i> sp.1					
Terebellidae					
<i>Pista</i> sp.4					
Trichobranchidae					
<i>Terebellides</i> sp.1					
<i>Terebellides</i> sp.2					1
<i>Trichobranchus</i> <i>roseus</i>					



Appendix E2
Benthic Community

Benthos density (individuals per 0.04 squareme

TAXA	MAWG- 3B2X	MAWG- 3C2	MAWG- 3D2	MAWG- 4B2X	MAWG- 4C2
Capitellidae					
<i>Capitella capitata</i>	27				
<i>Capitellethus</i> sp.1			1		
<i>Capitellethus</i> sp.2		1			
<i>Neomediomastus</i> sp.1					
<i>Promastobranhus hultoti</i>			1		
<i>Rashgua lobatus</i>					
<i>Scyphoproctus</i> sp.1	1				
Cossuridae					
<i>Cossura</i> sp.					
Maldanidae					
<i>Clymenella</i> sp.1					
<i>Euclymene</i> sp.1					
<i>Euclymene</i> sp.3					
<i>Praxillella nr. gracilis</i>					
<i>Praxillella</i> sp.3					
Orbiniidae					
<i>Leodamas</i> sp.1	1				
Paraonidae					
<i>Cirrophorus</i> sp.4		1			1
<i>Levinsenia</i> sp.2					1
<i>Levinsenia</i> sp.5				1	1
<i>Levinsenia</i> sp.9					
Arthropoda					
Crustacea					
Amphipoda					
Ampeliscidae					
<i>Ampelisca bocki</i>					
<i>Ampelisca chinensis</i>					
<i>Ampelisca cyclops</i>					
<i>Ampelisca maia</i>					
<i>Byblis calisto</i>					
<i>Byblis febris</i>			1		2
<i>Byblis</i> sp.					
Aoridae					
<i>Grandidierella gilesi</i>					
Caprellidae					
<i>Caprella</i> sp.1			1		
Dexaminidae					
Dexaminidae sp.2					
Eriopisidae					
<i>Cephalopisella propagatio</i>					
Photidae					
<i>Photis</i> sp.2					
Tryphosidae					
<i>Tryphosella</i> sp.1	1		1		1
Urothoidae					
<i>Urothoe gelasina</i>					



Appendix E2
Benthic Community

Benthos density (individuals per 0.04 squarem

TAXA	MAWG- 3B2X	MAWG- 3C2	MAWG- 3D2	MAWG- 4B2X	MAWG- 4C2
Cumacea					
Diastylidae					
<i>Diastylis</i> sp.2					
Nannastacidae					
<i>Campylaspis</i> sp.2					
<i>Campylaspis</i> sp.3					
Decapoda					
Alpheidae					
<i>Alpheus acutocarinatus</i>					1
<i>Alpheus rapacida</i>		1			
<i>Alpheus</i> sp.					
<i>Athanas</i> sp.					1
<i>Bermudacaris</i> sp.					1
<i>Bermudacaris</i> sp.1			2		
Axiidae					
<i>Calocaris</i> sp.1		1			
Callianassidae					
<i>Lipkecallianassa</i> sp.1			3		2
Euryplacidae					
<i>Platyozius laevis</i>					
Ogyrididae					
<i>Ogyrides</i> sp.4					
Palaemonidae					
<i>Palaemon</i> sp.					
<i>Palaemonidae</i> sp.7			1		
<i>Periclimenes</i> sp.2					
Pandalidae					
Pandalidae sp.1			1		
Pasiphaeidae					
<i>Leptochela pugnax</i>	1				
Pilumnidae					
<i>Ceratoplax fulgida</i>		1	1	1	
Portunidae					
<i>Alionectes pulchricristatus</i>					
<i>Charybdis (Archias) hongkongensis</i>	1				
<i>Libystes edwardsi</i>					
<i>Thalamita admete</i>					
Processidae					
<i>Processa</i> sp.1					1
Upogebiidae					
<i>Gebiacantha</i> sp.1					
<i>Gebiacantha</i> sp.3		1			
<i>Gebicula</i> sp.4					
Xanthidae					
Xanthidae sp.2					
Isopoda					
Anthuridae					
<i>Amakusanthura</i> sp.1					
<i>Amakusanthura</i> sp.2	10				
Gnathiidae					
<i>Caecognathia andamanensis</i>					1
<i>Gnathiidae</i>					



Appendix E2
Benthic Community

Benthos density (individuals per 0.04 squarem

TAXA	MAWG- 3B2X	MAWG- 3C2	MAWG- 3D2	MAWG- 4B2X	MAWG- 4C2
Mysidacea					
Mysidae					
<i>Anchialina</i> sp.1					
<i>Anchialina</i> sp.2					
Stomatopoda					
Nannosquillidae					
<i>Acanthosquilla derijardi</i>					
Tanaidacea					
Apseudidae					
<i>Apseudes</i> sp.1					
Apseudidae sp.4					
Echinodermata					
Ophiuroidea					
Ophiurida					
Amphiuridae					
<i>Amphioplus</i> sp.1					1
Amphiuridae sp.4	1				
Amphiuridae sp.5					
Ophiuridae					
<i>Ophiura kinbergi</i>					
Mollusca					
Aplacophora					
Cavibelonia					
Simrothiellidae					
<i>Helicoradomenia</i> sp.1			1		
Bivalvia					
Lucinida					
Lucinidae					
<i>Cavatidens imajimai</i>	1				
Mytiloida					
Mytilidae					
<i>Amygdalum cf. soyae</i>			1		1
Nuculoida					
Nuculidae					
<i>Ennucula niponica</i>	1		1		1
Veneroida					
Pharidae					
<i>Siliqua</i> sp.					
Ungulinidae					
<i>Felaniella</i> sp.1					
Bivalvia					
Gastropoda					
Heterostropha					
Pyramidellidae					
<i>Turbonilla (Chemnitzia)</i> sp.1					1
Neotaenioglossa					
Naticidae					
<i>Sinum japonicum</i>	1				
<i>Sinum</i> sp.1					1
Total	64	13	24	8	23



Appendix E2
Benthic Community

Benthos density (individuals per 0.04 squarem

TAXA	Control-3- A	Control-3- B	Control-3- C
Nemertea			
Anopla			
Heteronemertea			
Lineidae			
<i>Lineus</i> sp.1		1	
Palaeonemertea			
Tubulanidae			
<i>Callinera</i> sp.1	1		
Platyhelminthes			
Turbellaria			
<i>Turbellaria</i>		1	
Sipuncula			
Phascolosomatidea			
Aspidosiphoniformes			
Aspidosiphonidae			
<i>Aspidosiphon</i> sp.1			
Phascolosomatiformes			
Phascolosomatidae			
<i>Apionsoma</i> sp.2			
Annelida			
Polychaeta			
Aciculata			
Amphinomidae			
<i>Chloeia violacea</i>		1	
Dorvilleidae			
<i>Schistomeringos</i> sp.1			
Eunicidae			
<i>Marphysa</i> sp.1			
Glyceridae			
<i>Glycera alba</i>			1
<i>Glycera tessellata</i>			
Goniadidae			
<i>Glycinde cf. oligodon</i>			
Hartmaniellidae			
<i>Hartmaniella</i> sp.1	1		
Lumbrineridae			
<i>Gallardoneris thailandensis</i>			
Nephtyidae			
<i>Aglaophamus cf. dicirroides</i>		1	
<i>Aglaophamus orientalis</i>			
<i>Aglaophamus tepens</i>	1	1	
Nereididae			
<i>Tambalagama fauveli</i>	1		
Oeonidae			
<i>Arabella</i> sp.1			
Onuphidae			
<i>Onuphis</i> sp.1			



Appendix E2
Benthic Community

Benthos density (individuals per 0.04 squarem

TAXA	Control-3- A	Control-3- B	Control-3- C
Pilargidae			
<i>Hermundura</i> sp.1			
<i>Litocorsa nr. antennata</i>		2	
<i>Sigambra</i> sp.1			
<i>Sigambra</i> sp.8			
<i>Synelmis albini</i>		1	
<i>Synelmis rigida</i>	2	3	
Polynoidae			
<i>Harmothoe</i> sp.			
Sigalionidae			
<i>Sthenolepis japonica</i>	1		
Syllidae			
<i>Exogone (Exogone)</i> sp.1			1
<i>Syllis</i> sp.1			
Canalipalpata			
Ampharetidae			
<i>Anobothrus</i> sp.1			1
<i>Auchenoplax crinita</i>	1		
<i>Sosane</i> sp.2			1
Cirratulidae			
<i>Caulleriella</i> sp.1			
<i>Chaetozone</i> sp.1			
<i>Kirkegaardia</i> sp.1			1
<i>Kirkegaardia</i> sp.6	1		
<i>Kirkegaardia</i> sp.7			
Flabelligeridae			
<i>Diplocirrus</i> sp.1			
Magelonidae			
<i>Magelona</i> sp.13		1	
Poecilochaetidae			
<i>Poecilochaetus</i> sp.3		1	
Sabellidae			
<i>Chone</i> sp.1	1		
Spionidae			
<i>Laonice</i> sp.1			
<i>Prionospio ehlersi</i>			
<i>Prionospio elegantula</i>		2	
<i>Prionospio</i> sp.10			
Sternaspidae			
<i>Caulleryaspis</i> sp.1			
<i>Petersenaspis apinyae</i>	1		
<i>Sternaspis</i> sp.1			
Terebellidae			
<i>Pista</i> sp.4	1		
Trichobranchidae			
<i>Terebellides</i> sp.1			
<i>Terebellides</i> sp.2			
<i>Trichobranchus roseus</i>			



Appendix E2
Benthic Community

Benthos density (individuals per 0.04 squareme

TAXA	Control-3- A	Control-3- B	Control-3- C
Capitellidae			
<i>Capitella capitata</i>			
<i>Capitellethus</i> sp.1			
<i>Capitellethus</i> sp.2			
<i>Neomediomastus</i> sp.1	1	1	
<i>Promastobranchnus huloti</i>	1		
<i>Rashgua lobatus</i>			
<i>Scyphoproctus</i> sp.1			
Cossuridae			
<i>Cossura</i> sp.		1	
Maldanidae			
<i>Clymenella</i> sp.1			1
<i>Euclymene</i> sp.1			
<i>Euclymene</i> sp.3			
<i>Praxillella</i> nr. <i>gracilis</i>	1		1
<i>Praxillella</i> sp.3			1
Orbiniidae			
<i>Leodamas</i> sp.1			
Paraonidae			
<i>Cirrophorus</i> sp.4			1
<i>Levinsenia</i> sp.2	2		
<i>Levinsenia</i> sp.5			
<i>Levinsenia</i> sp.9			
Arthropoda			
Crustacea			
Amphipoda			
Ampeliscidae			
<i>Ampelisca bocki</i>			
<i>Ampelisca chinensis</i>			1
<i>Ampelisca cyclops</i>	1		
<i>Ampelisca maia</i>	1		
<i>Byblis calisto</i>			1
<i>Byblis febris</i>			1
<i>Byblis</i> sp.	2	1	
Aoridae			
<i>Grandidierella gilesi</i>	1		
Caprellidae			
<i>Caprella</i> sp.1		1	
Dexaminidae			
Dexaminidae sp.2	1		
Eriopisidae			
<i>Cephalopisella propagatio</i>			1
Photidae			
<i>Photis</i> sp.2			1
Tryphosidae			
<i>Tryphosella</i> sp.1			
Urothoidae			
<i>Urothoe gelasina</i>			



Appendix E2
Benthic Community

Benthos density (individuals per 0.04 squareme

TAXA	Control-3- A	Control-3- B	Control-3- C
Cumacea			
Diastylidae			
<i>Diastylis</i> sp.2		1	
Nannastacidae			
<i>Campylaspis</i> sp.2			
<i>Campylaspis</i> sp.3	1		
Decapoda			
Alpheidae			
<i>Alpheus acutocarinatus</i>			
<i>Alpheus rapacida</i>			
<i>Alpheus</i> sp.			1
<i>Athanas</i> sp.			
<i>Bermudacaris</i> sp.			3
<i>Bermudacaris</i> sp.1			
Axiidae			
<i>Calocaris</i> sp.1			
Callianassidae			
<i>Lipkecallianassa</i> sp.1		2	
Euryplacidae			
<i>Platyozius laevis</i>		1	
Ogyrididae			
<i>Ogyrides</i> sp.4			
Palaemonidae			
<i>Palaemon</i> sp.			
<i>Palaemonidae</i> sp.7			
<i>Periclimenes</i> sp.2			
Pandalidae			
Pandalidae sp.1			
Pasiphaeidae			
<i>Leptochela pugnax</i>	1		
Pilumnidae			
<i>Ceratoplax fulgida</i>			
Portunidae			
<i>Alionectes pulchricristatus</i>			
<i>Charybdis (Archias) hongkongensis</i>			
<i>Libystes edwardsi</i>			
<i>Thalamita admete</i>			
Processidae			
<i>Processa</i> sp.1			
Upogebiidae			
<i>Gebiacantha</i> sp.1			
<i>Gebiacantha</i> sp.3			
<i>Gebicula</i> sp.4			
Xanthidae			
Xanthidae sp.2			
Isopoda			
Anthuridae			
<i>Amakusanthura</i> sp.1			
<i>Amakusanthura</i> sp.2			
Gnathiidae			
<i>Caecognathia andamanensis</i>	1		1
<i>Gnathiidae</i>			



Appendix E2
Benthic Community

Benthos density (individuals per 0.04 square meter)

TAXA	Control-3- A	Control-3- B	Control-3- C
Mysidacea			
Mysidae			
<i>Anchialina</i> sp.1			
<i>Anchialina</i> sp.2	1		
Stomatopoda			
Nannosquillidae			
<i>Acanthosquilla derijardi</i>			
Tanaidacea			
Apseudidae			
<i>Apseudes</i> sp.1	1		
Apseudidae sp.4	1		3
Echinodermata			
Ophiuroidea			
Ophiurida			
Amphiuridae			
<i>Amphioplus</i> sp.1	1	2	
Amphiuridae sp.4			
Amphiuridae sp.5	1		
Ophiuridae			
<i>Ophiura kinbergi</i>			1
Mollusca			
Aplacophora			
Cavibelonia			
Simrothiellidae			
<i>Helicoradomenia</i> sp.1			
Bivalvia			
Lucinida			
Lucinidae			
<i>Cavatidens imajimai</i>			
Mytiloida			
Mytilidae			
<i>Amygdalum cf. soyae</i>			
Nuculoida			
Nuculidae			
<i>Ennucula niponica</i>			
Veneroida			
Pharidae			
<i>Siliqua</i> sp.			
Ungulinidae			
<i>Felaniella</i> sp.1			
Bivalvia			
Gastropoda			
Heterostropha			
Pyramidellidae			
<i>Turbonilla (Chemnitzia)</i> sp.1			
Neotaenioglossa			
Naticidae			
<i>Sinum japonicum</i>			
<i>Sinum</i> sp.1			
Total	31	25	23



Appendix E2a
Biomass

No.	Sample ID	Biomass (g)				
		Polychaete	Crustacea	Mollusc	Echinoderm	Other
1	MAWG-1B2X	0.0139	0.0507	0.0109	0.0001	0.0051
2	MAWG-1C2	0.0360	0.0161	0.0041	-	0.0001
3	MAWG-1D2	0.0412	0.0173	0.0113	0.0171	0.0040
4	MAWG-2B2X	0.2070	0.0808	-	-	-
5	MAWG-2C2	0.0267	0.1003	-	-	-
6	MAWG-3B2X	0.0594	0.1728	0.1438	0.0001	0.0037
7	MAWG-3C2	0.0529	0.1198	-	-	0.0017
8	MAWG-3D2	0.0229	0.1632	0.0043	-	-
9	MAWG-4B2X	0.0184	0.0030	-	-	0.0001
10	MAWG-4C2	0.0182	0.0359	0.0045	0.0164	-
11	Control-3-A	0.1211	0.0169	-	0.0162	0.0018
12	Control-3-B	0.0161	0.0164	-	0.0130	0.0932
13	Control-3-C	0.0375	0.0482	-	0.1342	-

APPENDIX D
ANALYTICAL LABORATORY REPORTS:
PHYTOPLANKTON COMMUNITY

Phytoplankton density (individuals in the bottle)

TAXA	MAWA-1C2	MAWA-1CP2	MAWA-2B2X	MAWA-3B2	MAWA-3C2	MAWA-4B2X
Charophyta						
Conjugophyceae						
Desmidiales						
Desmidiaceae						
Cosmarium						
<i>Cosmarium</i> sp.1	60					
Spondylosium						
<i>Spondylosium</i> sp.1	180	240		240	240	240
Staurostrum						
<i>Staurostrum</i> sp.1		120	300	180		180
<i>Staurostrum</i> sp.3		60	60			
Chlorophyta						
Chlorophyceae						
Chlamydomonadales						
Micractiniaceae						
Golenkinia						
<i>Golenkinia radiata</i>	120	240	240	180	180	180
Tetrasporales						
Palmellopsidaceae						
Sphaerocystis						
<i>Sphaerocystis</i> sp.1	7800	1200				
Trebouxiophyceae						
Oocystales						
Oocystaceae						
Ankistrodesmus						
<i>Ankistrodesmus</i> sp.1		240	120			
Chrysophyta						
Chrysophyceae						
Dictyochales						
Dictyochaceae						
Dictyocha						
<i>Dictyocha fibula</i>	420	420	180	600	540	600
<i>Dictyocha speculum</i> var. <i>octonaris</i>			240			
Cyanobacteria						
Cyanophyceae						
Chroococcales						
Chroococcaceae						
Gloeocapsa						
<i>Gloeocapsa</i> sp.1	840	1320	900	1080	840	1680
Nostocales						
Oscillatoriaceae						
Oscillatoria						
<i>Oscillatoria erythraea</i>	82800	81000	75660	95160	69780	74280
<i>Oscillatoria</i> sp.1	28380	41040	24180	33060	25200	21720
<i>Oscillatoria</i> sp.2	2880	1740	960	1200	960	720
<i>Oscillatoria thiebautii</i>			180	120		
Rivulariaceae						
Calothrix						
<i>Calothrix crustacea</i>	1200	2160	1860	1380	1560	2580
Euglenophycota						



Sakamon Petchong

Phytoplankton density (individuals in the bottle)

TAXA	MAWA-1C2	MAWA-1CP2	MAWA-2B2X	MAWA-3B2	MAWA-3C2	MAWA-4B2X
Euglenophyceae						
Euglenales						
Euglenaceae						
Phacus						
<i>Phacus</i> sp.1						
<i>Phacus</i> sp.2				120		
<i>Phacus</i> sp.3						
Ochrophyta						
Bacillariophyceae						
Asterolamprales						
Asterolampraceae						
Asterolampra						
<i>Asterolampra marylandica</i>	180	420	300	600	360	420
Asteromphalus						
<i>Asteromphalus cleveanus</i>	300	300	300	540	420	540
<i>Asteromphalus elegans</i>	180	180	180	300	300	300
<i>Asteromphalus flabellatus</i>	120	60	180	240	240	300
<i>Asteromphalus</i> sp.1	60	180	120	180	120	120
Bacillariales						
Bacillariaceae						
Bacillaria						
<i>Bacillaria paxillifer</i>	4680	3240	2820			
Cylindrotheca						
<i>Cylindrotheca closterium</i>						
<i>Cylindrotheca</i> sp.1	600	600	360			600
Nitzschia						
<i>Nitzschia longissima</i>	60	180	120	240	240	240
<i>Nitzschia lorenziana</i>	180	180	240			
<i>Nitzschia</i> sp.10	300	420	300	180	300	180
<i>Nitzschia</i> sp.11	180	240	180			
<i>Nitzschia</i> sp.3	300	360	300	240	180	360
<i>Nitzschia</i> sp.5	240	300	120			
Pseudo-nitzschia						
<i>Pseudo-nitzschia</i> sp.1	1020					
Centrales						
Eupodiscaceae						
Odontella						
<i>Odontella aurita</i>		60				
<i>Odontella mobiliensis</i>	60	180		240	60	120
<i>Odontella sinensis</i>		60	180	420	300	240
Chaetocerotales						
Chaetocerotaceae						
Bacteriastrium						
<i>Bacteriastrium comosum</i>	1620	1620	960	2220	2040	1980
<i>Bacteriastrium furcatum</i>	1320	1140	1740	1260	1320	2040
<i>Bacteriastrium hyalinum</i>	1320	1560	1320	1500	1080	1740
<i>Bacteriastrium minus</i>						



Phytoplankton density (individuals in the bottle)

TAXA	MAWA-1C2	MAWA-1CP2	MAWA-2B2X	MAWA-3B2	MAWA-3C2	MAWA-4B2X
Chaetoceros						
<i>Chaetoceros aequatorialis</i>	240	420	120	300	300	420
<i>Chaetoceros affinis</i>	300	300				
<i>Chaetoceros atlanticus</i>	540	660	360	660	600	660
<i>Chaetoceros coarctatus</i>	3300	4680	4200	4440	4620	4860
<i>Chaetoceros compressus</i>	780	2460	1380	1260	1380	1500
<i>Chaetoceros costatus</i>	1260	1620			780	
<i>Chaetoceros didymus</i>	840	1500	840	2520	2640	1380
<i>Chaetoceros diversus</i>	2160	3300	1320	1500	1740	1560
<i>Chaetoceros eibenii</i>	0					
<i>Chaetoceros lorenzianus</i>	1380	540	840	600	960	1440
<i>Chaetoceros messanensis</i>	1260	780	840	1980		1440
<i>Chaetoceros peruvianus</i>	60	240	120			
<i>Chaetoceros pseudocurvisetus</i>	1140	1080	1200			
<i>Chaetoceros tenuissimus</i>	0					
Corethrales						
Corethraceae						
Corethron						
<i>Corethron criophilum</i>	60	240	180	60		300
Coscinodiscales						
Coscinodiscaceae						
Coscinodiscus						
<i>Coscinodiscus gigas</i>		60				
<i>Coscinodiscus</i> sp.1	180	300	300	360	300	780
<i>Coscinodiscus</i> sp.10	240	240	300			
<i>Coscinodiscus</i> sp.11	300	360	240	300	360	660
<i>Coscinodiscus</i> sp.2	60	120	120	300	240	180
<i>Coscinodiscus</i> sp.4						
<i>Coscinodiscus</i> sp.5	300	240	600			
<i>Coscinodiscus</i> sp.6	120	180	360	300	420	720
<i>Coscinodiscus</i> sp.8	60	180	240	360	300	600
<i>Coscinodiscus</i> sp.9						
Gossleriella						
<i>Gossleriella tropica</i>	660	540	780	540	780	420
Palmeria						
<i>Palmeria hardmaniana</i>	240	300	420			
Heliopeltaceae						
Actinoptychus						
<i>Actinoptychus</i> sp.1	240	180	240	300	300	240
Hemidiscaceae						
Pseudoguinaridia						
<i>Pseudoguinaridia recta</i>	360	480	300	240		
Eunotiales						
Eunotiaceae						
Eunotia						
<i>Eunotia</i> sp.1	360	900	360			



Phytoplankton density (individuals in the bottle)

TAXA	MAWA-1C2	MAWA-1CP2	MAWA-2B2X	MAWA-3B2	MAWA-3C2	MAWA-4B2X
Fragilariales						
Fragilariaceae						
Asterionella						
<i>Asterionella formosa</i>	120	180	120			
Fragilaria						
<i>Fragilaria</i> sp.1	1140	1320	1140	960	960	960
Hemiaulales						
Belleracheaceae						
Bellerachea						
<i>Bellerachea horologicalis</i>						
Hemiaulaceae						
Cerataulina						
<i>Cerataulina</i> sp.1		480			480	
Climacodium						
<i>Climacodium biconcavum</i>	540	900	480	780	840	1200
<i>Climacodium frauenfeldianum</i>	6780	4740	4320	4260	4860	5880
Eucampia						
<i>Eucampia cornuta</i>	480					
Hemiaulus						
<i>Hemiaulus hauckii</i>	420	360	480	480	300	720
<i>Hemiaulus indicus</i>	840	420	420			
<i>Hemiaulus membranaceus</i>	3840	2040	2400	1740	3120	4260
<i>Hemiaulus sinensis</i>	660	420	660			
Leptocylindrales						
Leptocylindraceae						
Leptocylindrus						
<i>Leptocylindrus danicus</i>			420	660		660
Lithodesmiales						
Lithodesmaceae						
Ditylum						
<i>Ditylum brightwellii</i>						
<i>Ditylum sol</i>	180	240	240	300	180	360
Lithodesmium						
<i>Lithodesmium</i> sp.1						
Lyrellales						
Lyrellaceae						
Lyrella						
<i>Lyrella lyra</i>	240					
Melosirales						
Stephanopyxidaceae						
Stephanopyxis						
<i>Stephanopyxis palmeriana</i>		240				



Phytoplankton density (individuals in the bottle)

TAXA	MAWA-1C2	MAWA-1CP2	MAWA-2B2X	MAWA-3B2	MAWA-3C2	MAWA-4B2X
Naviculales						
Diploneidaceae						
Diploneis						
<i>Diploneis</i> sp.1	420	360	600	480	300	660
Naviculaceae						
Anomoeneis						
<i>Anomoeneis</i> sp.1	480	360	240	300		240
Haslea						
<i>Haslea</i> sp.1	360	540	480	480	540	1080
<i>Haslea wawriake</i>		180	120			
Meuniera						
<i>Meuniera</i> sp.1	600	600		420	660	660
Navicula						
<i>Navicula</i> sp.1	600	540	420	300	360	360
<i>Navicula</i> sp.3	300	420	300	420	360	420
<i>Navicula</i> sp.5		120				
<i>Navicula</i> sp.6	240	360	300			
<i>Navicula</i> sp.7	240	120	480			
<i>Navicula</i> sp.8	360	240	480	420	420	420
Trachyneis						
<i>Trachyneis</i> sp.1	300	240	360	420	240	300
Pinnulariaceae						
Pinnularia						
<i>Pinnularia</i> sp.2	240	120	180	120		120
Pleurosigmataceae						
Gyrosigma						
<i>Gyrosigma balticum</i>	60	60				
<i>Gyrosigma</i> sp.1	300	240	240	420	600	780
<i>Gyrosigma</i> sp.2	180	240	240	240	300	300
<i>Gyrosigma</i> sp.3	420	360	360			
<i>Gyrosigma</i> sp.4	180					
Pleurosigma						
<i>Pleurosigma</i> sp.1	180	420	420	420	480	660
<i>Pleurosigma</i> sp.2	120	420	360	240	300	420
<i>Pleurosigma</i> sp.3	300	540	420	420	420	360
<i>Pleurosigma</i> sp.4						
<i>Pleurosigma</i> sp.5		60	120			
<i>Pleurosigma</i> sp.6	420	300	420	240	240	240
Rhabdonematales						
Rhabdonemataceae						
Rhabdonema						
<i>Rhabdonema</i> sp.1			1440			



Phytoplankton density (individuals in the bottle)

TAXA	MAWA-1C2	MAWA-1CP2	MAWA-2B2X	MAWA-3B2	MAWA-3C2	MAWA-4B2X
Rhizosoleniales						
Rhizosoleniaceae						
Dactyliosolen						
<i>Dactyliosolen blavyanus</i>						
<i>Dactyliosolen fragilissimus</i>	660					600
<i>Dactyliosolen phuketensis</i>	480		360			
Guinardia						
<i>Guinardia cylindrus</i>						
<i>Guinardia flaccida</i>	600	300	240			
<i>Guinardia striata</i>	540	900	2760	1440	2160	1020
Proboscia						
<i>Proboscia alata</i>	840	540	600	720	480	1020
Pseudosolenia						
<i>Pseudosolenia calcar avis</i>	840	540	420	360	300	660
Rhizosolenia						
<i>Rhizosolenia acuminata</i>						
<i>Rhizosolenia bergonii</i>	360	540	300			
<i>Rhizosolenia clevei</i> var. <i>clevei</i>	240	180	420			
<i>Rhizosolenia formosa</i>	180	240	180	120	120	240
<i>Rhizosolenia hyalina</i>	300	240	300	300	240	300
<i>Rhizosolenia imbricata</i>	60	120	240			
<i>Rhizosolenia pungens</i>	600	420	420	420	120	300
<i>Rhizosolenia robusta</i>	120	240	300			
<i>Rhizosolenia</i> sp.1	120	180	300	360	120	240
<i>Rhizosolenia</i> sp.3						
<i>Rhizosolenia striata</i>	60	420	120	240	300	360
<i>Rhizosolenia styliformis</i>	120	480	180	300	240	540
Surirellales						
Entomoneidaceae						
Entomoneis						
<i>Entomoneis</i> sp.1	240	300	180	120	240	
<i>Entomoneis</i> sp.2						
Surirellaceae						
Campylodiscus						
<i>Campylodiscus</i> sp.1	180	60	180	120	120	
Surirella						
<i>Surirella</i> sp.1	120	180				
Thalassionematales						
Thalassionemataceae						
Thalassionema						
<i>Thalassionema nitzschioides</i>	1080	960		1320	1320	1500
<i>Thalassionema</i> sp.1	900	1260	600	600	1500	1140
Thalassiothrix						
<i>Thalassiothrix</i> sp.1	240	480		420	660	1140
<i>Thalassiothrix</i> sp.2	540	1380	1200	660	840	1260



Phytoplankton density (individuals in the bottle)

TAXA	MAWA-1C2	MAWA-1CP2	MAWA-2B2X	MAWA-3B2	MAWA-3C2	MAWA-4B2X
Thalassiosiphysales						
Catenulaceae						
Amphora						
<i>Amphora</i> sp.1	120	120	180			
<i>Amphora</i> sp.2				60		
<i>Amphora</i> sp.3	60	120	60			
Thalassiosirales						
Stephanodiscaceae						
Cyclotella						
<i>Cyclotella</i> sp.1	1020	780	420	300	600	1200
Thalassiosiraceae						
Planktoniella						
<i>Planktoniella blanda</i>	300	600	840	960	900	960
<i>Planktoniella sol</i>	360	720	1200	780	720	840
Thalassiosira						
<i>Thalassiosira</i> sp.5	1200	960	840	480	1260	1140
<i>Thalassiosira</i> sp.6	780	660	600	840	780	1260
Pyrrophyphyta						
Dinophyceae						
Dinophysiales						
Amphisoleniaceae						
Amphisolenia						
<i>Amphisolenia bidentata</i>	360	480	300	840	660	720
Dinophysiaceae						
Dinophysis						
<i>Dinophysis caudata</i>	120	60	180			
<i>Dinophysis hastata</i>	240	180	120	180	120	240
<i>Dinophysis miles</i>	420		240			
<i>Dinophysis recurva</i>						
<i>Dinophysis schuettii</i>	120		180			
Histioneis						
<i>Histioneis hyalina</i>						
<i>Histioneis</i> sp.1	120	180	180			
Ornithocercus						
<i>Ornithocercus</i> sp.1						
<i>Ornithocercus thumii</i>		60				
Phalacroma						
<i>Phalacroma doryphorum</i>			60	300	180	120
<i>Phalacroma mitra</i>						



Phytoplankton density (individuals in the bottle)

TAXA	MAWA-1C2	MAWA-1CP2	MAWA-2B2X	MAWA-3B2	MAWA-3C2	MAWA-4B2X
Gonyaulacales						
Ceratiaceae						
Ceratium						
<i>Ceratium breve</i>						
<i>Ceratium candelabrum</i>	240	60				
<i>Ceratium carriense</i>	300	240				
<i>Ceratium claviger</i>	300	120	300	120	240	240
<i>Ceratium contortum</i>	240	240	180	240		240
<i>Ceratium deflexum</i>	180	240	180	300	240	300
<i>Ceratium dens</i>		420	420	660		420
<i>Ceratium extensum</i>	60	120	120			
<i>Ceratium falcatum</i>		60	60			
<i>Ceratium furca</i>	480	300	300	300	240	240
<i>Ceratium fusus</i>	360	240	240	240	240	240
<i>Ceratium gibberum</i>		180				
<i>Ceratium hircus</i>		60				
<i>Ceratium horridum</i>	480	240	300	420	300	600
<i>Ceratium kofoidii</i>	240	600	420	780	420	720
<i>Ceratium massiliense</i>				300	180	240
<i>Ceratium porrectum</i>		360	240	360	480	300
<i>Ceratium teres</i>		60				
<i>Ceratium trichoceros</i>		300	240	300	240	240
<i>Ceratium tripos</i>	480	300	300	480	300	420
Ceratocoryaceae						
Ceratocorys						
<i>Ceratocorys armata</i>	120	240	60	180	60	360
<i>Ceratocorys horrida</i>	180	180				
Goniodomataceae						
Alexandrium						
<i>Alexandrium</i> sp.1	600	660		780	1320	1020
Goniodoma						
<i>Goniodoma</i> sp.1	240	180	180	120	240	240
<i>Goniodoma</i> sp.2						
Gonyaulacaceae						
Gonyaulax						
<i>Gonyaulax</i> sp.1						
Lingulodinium						
<i>Lingulodinium</i> sp.1	180	240	240	240	180	240
Oxytoxaceae						
Oxytoxum						
<i>Oxytoxum</i> sp.1	120	120		180	120	180
<i>Oxytoxum</i> sp.3	180	420	240	300	360	240
<i>Oxytoxum</i> sp.5	60					
Pyrocystaceae						
Pyrocystis						
<i>Pyrocystis lunula</i>	240	300	180	240	300	240
<i>Pyrocystis noctiluca</i>		120				



Phytoplankton density (individuals in the bottle)

TAXA	MAWA-1C2	MAWA-1CP2	MAWA-2B2X	MAWA-3B2	MAWA-3C2	MAWA-4B2X
Pyrophacaceae						
Pyrophacus						
<i>Pyrophacus horologium</i>			120			
<i>Pyrophacus steinii</i>	180	120	60	120	120	120
Gymnodiniales						
Gymnodiniaceae						
Gymnodinium						
<i>Gymnodinium</i> sp.2	360	240	240	300	360	300
<i>Gymnodinium</i> sp.6	120	180		180	240	240
Gyrodinium						
<i>Gyrodinium falcatum</i>	360	300	180	240	240	180
Peridinales						
Podolampadaceae						
Podolampas						
<i>Podolampas bipes</i>	120	60	120	180	300	180
<i>Podolampas elegans</i>			120			
<i>Podolampas palmipes</i>	180	240	300	480	480	360
<i>Podolampas spinifera</i>		120	120	240	240	
Protopteridiniaceae						
Protopteridinium						
<i>Protopteridinium asymmetricum</i>	60		60	120	120	120
<i>Protopteridinium conicum</i>						
<i>Protopteridinium depressum</i>	120	240	180	240	300	180
<i>Protopteridinium diabolum</i>						
<i>Protopteridinium divergens</i>	180	180	240	240	120	240
<i>Protopteridinium elegans</i>		60	120			
<i>Protopteridinium globulum</i>	120	60	120	180	300	240
<i>Protopteridinium latispinum</i>	120	180	180	240	120	480
<i>Protopteridinium oceanicum</i>		60	120			
<i>Protopteridinium pallidum</i>						
<i>Protopteridinium pentagonum</i>			60			
<i>Protopteridinium</i> sp.1		60				
<i>Protopteridinium</i> sp.17	60	180	120	240		240
<i>Protopteridinium</i> sp.22	60					
<i>Protopteridinium</i> sp.6						
Prorocentrales						
Prorocentraceae						
Prorocentrum						
<i>Prorocentrum compressum</i>	60	120	120			
<i>Prorocentrum micans</i>						
<i>Prorocentrum</i> sp.1			60			
<i>Prorocentrum</i> sp.2						120
TOTAL	197400	205020	170460	193800	160320	176100



Phytoplankton density (individuals in the br

TAXA	MAWB-1B2X	MAWB-1C2X	MAWB-2B2X	MAWB-3B2X	MAWB-3C2	MAWB-4B2X
Charophyta						
Conjugophyceae						
Desmidiales						
Desmidiaceae						
Cosmarium						
<i>Cosmarium</i> sp.1		120				60
Spondylosium						
<i>Spondylosium</i> sp.1	300	240	480	360	240	240
Staurostrum						
<i>Staurostrum</i> sp.1	240	180	240		180	
<i>Staurostrum</i> sp.3	180		240			
Chlorophyta						
Chlorophyceae						
Chlamydomonadales						
Micractiniaceae						
Golenkinia						
<i>Golenkinia radiata</i>	120	120	240	240	240	60
Tetrasporales						
Palmellopsidaceae						
Sphaerocystis						
<i>Sphaerocystis</i> sp.1	5040	4620	6180	7140		5280
Trebouxiophyceae						
Oocystales						
Oocystaceae						
Ankistrodesmus						
<i>Ankistrodesmus</i> sp.1	300	180				
Chrysophyta						
Chrysophyceae						
Dictyochales						
Dictyochaceae						
Dictyocha						
<i>Dictyocha fibula</i>	480	420	840	780	360	660
<i>Dictyocha speculum</i> var. <i>octonaris</i>	240		480	420	240	
Cyanobacteria						
Cyanophyceae						
Chroococcales						
Chroococcaceae						
Gloeocapsa						
<i>Gloeocapsa</i> sp.1	840	1320	1200	1080	900	780
Nostocales						
Oscillatoriaceae						
Oscillatoria						
<i>Oscillatoria erythraea</i>	274620	239400	236220	200700	159480	143160
<i>Oscillatoria</i> sp.1	72900	68580	55860	42720	38100	28980
<i>Oscillatoria</i> sp.2	1920	1500	1980	1260	1920	1500
<i>Oscillatoria thiebautii</i>	300	60	360	120		
Rivulariaceae						
Calothrix						
<i>Calothrix crustacea</i>	1620	2520	1920	1920	2100	2280
Euglenophycota						



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Phytoplankton density (individuals in the br

TAXA	MAWB-1B2X	MAWB-1C2X	MAWB-2B2X	MAWB-3B2X	MAWB-3C2	MAWB-4B2X
Euglenophyceae						
Euglenales						
Euglenaceae						
Phacus						
<i>Phacus</i> sp.1	300		420			
<i>Phacus</i> sp.2						
<i>Phacus</i> sp.3	120					
Ochrophyta						
Bacillariophyceae						
Asterolamprales						
Asterolampraceae						
Asterolampra						
<i>Asterolampra marylandica</i>	480	420	360	300	420	480
Asteromphalus						
<i>Asteromphalus cleveanus</i>	480	420	480	360	540	720
<i>Asteromphalus elegans</i>	300	240	300	300	240	300
<i>Asteromphalus flabellatus</i>	180	60	120	180	180	180
<i>Asteromphalus</i> sp.1	120	240	240	240	240	
Bacillariales						
Bacillariaceae						
Bacillaria						
<i>Bacillaria paxillifer</i>	6660	5820	3780	3480		
Cylindrotheca						
<i>Cylindrotheca closterium</i>	600					
<i>Cylindrotheca</i> sp.1		600				
Nitzschia						
<i>Nitzschia longissima</i>	180	240	480	300	180	240
<i>Nitzschia lorenziana</i>	240	300	480	180	300	240
<i>Nitzschia</i> sp.10	300	240	300	480	480	240
<i>Nitzschia</i> sp.11	240	300				240
<i>Nitzschia</i> sp.3	420	180	480	300	360	300
<i>Nitzschia</i> sp.5	300	300				300
Pseudo-nitzschia						
<i>Pseudo-nitzschia</i> sp.1						
Centrales						
Eupodiscaceae						
Odontella						
<i>Odontella aurita</i>	120					
<i>Odontella mobiliensis</i>	240		240	300	180	240
<i>Odontella sinensis</i>	360	300				
Chaetocerotales						
Chaetocerotaceae						
Bacteriastrum						
<i>Bacteriastrum comosum</i>	1560	2220	1740	1980	960	2100
<i>Bacteriastrum furcatum</i>	1620	1020	1080	1740	1440	2100
<i>Bacteriastrum hyalinum</i>	1620	900	2160	1860	1020	2280
<i>Bacteriastrum minus</i>	2280	900				



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Phytoplankton density (individuals in the br

TAXA	MAWB- 1B2X	MAWB- 1C2X	MAWB- 2B2X	MAWB- 3B2X	MAWB- 3C2	MAWB- 4B2X
Chaetoceros						
<i>Chaetoceros aequatorialis</i>	360	300	300	360	420	360
<i>Chaetoceros affinis</i>	480	480	960	1080	480	
<i>Chaetoceros atlanticus</i>	600	660	1140	360	780	540
<i>Chaetoceros coarctatus</i>	4320	3900	3360	4860	6420	3900
<i>Chaetoceros compressus</i>	1260	1740	4200	3180	3180	2700
<i>Chaetoceros costatus</i>	2160		1140	3000		
<i>Chaetoceros didymus</i>	2220	840	3120	4680	2340	840
<i>Chaetoceros diversus</i>	3060	2160	3360	4440	2940	1860
<i>Chaetoceros eibonii</i>	900					
<i>Chaetoceros lorenzianus</i>	720	1380	1260	1800	1680	1380
<i>Chaetoceros messanensis</i>	660	1260	1740	1560	1140	1260
<i>Chaetoceros peruvianus</i>	180		240		240	120
<i>Chaetoceros pseudocurvisetus</i>	1740	1140	2700	3120		1380
<i>Chaetoceros tenuissimus</i>						
Corethrales						
Corethraceae						
Corethron						
<i>Corethron criophilum</i>	240		240	120	120	240
Coscinodiscales						
Coscinodiscaceae						
Coscinodiscus						
<i>Coscinodiscus gigas</i>	60		240			
<i>Coscinodiscus</i> sp.1	300	240	420	540	300	420
<i>Coscinodiscus</i> sp.10	420	300	240	360	360	420
<i>Coscinodiscus</i> sp.11	240	360	300	420	240	360
<i>Coscinodiscus</i> sp.2	180	240	300	420	300	120
<i>Coscinodiscus</i> sp.4						
<i>Coscinodiscus</i> sp.5	480	300	840	480	480	420
<i>Coscinodiscus</i> sp.6	240	120	420	300	360	600
<i>Coscinodiscus</i> sp.8	420	60	240	300	240	480
<i>Coscinodiscus</i> sp.9	60					
Gossleriella						
<i>Gossleriella tropica</i>	960	720	1080	1560	780	660
Palmeria						
<i>Palmeria hardmaniana</i>	360	300				180
Heliopeltaceae						
Actinoptychus						
<i>Actinoptychus</i> sp.1	240	300	240	300		180
Hemidiscaceae						
Pseudoguinaridia						
<i>Pseudoguinaridia recta</i>	240	480	300	480		420
Eunotiales						
Eunotiaceae						
Eunotia						
<i>Eunotia</i> sp.1	480	540				540



Phytoplankton density (individuals in the br

TAXA	MAWB- 1B2X	MAWB- 1C2X	MAWB- 2B2X	MAWB- 3B2X	MAWB- 3C2	MAWB- 4B2X
Fragilariales						
Fragilariaceae						
Asterionella						
<i>Asterionella formosa</i>	180	240	180			60
Fragilaria						
<i>Fragilaria</i> sp.1	1200	840	960	900		
Hemiaulales						
Belleracheaceae						
Bellerachea						
<i>Bellerachea horologicalis</i>		480				
Hemiaulaceae						
Cerataulina						
<i>Cerataulina</i> sp.1	600					
Climacodium						
<i>Climacodium biconcavum</i>	600	540	2820	2160	960	540
<i>Climacodium frauenfeldianum</i>	10680	7740	34200	7440	4800	4980
Eucampia						
<i>Eucampia cornuta</i>				480		
Hemiaulus						
<i>Hemiaulus hauckii</i>	420	480				480
<i>Hemiaulus indicus</i>	840	600				540
<i>Hemiaulus membranaceus</i>	5100	1920	2640	2940	1980	3240
<i>Hemiaulus sinensis</i>	840	540	1440	1800	660	1080
Leptocylindrales						
Leptocylindraceae						
Leptocylindrus						
<i>Leptocylindrus danicus</i>			1020	780		
Lithodesmiales						
Lithodesmaceae						
Ditylum						
<i>Ditylum brightwellii</i>	120	240				
<i>Ditylum sol</i>	180	180	300	240	360	240
Lithodesmium						
<i>Lithodesmium</i> sp.1						
Lyrellales						
Lyrellaceae						
Lyrella						
<i>Lyrella lyra</i>						
Melosirales						
Stephanopyxidaceae						
Stephanopyxis						
<i>Stephanopyxis palmeriana</i>						



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Phytoplankton density (individuals in the br

TAXA	MAWB- 1B2X	MAWB- 1C2X	MAWB- 2B2X	MAWB- 3B2X	MAWB- 3C2	MAWB- 4B2X
Naviculales						
Diploneidaceae						
Diploneis						
<i>Diploneis</i> sp.1	660	420	600	420	720	660
Naviculaceae						
Anomoeneis						
<i>Anomoeneis</i> sp.1	420	480	180		300	240
Haslea						
<i>Haslea</i> sp.1	480	660	480	720	480	660
<i>Haslea wawriake</i>	300	240	240	180	180	
Meuniera						
<i>Meuniera</i> sp.1	480	300				480
Navicula						
<i>Navicula</i> sp.1	660	540	1560	720	600	660
<i>Navicula</i> sp.3	480	480	1200	720	480	420
<i>Navicula</i> sp.5	300	120				
<i>Navicula</i> sp.6	360	300				360
<i>Navicula</i> sp.7	240	420	600	480	180	420
<i>Navicula</i> sp.8	360	480	480	480	240	300
Trachyneis						
<i>Trachyneis</i> sp.1	300	360	780	480	420	420
Pinnulariaceae						
Pinnularia						
<i>Pinnularia</i> sp.2	240	300				180
Pleurosigmataceae						
Gyrosigma						
<i>Gyrosigma balticum</i>	120					180
<i>Gyrosigma</i> sp.1	420	300	300	900	420	360
<i>Gyrosigma</i> sp.2	240	180	240	720	300	420
<i>Gyrosigma</i> sp.3	360	420	300	480	360	300
<i>Gyrosigma</i> sp.4		180				120
Pleurosigma						
<i>Pleurosigma</i> sp.1	420	480	900	840	480	360
<i>Pleurosigma</i> sp.2	420	300	600	540	600	420
<i>Pleurosigma</i> sp.3	420	420	180	420	540	480
<i>Pleurosigma</i> sp.4	180	120				
<i>Pleurosigma</i> sp.5	240	180	300	300	360	
<i>Pleurosigma</i> sp.6	420	480	360	480	600	300
Rhabdonematales						
Rhabdonemataceae						
Rhabdonema						
<i>Rhabdonema</i> sp.1						



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Phytoplankton density (individuals in the br

TAXA	MAWB-1B2X	MAWB-1C2X	MAWB-2B2X	MAWB-3B2X	MAWB-3C2	MAWB-4B2X
Rhizosoleniales						
Rhizosoleniaceae						
Dactyliosolen						
<i>Dactyliosolen blavyanus</i>	480					
<i>Dactyliosolen fragilissimus</i>	420			600		1080
<i>Dactyliosolen phuketensis</i>	2160					1860
Guinardia						
<i>Guinardia cylindrus</i>						
<i>Guinardia flaccida</i>	600	420	360	540	360	420
<i>Guinardia striata</i>	1200	1500	2160	2280	1200	540
Proboscia						
<i>Proboscia alata</i>	960	600	660	600	660	540
Pseudosolenia						
<i>Pseudosolenia calcar avis</i>	780	420	600	480	540	660
Rhizosolenia						
<i>Rhizosolenia acuminata</i>	60					
<i>Rhizosolenia bergonii</i>	420	360	300	420	420	540
<i>Rhizosolenia clevei</i> var. <i>clevei</i>	420	300				300
<i>Rhizosolenia formosa</i>	240	240	240	240	240	120
<i>Rhizosolenia hyalina</i>	420	540	240	420	360	480
<i>Rhizosolenia imbricata</i>	120	180				240
<i>Rhizosolenia pungens</i>	480	420	540	480	540	780
<i>Rhizosolenia robusta</i>	180	240	360	300	180	180
<i>Rhizosolenia</i> sp.1	180	240	240	240	300	240
<i>Rhizosolenia</i> sp.3	60	60				
<i>Rhizosolenia striata</i>	240	1440	300	300	300	240
<i>Rhizosolenia styliformis</i>	180	180	240	300	240	180
Surirellales						
Entomoneidaceae						
Entomoneis						
<i>Entomoneis</i> sp.1	300	240	360	360	240	300
<i>Entomoneis</i> sp.2		120				
Surirellaceae						
Campylodiscus						
<i>Campylodiscus</i> sp.1	180	240	120			60
Surirella						
<i>Surirella</i> sp.1			180			
Thalassionematales						
Thalassionemataceae						
Thalassionema						
<i>Thalassionema nitzschioides</i>	1140	840	1560	2520	1200	1380
<i>Thalassionema</i> sp.1	900	1320	3360	1860	1200	1020
Thalassiothrix						
<i>Thalassiothrix</i> sp.1	360	960	780	840	720	840
<i>Thalassiothrix</i> sp.2	1020	960	2460	1440	1620	1140



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Phytoplankton density (individuals in the br

TAXA	MAWB- 1B2X	MAWB- 1C2X	MAWB- 2B2X	MAWB- 3B2X	MAWB- 3C2	MAWB- 4B2X
Thalassiosiphysales						
Catenulaceae						
Amphora						
<i>Amphora</i> sp.1	120	60				
<i>Amphora</i> sp.2						
<i>Amphora</i> sp.3	120					120
Thalassiosirales						
Stephanodiscaceae						
Cyclotella						
<i>Cyclotella</i> sp.1	1140	1020	600	1260	840	840
Thalassiosiraceae						
Planktoniella						
<i>Planktoniella blanda</i>	1020	840	1680	1800	900	780
<i>Planktoniella sol</i>	1200	780	1860	1320	840	1020
Thalassiosira						
<i>Thalassiosira</i> sp.5	1200	600	1500	960	900	960
<i>Thalassiosira</i> sp.6	780	780	1620	1020	720	900
Pyrrophytophyta						
Dinophyceae						
Dinophysiales						
Amphisoleniaceae						
Amphisolenia						
<i>Amphisolenia bidentata</i>	960	600	1260	840	780	600
Dinophysiaceae						
Dinophysis						
<i>Dinophysis caudata</i>	240	60				240
<i>Dinophysis hastata</i>	360	120	240	120	360	300
<i>Dinophysis miles</i>						480
<i>Dinophysis recurva</i>	60					
<i>Dinophysis schuettii</i>	240	180	240	180	300	300
Histioneis						
<i>Histioneis hyalina</i>	180					
<i>Histioneis</i> sp.1	120		300	120	180	240
Ornithocercus						
<i>Ornithocercus</i> sp.1		60	240	240	120	
<i>Ornithocercus thumii</i>		60				
Phalacroma						
<i>Phalacroma doryphorum</i>	120					
<i>Phalacroma mitra</i>	240					



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Phytoplankton density (individuals in the br

TAXA	MAWB- 1B2X	MAWB- 1C2X	MAWB- 2B2X	MAWB- 3B2X	MAWB- 3C2	MAWB- 4B2X
Gonyaulacales						
Ceratiaceae						
Ceratium						
<i>Ceratium breve</i>	240					
<i>Ceratium candelabrum</i>	300	300				
<i>Ceratium carriense</i>	240	240				
<i>Ceratium claviger</i>	420	240	420	300	300	360
<i>Ceratium contortum</i>	300	300	360	540	240	300
<i>Ceratium deflexum</i>	240	240	180	300	300	180
<i>Ceratium dens</i>	780	960				
<i>Ceratium extensum</i>	300	240				240
<i>Ceratium falcatum</i>	240	300				
<i>Ceratium furca</i>	540	300	660	300	240	420
<i>Ceratium fusus</i>	420	300	420	480	300	300
<i>Ceratium gibberum</i>		180				
<i>Ceratium hircus</i>	300	240				
<i>Ceratium horridum</i>	300	420	600	360	240	300
<i>Ceratium kofoidii</i>	660	720	1080	780	480	840
<i>Ceratium massiliense</i>			420	360	360	
<i>Ceratium porrectum</i>	360	480	480	420	300	
<i>Ceratium teres</i>	120	180	240	120		
<i>Ceratium trichoceros</i>	540	480	660	600	240	
<i>Ceratium tripos</i>	540	420	660	660	420	600
Ceratocoryaceae						
Ceratocorys						
<i>Ceratocorys armata</i>	240	240	300	240		120
<i>Ceratocorys horrida</i>	240	60	300	120	120	
Goniodomataceae						
Alexandrium						
<i>Alexandrium</i> sp.1	840	960	1320	360	1200	1080
Goniodoma						
<i>Goniodoma</i> sp.1	300	300	240	240	180	180
<i>Goniodoma</i> sp.2						
Gonyaulacaceae						
Gonyaulax						
<i>Gonyaulax</i> sp.1						
Lingulodinium						
<i>Lingulodinium</i> sp.1	240	240	420	480	240	300
Oxytoxaceae						
Oxytoxum						
<i>Oxytoxum</i> sp.1	120	60	240	180	60	120
<i>Oxytoxum</i> sp.3	300	360	660	480	420	600
<i>Oxytoxum</i> sp.5						
Pyrocystaceae						
Pyrocystis						
<i>Pyrocystis lunula</i>	420	180	300	240	240	300
<i>Pyrocystis noctiluca</i>	60					



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Phytoplankton density (individuals in the br

TAXA	MAWB-1B2X	MAWB-1C2X	MAWB-2B2X	MAWB-3B2X	MAWB-3C2	MAWB-4B2X
Pyrophacaceae						
Pyrophacus						
<i>Pyrophacus horologium</i>	120	60				
<i>Pyrophacus steinii</i>	120	60				240
Gymnodiniales						
Gymnodiniaceae						
Gymnodinium						
<i>Gymnodinium</i> sp.2	300	300	540	480	300	300
<i>Gymnodinium</i> sp.6		240	420	420	240	180
Gyrodinium						
<i>Gyrodinium falcatum</i>	240	240	240	300	180	60
Peridinales						
Podolampadaceae						
Podolampas						
<i>Podolampas bipes</i>	420	180	420	420	300	300
<i>Podolampas elegans</i>	120					
<i>Podolampas palmipes</i>	600	600	900	660	780	540
<i>Podolampas spinifera</i>	240	120				
Protopteridiniaceae						
Protopteridinium						
<i>Protopteridinium asymmetricum</i>	120	300	540	240	240	
<i>Protopteridinium conicum</i>		120				
<i>Protopteridinium depressum</i>	240	300	600	540	420	660
<i>Protopteridinium diabolum</i>	240	180				
<i>Protopteridinium divergens</i>	240	780	720	480	360	420
<i>Protopteridinium elegans</i>	60	120				
<i>Protopteridinium globulum</i>	240	120				180
<i>Protopteridinium latispinum</i>	420	480	540	300	360	240
<i>Protopteridinium oceanicum</i>	180	180				
<i>Protopteridinium pallidum</i>						
<i>Protopteridinium pentagonum</i>		240				
<i>Protopteridinium</i> sp.1	120	60	300	120	120	
<i>Protopteridinium</i> sp.17	60	300	240	240	180	120
<i>Protopteridinium</i> sp.22						
<i>Protopteridinium</i> sp.6						
Prorocentrales						
Prorocentraceae						
Prorocentrum						
<i>Prorocentrum compressum</i>	120	120				
<i>Prorocentrum micans</i>			240	300	60	
<i>Prorocentrum</i> sp.1		60				
<i>Prorocentrum</i> sp.2						
TOTAL	466080	404820	440400	362220	274800	260640



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Phytoplankton density (individuals in the br

TAXA	MAWC-1B2X	MAWC-1C2	MAWC-2B2X	MAWC-3B2X	MAWC-3C2	MAWC-4B2X
Charophyta						
Conjugophyceae						
Desmidiales						
Desmidiaceae						
Cosmarium						
<i>Cosmarium</i> sp.1	180					240
Spondylosium						
<i>Spondylosium</i> sp.1	420		240	240	240	240
Staurostrum						
<i>Staurostrum</i> sp.1	420		180	180		
<i>Staurostrum</i> sp.3	60					
Chlorophyta						
Chlorophyceae						
Chlamydomonadales						
Micractiniaceae						
Golenkinia						
<i>Golenkinia radiata</i>	60	60	180	60	180	60
Tetrasporales						
Palmellopsidaceae						
Sphaerocystis						
<i>Sphaerocystis</i> sp.1	4620	3360				3900
Trebouxiophyceae						
Oocystales						
Oocystaceae						
Ankistrodesmus						
<i>Ankistrodesmus</i> sp.1	120					
Chrysophyta						
Chrysophyceae						
Dictyochales						
Dictyochaceae						
Dictyocha						
<i>Dictyocha fibula</i>	600	600	480	420	480	420
<i>Dictyocha speculum</i> var. <i>octonaris</i>	360	240				
Cyanobacteria						
Cyanophyceae						
Chroococcales						
Chroococcaceae						
Gloeocapsa						
<i>Gloeocapsa</i> sp.1	1020	1080			900	840
Nostocales						
Oscillatoriaceae						
Oscillatoria						
<i>Oscillatoria erythraea</i>	232620	158220	129660	116460	111480	102300
<i>Oscillatoria</i> sp.1	39000	43320	41100	33840	33660	36780
<i>Oscillatoria</i> sp.2	2400	1260		660	1320	960
<i>Oscillatoria thiebautii</i>	60		60			
Rivulariaceae						
Calothrix						
<i>Calothrix crustacea</i>	1740	1860	1860	1980	1920	2040
Euglenophycota						



Sakorn Pichong

Phytoplankton density (individuals in the br

TAXA	MAWC-1B2X	MAWC-1C2	MAWC-2B2X	MAWC-3B2X	MAWC-3C2	MAWC-4B2X
Euglenophyceae						
Euglenales						
Euglenaceae						
Phacus						
<i>Phacus</i> sp.1						
<i>Phacus</i> sp.2						
<i>Phacus</i> sp.3						
Ochrophyta						
Bacillariophyceae						
Asterolamprales						
Asterolampraceae						
Asterolampra						
<i>Asterolampra marylandica</i>	420	300	480	240	480	300
Asteromphalus						
<i>Asteromphalus cleveanus</i>	360	360	420	300	480	420
<i>Asteromphalus elegans</i>	240	120	300	120	300	240
<i>Asteromphalus flabellatus</i>	180	60	180	120	240	180
<i>Asteromphalus</i> sp.1		120	60		240	240
Bacillariales						
Bacillariaceae						
Bacillaria						
<i>Bacillaria paxillifer</i>		5400				3360
Cylindrotheca						
<i>Cylindrotheca closterium</i>						
<i>Cylindrotheca</i> sp.1			300		720	480
Nitzschia						
<i>Nitzschia longissima</i>	240	240	240	300	420	240
<i>Nitzschia lorenziana</i>	120	120				180
<i>Nitzschia</i> sp.10	660	300	240	300	360	420
<i>Nitzschia</i> sp.11	420	180				240
<i>Nitzschia</i> sp.3	420	300	240	420	300	360
<i>Nitzschia</i> sp.5	180	240				300
Pseudo-nitzschia						
<i>Pseudo-nitzschia</i> sp.1						480
Centrales						
Eupodiscaceae						
Odontella						
<i>Odontella aurita</i>						
<i>Odontella mobiliensis</i>	180	120	120	240	300	
<i>Odontella sinensis</i>	420	480	300	300	420	
Chaetocerotales						
Chaetocerotaceae						
Bacteriastrum						
<i>Bacteriastrum comosum</i>	1320	1860	2040	2340	2400	1800
<i>Bacteriastrum furcatum</i>	1200	2100	1920	2280	2280	2640
<i>Bacteriastrum hyalinum</i>	1680	2040	2220	2940	1620	2040
<i>Bacteriastrum minus</i>	480	960				



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Phytoplankton density (individuals in the br

TAXA	MAWC-1B2X	MAWC-1C2	MAWC-2B2X	MAWC-3B2X	MAWC-3C2	MAWC-4B2X
Chaetoceros						
<i>Chaetoceros aequatorialis</i>	300	420	360	480	420	480
<i>Chaetoceros affinis</i>	900	960				1080
<i>Chaetoceros atlanticus</i>	840	720	780	960	1140	1080
<i>Chaetoceros coarctatus</i>	3780	4500	3720	5460	5100	3900
<i>Chaetoceros compressus</i>	1980	1680	2400	4320	2760	2100
<i>Chaetoceros costatus</i>	2520	1620	2040		900	1860
<i>Chaetoceros didymus</i>	3240	2100	2340	3060	2880	3000
<i>Chaetoceros diversus</i>	4320	3000	2760	3120	2040	2820
<i>Chaetoceros eibenii</i>						
<i>Chaetoceros lorenzianus</i>	2520	2580	1680	2880	2160	1920
<i>Chaetoceros messanensis</i>	2520	2520	1980	3000	2040	720
<i>Chaetoceros peruvianus</i>	240	180				300
<i>Chaetoceros pseudocurvisetus</i>	3480	2700				3060
<i>Chaetoceros tenuissimus</i>						
Corethrales						
Corethraceae						
Corethron						
<i>Corethron criophilum</i>	120	60	60	480		300
Coscinodiscales						
Coscinodiscaceae						
Coscinodiscus						
<i>Coscinodiscus gigas</i>	240	240				
<i>Coscinodiscus</i> sp.1	420	600	420	780	600	420
<i>Coscinodiscus</i> sp.10	300	420				660
<i>Coscinodiscus</i> sp.11	360	360	420	720	420	420
<i>Coscinodiscus</i> sp.2	240	240	360	420	300	300
<i>Coscinodiscus</i> sp.4	60					
<i>Coscinodiscus</i> sp.5	420	600				660
<i>Coscinodiscus</i> sp.6	480	720	420	900	720	420
<i>Coscinodiscus</i> sp.8	240	420	540	420	480	600
<i>Coscinodiscus</i> sp.9						
Gossleriella						
<i>Gossleriella tropica</i>	840	660	1500	1200	840	900
Palmeria						
<i>Palmeria hardmaniana</i>	180	240				
Heliopeltaceae						
Actinoptychus						
<i>Actinoptychus</i> sp.1	300	240	300	240	300	180
Hemidiscaceae						
Pseudoguinaridia						
<i>Pseudoguinaridia recta</i>	300	180	180		360	180
Eunotiales						
Eunotiaceae						
Eunotia						
<i>Eunotia</i> sp.1	360	480				360



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Phytoplankton density (individuals in the br

TAXA	MAWC-1B2X	MAWC-1C2	MAWC-2B2X	MAWC-3B2X	MAWC-3C2	MAWC-4B2X
Fragilariales						
Fragilariaceae						
Asterionella						
<i>Asterionella formosa</i>	180	180				60
Fragilaria						
<i>Fragilaria</i> sp.1	1440	960	1140	720	600	
Hemiaulales						
Belleracheaceae						
Bellerachea						
<i>Bellerachea horologicalis</i>						
Hemiaulaceae						
Cerataulina						
<i>Cerataulina</i> sp.1						
Climacodium						
<i>Climacodium biconcavum</i>	1920	1080	1080	1800	1800	540
<i>Climacodium frauenfeldianum</i>	6780	6240	5520	6480	4860	5160
Eucampia						
<i>Eucampia cornuta</i>						
Hemiaulus						
<i>Hemiaulus hauckii</i>	420	540	660	720	240	240
<i>Hemiaulus indicus</i>	600					480
<i>Hemiaulus membranaceus</i>	6240	2340	3240	2340	3180	2460
<i>Hemiaulus sinensis</i>	660	600				840
Leptocylindrales						
Leptocylindraceae						
Leptocylindrus						
<i>Leptocylindrus danicus</i>	600				660	
Lithodesmiales						
Lithodesmaceae						
Ditylum						
<i>Ditylum brightwellii</i>	180	60				
<i>Ditylum sol</i>	300	300	180	300	240	240
Lithodesmium						
<i>Lithodesmium</i> sp.1	600					
Lyrellales						
Lyrellaceae						
Lyrella						
<i>Lyrella lyra</i>						
Melosirales						
Stephanopyxidaceae						
Stephanopyxis						
<i>Stephanopyxis palmeriana</i>						



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Phytoplankton density (individuals in the br

TAXA	MAWC-1B2X	MAWC-1C2	MAWC-2B2X	MAWC-3B2X	MAWC-3C2	MAWC-4B2X
Naviculales						
Diploneidaceae						
Diploneis						
<i>Diploneis</i> sp.1	300	540	600	480	660	600
Naviculaceae						
Anomoeneis						
<i>Anomoeneis</i> sp.1	360	420				
Haslea						
<i>Haslea</i> sp.1	600	240	480	600	540	420
<i>Haslea wawrikan</i>	60	120				
Meuniera						
<i>Meuniera</i> sp.1	420	480	480	660	480	480
Navicula						
<i>Navicula</i> sp.1	540	600	480	900	540	600
<i>Navicula</i> sp.3	600	420	420	540	480	360
<i>Navicula</i> sp.5	180					
<i>Navicula</i> sp.6	420	480				240
<i>Navicula</i> sp.7	360	420				600
<i>Navicula</i> sp.8	300	300	360	660	300	420
Trachyneis						
<i>Trachyneis</i> sp.1	420	780	420	360	420	420
Pinnulariaceae						
Pinnularia						
<i>Pinnularia</i> sp.2	180	240	120	180		
Pleurosigmaaceae						
Gyrosigma						
<i>Gyrosigma balticum</i>	120					180
<i>Gyrosigma</i> sp.1	480	300	720	600	480	420
<i>Gyrosigma</i> sp.2	300	420	300	240	660	300
<i>Gyrosigma</i> sp.3	540	360				540
<i>Gyrosigma</i> sp.4						
Pleurosigma						
<i>Pleurosigma</i> sp.1	600	420	300	660	360	480
<i>Pleurosigma</i> sp.2	540	300	300	420	420	360
<i>Pleurosigma</i> sp.3	480	420	540	720	360	420
<i>Pleurosigma</i> sp.4						
<i>Pleurosigma</i> sp.5	240	240				
<i>Pleurosigma</i> sp.6	480	480	480	660	300	420
Rhabdonematales						
Rhabdonemataceae						
Rhabdonema						
<i>Rhabdonema</i> sp.1						



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Phytoplankton density (individuals in the br

TAXA	MAWC-1B2X	MAWC-1C2	MAWC-2B2X	MAWC-3B2X	MAWC-3C2	MAWC-4B2X
Rhizosoleniales						
Rhizosoleniaceae						
Dactyliosolen						
<i>Dactyliosolen blavyanus</i>						
<i>Dactyliosolen fragilissimus</i>						
<i>Dactyliosolen phuketensis</i>	600					840
Guinardia						
<i>Guinardia cylindrus</i>	480					
<i>Guinardia flaccida</i>	360		360			360
<i>Guinardia striata</i>	2220	1920	2040	1920	2220	1560
Proboscia						
<i>Proboscia alata</i>	900	840	480	1140	600	480
Pseudosolenia						
<i>Pseudosolenia calcar avis</i>	420	420	480	720	480	480
Rhizosolenia						
<i>Rhizosolenia acuminata</i>	60					
<i>Rhizosolenia bergonii</i>	660	780				480
<i>Rhizosolenia clevei</i> var. <i>clevei</i>	360	300				300
<i>Rhizosolenia formosa</i>	240	240	240	180	240	120
<i>Rhizosolenia hyalina</i>	420	480	420	480	480	420
<i>Rhizosolenia imbricata</i>	60	120				120
<i>Rhizosolenia pungens</i>	660	720	660	840	600	780
<i>Rhizosolenia robusta</i>	300	240				180
<i>Rhizosolenia</i> sp.1	240	240	300	240	240	180
<i>Rhizosolenia</i> sp.3	120	120				
<i>Rhizosolenia striata</i>	420	180	240	240	360	420
<i>Rhizosolenia styliformis</i>	300	180	240	240	360	300
Surirellales						
Entomoneidaceae						
Entomoneis						
<i>Entomoneis</i> sp.1	300	240	180		360	
<i>Entomoneis</i> sp.2						
Surirellaceae						
Campylodiscus						
<i>Campylodiscus</i> sp.1	120					120
Surirella						
<i>Surirella</i> sp.1					240	
Thalassionematales						
Thalassionemataceae						
Thalassionema						
<i>Thalassionema nitzschioides</i>	720	1560	1860		1680	1380
<i>Thalassionema</i> sp.1	1080	960	2040	3000	1440	1080
Thalassiothrix						
<i>Thalassiothrix</i> sp.1						600
<i>Thalassiothrix</i> sp.2	1440	1440	1020	2340	1080	660



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Phytoplankton density (individuals in the br

TAXA	MAWC-1B2X	MAWC-1C2	MAWC-2B2X	MAWC-3B2X	MAWC-3C2	MAWC-4B2X
Thalassiosiphysales						
Catenulaceae						
Amphora						
<i>Amphora</i> sp.1	120	120				120
<i>Amphora</i> sp.2						
<i>Amphora</i> sp.3	120	120				240
Thalassiosirales						
Stephanodiscaceae						
Cyclotella						
<i>Cyclotella</i> sp.1	720	660	840	960	900	660
Thalassiosiraceae						
Planktoniella						
<i>Planktoniella blanda</i>	1080	900	1140	1200	720	720
<i>Planktoniella sol</i>	900	1020	840	1260	720	660
Thalassiosira						
<i>Thalassiosira</i> sp.5	780	720	840	1500	840	840
<i>Thalassiosira</i> sp.6	840	960	960	1920	960	660
Pyrrophyphyta						
Dinophyceae						
Dinophysiales						
Amphisoleniaceae						
Amphisolenia						
<i>Amphisolenia bidentata</i>	720	420	780	660	360	420
Dinophysiaceae						
Dinophysis						
<i>Dinophysis caudata</i>	240	240				360
<i>Dinophysis hastata</i>	420	180	240	300	360	360
<i>Dinophysis miles</i>	420					240
<i>Dinophysis recurva</i>						
<i>Dinophysis schuettii</i>	240	60				180
Histioneis						
<i>Histioneis hyalina</i>		60				
<i>Histioneis</i> sp.1	120	180				180
Ornithocercus						
<i>Ornithocercus</i> sp.1	60					
<i>Ornithocercus thumii</i>		60				
Phalacroma						
<i>Phalacroma doryphorum</i>	180		300	120	240	
<i>Phalacroma mitra</i>	120					



Sakamir P. Hing

Phytoplankton density (individuals in the br

TAXA	MAWC-1B2X	MAWC-1C2	MAWC-2B2X	MAWC-3B2X	MAWC-3C2	MAWC-4B2X
Gonyaulacales						
Ceratiaceae						
Ceratium						
<i>Ceratium breve</i>	240	60				
<i>Ceratium candelabrum</i>						120
<i>Ceratium carriense</i>						240
<i>Ceratium claviger</i>	240	360	300	240	420	360
<i>Ceratium contortum</i>	420	480	420	360		420
<i>Ceratium deflexum</i>	300	240	240	300	240	240
<i>Ceratium dens</i>	900	1200	840	720		
<i>Ceratium extensum</i>	120	240				120
<i>Ceratium falcatum</i>	60	120				
<i>Ceratium furca</i>	300	420	540	300	300	300
<i>Ceratium fusus</i>	300	300	300	240	240	240
<i>Ceratium gibberum</i>	240	300				
<i>Ceratium hircus</i>	240					
<i>Ceratium horridum</i>	420	300	480		300	420
<i>Ceratium kofoidii</i>	780	780	720	1020	600	480
<i>Ceratium massiliense</i>				360	300	
<i>Ceratium porrectum</i>	720	180	540	420	600	
<i>Ceratium teres</i>	240	60				
<i>Ceratium trichoceros</i>	780	540	420	480	420	
<i>Ceratium tripos</i>	780	480	480	540	780	540
Ceratocoryaceae						
Ceratocorys						
<i>Ceratocorys armata</i>		120	180	360	300	240
<i>Ceratocorys horrida</i>		180				300
Goniodomataceae						
Alexandrium						
<i>Alexandrium</i> sp.1	240		660	240		
Goniodoma						
<i>Goniodoma</i> sp.1	240	360	60	240	180	180
<i>Goniodoma</i> sp.2	60					
Gonyaulacaceae						
Gonyaulax						
<i>Gonyaulax</i> sp.1	60					
Lingulodinium						
<i>Lingulodinium</i> sp.1	240	300	420	420	420	420
Oxytoxaceae						
Oxytoxum						
<i>Oxytoxum</i> sp.1	120	60	120	60	60	120
<i>Oxytoxum</i> sp.3	540	360	420	420	480	480
<i>Oxytoxum</i> sp.5						
Pyrocystaceae						
Pyrocystis						
<i>Pyrocystis lunula</i>	300	360	300	300	300	180
<i>Pyrocystis noctiluca</i>						



Sakamon Petchong

Phytoplankton density (individuals in the br

TAXA	MAWC-1B2X	MAWC-1C2	MAWC-2B2X	MAWC-3B2X	MAWC-3C2	MAWC-4B2X
Pyrophacaceae						
Pyrophacus						
<i>Pyrophacus horologium</i>	60	240				
<i>Pyrophacus steinii</i>	240	360	120	180	120	120
Gymnodiniales						
Gymnodiniaceae						
Gymnodinium						
<i>Gymnodinium</i> sp.2	300	240	240	240	480	420
<i>Gymnodinium</i> sp.6	180	240		300		240
Gyrodinium						
<i>Gyrodinium falcatum</i>	240	180	300	120	120	240
Peridinales						
Podolampadaceae						
Podolampas						
<i>Podolampas bipes</i>	240	300	420	300	300	240
<i>Podolampas elegans</i>	120	60				
<i>Podolampas palmipes</i>	480	540	540	420	420	360
<i>Podolampas spinifera</i>	240	240	240		240	
Protopteridiniaceae						
Protopteridinium						
<i>Protopteridinium asymmetricum</i>	240	240	180	300		
<i>Protopteridinium conicum</i>	60	60				
<i>Protopteridinium depressum</i>	780	420	360	600	420	600
<i>Protopteridinium diabolum</i>	240					
<i>Protopteridinium divergens</i>	420	420	360	660	480	420
<i>Protopteridinium elegans</i>	120	240				
<i>Protopteridinium globulum</i>	180	120	120	240	420	240
<i>Protopteridinium latispinum</i>	360	240	240	480	300	240
<i>Protopteridinium oceanicum</i>	60	60				
<i>Protopteridinium pallidum</i>	480	300				
<i>Protopteridinium pentagonum</i>	240	120				
<i>Protopteridinium</i> sp.1						
<i>Protopteridinium</i> sp.17			180		240	120
<i>Protopteridinium</i> sp.22						240
<i>Protopteridinium</i> sp.6	300					
Prorocentrales						
Prorocentraceae						
Prorocentrum						
<i>Prorocentrum compressum</i>						
<i>Prorocentrum micans</i>						
<i>Prorocentrum</i> sp.1						
<i>Prorocentrum</i> sp.2						
TOTAL	386160	303120	250140	242340	226740	232080



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Phytoplankton density (individuals in the br

TAXA	MAWD- 1B2X	MAWD- 1C2	MAWD- 2C2X	MAWD- 3B2	MAWD- 3C2X	MAWD- 4B2X
Charophyta						
Conjugophyceae						
Desmidiales						
Desmidiaceae						
Cosmarium						
<i>Cosmarium</i> sp.1	60					
Spondylosium						
<i>Spondylosium</i> sp.1	360			300	180	180
Staurostrum						
<i>Staurostrum</i> sp.1		240	180	240	120	
<i>Staurostrum</i> sp.3		120	120			
Chlorophyta						
Chlorophyceae						
Chlamydomonadales						
Micractiniaceae						
Golenkinia						
<i>Golenkinia radiata</i>	180	60	120			
Tetrasporales						
Palmellopsidaceae						
Sphaerocystis						
<i>Sphaerocystis</i> sp.1	3540	3000				
Trebouxiophyceae						
Oocystales						
Oocystaceae						
Ankistrodesmus						
<i>Ankistrodesmus</i> sp.1		300	240			
Chrysophyta						
Chrysophyceae						
Dictyochales						
Dictyochaceae						
Dictyocha						
<i>Dictyocha fibula</i>	360	660	360	660	300	420
<i>Dictyocha speculum</i> var. <i>octonaris</i>			300			
Cyanobacteria						
Cyanophyceae						
Chroococcales						
Chroococcaceae						
Gloeocapsa						
<i>Gloeocapsa</i> sp.1	1020	720				
Nostocales						
Oscillatoriaceae						
Oscillatoria						
<i>Oscillatoria erythraea</i>	103800	120720	137280	121860	187440	123120
<i>Oscillatoria</i> sp.1	34200	33480	39960	30000	45600	41400
<i>Oscillatoria</i> sp.2	1440	1020	720	780	600	840
<i>Oscillatoria thiebautii</i>			180			
Rivulariaceae						
Calothrix						
<i>Calothrix crustacea</i>	1380	2280	1500	1860	1080	1680
Euglenophycota						



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Phytoplankton density (individuals in the br

TAXA	MAWD- 1B2X	MAWD- 1C2	MAWD- 2C2X	MAWD- 3B2	MAWD- 3C2X	MAWD- 4B2X
Euglenophyceae						
Euglenales						
Euglenaceae						
Phacus						
<i>Phacus</i> sp.1						
<i>Phacus</i> sp.2				60		
<i>Phacus</i> sp.3						
Ochrophyta						
Bacillariophyceae						
Asterolamprales						
Asterolampraceae						
Asterolampra						
<i>Asterolampra marylandica</i>	540	600	300	600	300	600
Asteromphalus						
<i>Asteromphalus cleveanus</i>	600	420	420	540	360	240
<i>Asteromphalus elegans</i>	240	240	120	300	240	240
<i>Asteromphalus flabellatus</i>	60	120	120	240		180
<i>Asteromphalus</i> sp.1	240	240	180	180	180	240
Bacillariales						
Bacillariaceae						
Bacillaria						
<i>Bacillaria paxillifer</i>	3000	3720	3000			
Cylindrotheca						
<i>Cylindrotheca closterium</i>						
<i>Cylindrotheca</i> sp.1	540		900			
Nitzschia						
<i>Nitzschia longissima</i>	240	240	240	180	180	120
<i>Nitzschia lorenziana</i>	240	300	180			
<i>Nitzschia</i> sp.10	300	300	240	240	300	360
<i>Nitzschia</i> sp.11	300	240	240			
<i>Nitzschia</i> sp.3	660	240	360	180	240	240
<i>Nitzschia</i> sp.5	240	240	240			
Pseudo-nitzschia						
<i>Pseudo-nitzschia</i> sp.1						
Centrales						
Eupodiscaceae						
Odontella						
<i>Odontella aurita</i>						
<i>Odontella mobiliensis</i>		240		60		
<i>Odontella sinensis</i>		300	300	360	360	240
Chaetocerotales						
Chaetocerotaceae						
Bacteriastrium						
<i>Bacteriastrium comosum</i>	2100	2520	1500	2220	1080	960
<i>Bacteriastrium furcatum</i>	55980	1680	840	1260	1560	1140
<i>Bacteriastrium hyalinum</i>	1320	2040	1320	1500	1860	1500
<i>Bacteriastrium minus</i>						



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Phytoplankton density (individuals in the br

TAXA	MAWD- 1B2X	MAWD- 1C2	MAWD- 2C2X	MAWD- 3B2	MAWD- 3C2X	MAWD- 4B2X
Chaetoceros						
<i>Chaetoceros aequatorialis</i>	360	300	240	300	480	420
<i>Chaetoceros affinis</i>	1140	1260				
<i>Chaetoceros atlanticus</i>	660	1260	300	840	960	1020
<i>Chaetoceros coarctatus</i>	4080	3840	3900	3420	3420	3120
<i>Chaetoceros compressus</i>	1560	2160	1860	1560	2100	1200
<i>Chaetoceros costatus</i>	1320	1740				1920
<i>Chaetoceros didymus</i>	1680	2400	1080	2520	2220	2280
<i>Chaetoceros diversus</i>	2160	3240	2940	2100	2280	2100
<i>Chaetoceros eibenii</i>						
<i>Chaetoceros lorenzianus</i>	1260	1260	2400	720	1620	1680
<i>Chaetoceros messanensis</i>	1020	1560	1260	1620	900	
<i>Chaetoceros peruvianus</i>	180	360	300			
<i>Chaetoceros pseudocurvisetus</i>	1740		2400			
<i>Chaetoceros tenuissimus</i>						
Corethrales						
Corethraceae						
Corethron						
<i>Corethron criophilum</i>	120	180	240	120	120	
Coscinodiscales						
Coscinodiscaceae						
Coscinodiscus						
<i>Coscinodiscus gigas</i>						
<i>Coscinodiscus</i> sp.1	480	480	420	480	420	540
<i>Coscinodiscus</i> sp.10	540	360	480			
<i>Coscinodiscus</i> sp.11	360	420	300	420	420	360
<i>Coscinodiscus</i> sp.2		180	300	240	60	720
<i>Coscinodiscus</i> sp.4						
<i>Coscinodiscus</i> sp.5	300	300	600			
<i>Coscinodiscus</i> sp.6	660	720	480	300	480	420
<i>Coscinodiscus</i> sp.8	600	780	480	480	420	480
<i>Coscinodiscus</i> sp.9						
Gossleriella						
<i>Gossleriella tropica</i>	660	660	900	660	480	600
Palmeria						
<i>Palmeria hardmaniana</i>		180				
Heliopeltaceae						
Actinoptychus						
<i>Actinoptychus</i> sp.1	300	300	300	240	180	540
Hemidiscaceae						
Pseudoguinaridia						
<i>Pseudoguinaridia recta</i>	300			240		
Eunotiales						
Eunotiaceae						
Eunotia						
<i>Eunotia</i> sp.1	420	420				



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Phytoplankton density (individuals in the br

TAXA	MAWD- 1B2X	MAWD- 1C2	MAWD- 2C2X	MAWD- 3B2	MAWD- 3C2X	MAWD- 4B2X
Fragilariales						
Fragilariaceae						
Asterionella						
<i>Asterionella formosa</i>	240	240	180			
Fragilaria						
<i>Fragilaria</i> sp.1	960	1080	1200	1020	960	960
Hemiaulales						
Belleracheaceae						
Bellerachea						
<i>Bellerachea horologicalis</i>						
Hemiaulaceae						
Cerataulina						
<i>Cerataulina</i> sp.1		600				
Climacodium						
<i>Climacodium biconcavum</i>	840	600	960	780	780	1320
<i>Climacodium frauenfeldianum</i>	4680	3720	3780	3840	2340	3060
Eucampia						
<i>Eucampia cornuta</i>						
Hemiaulus						
<i>Hemiaulus hauckii</i>	240		480	600	480	480
<i>Hemiaulus indicus</i>	240		360			
<i>Hemiaulus membranaceus</i>	4440	2640	1800	1920	3060	1500
<i>Hemiaulus sinensis</i>	840	660	480			
Leptocylindrales						
Leptocylindraceae						
Leptocylindrus						
<i>Leptocylindrus danicus</i>			600			
Lithodesmiales						
Lithodesmaceae						
Ditylum						
<i>Ditylum brightwellii</i>						
<i>Ditylum sol</i>	240	360	300	240	240	360
Lithodesmium						
<i>Lithodesmium</i> sp.1						
Lyrellales						
Lyrellaceae						
Lyrella						
<i>Lyrella lyra</i>						
Melosirales						
Stephanopyxidaceae						
Stephanopyxis						
<i>Stephanopyxis palmeriana</i>						



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Phytoplankton density (individuals in the br

TAXA	MAWD- 1B2X	MAWD- 1C2	MAWD- 2C2X	MAWD- 3B2	MAWD- 3C2X	MAWD- 4B2X
Naviculales						
Diploneidaceae						
Diploneis						
<i>Diploneis</i> sp.1	600	420	480	360	300	240
Naviculaceae						
Anomoeneis						
<i>Anomoeneis</i> sp.1	300	180	120			
Haslea						
<i>Haslea</i> sp.1	480	660	300	420	480	300
<i>Haslea wawriake</i>		60	60			
Meuniera						
<i>Meuniera</i> sp.1	480	540		480	780	660
Navicula						
<i>Navicula</i> sp.1	660	420	720	420	420	660
<i>Navicula</i> sp.3	660	300	480	360	480	360
<i>Navicula</i> sp.5		300				
<i>Navicula</i> sp.6	660	240	420			
<i>Navicula</i> sp.7	360	180	300			
<i>Navicula</i> sp.8	300	360	420	300	360	240
Trachyneis						
<i>Trachyneis</i> sp.1	540	480	240	180	180	360
Pinnulariaceae						
Pinnularia						
<i>Pinnularia</i> sp.2	360	120	120	120	300	
Pleurosigmataceae						
Gyrosigma						
<i>Gyrosigma balticum</i>	120	120				
<i>Gyrosigma</i> sp.1	420	420	600	720	420	660
<i>Gyrosigma</i> sp.2	360	300	540	480	360	360
<i>Gyrosigma</i> sp.3	300	300	300			
<i>Gyrosigma</i> sp.4						
Pleurosigma						
<i>Pleurosigma</i> sp.1	420	660	480	480	480	480
<i>Pleurosigma</i> sp.2	300	420	420	420	420	240
<i>Pleurosigma</i> sp.3	600	420	300	480	300	240
<i>Pleurosigma</i> sp.4						
<i>Pleurosigma</i> sp.5		240	300			
<i>Pleurosigma</i> sp.6	540	480	420	360	360	300
Rhabdonematales						
Rhabdonemataceae						
Rhabdonema						
<i>Rhabdonema</i> sp.1						



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Phytoplankton density (individuals in the br

TAXA	MAWD-1B2X	MAWD-1C2	MAWD-2C2X	MAWD-3B2	MAWD-3C2X	MAWD-4B2X
Rhizosoleniales						
Rhizosoleniaceae						
Dactyliosolen						
<i>Dactyliosolen blavyanus</i>						
<i>Dactyliosolen fragilissimus</i>						
<i>Dactyliosolen phuketensis</i>	420		840			
Guinardia						
<i>Guinardia cylindrus</i>						
<i>Guinardia flaccida</i>	780	300				
<i>Guinardia striata</i>	840	840	1200	1800	600	900
Proboscia						
<i>Proboscia alata</i>	420	420	540	480	600	420
Pseudosolenia						
<i>Pseudosolenia calcar avis</i>	360	420	360	600	480	420
Rhizosolenia						
<i>Rhizosolenia acuminata</i>						
<i>Rhizosolenia bergonii</i>	480	600	600			
<i>Rhizosolenia clevei</i> var. <i>clevei</i>	420	360	600			
<i>Rhizosolenia formosa</i>	180	120	60	60	180	180
<i>Rhizosolenia hyalina</i>	480	600	420	300	540	360
<i>Rhizosolenia imbricata</i>	60	120	360			
<i>Rhizosolenia pungens</i>	840	660	480	480	480	480
<i>Rhizosolenia robusta</i>	240	300	240			
<i>Rhizosolenia</i> sp.1	360	120	240	240	360	180
<i>Rhizosolenia</i> sp.3						
<i>Rhizosolenia striata</i>	240	240	240	180	240	360
<i>Rhizosolenia styliiformis</i>	180	120	240	240	240	180
Suriellales						
Entomoneidaceae						
Entomoneis						
<i>Entomoneis</i> sp.1	300	360	300	300		360
<i>Entomoneis</i> sp.2						
Suriellaceae						
Campylodiscus						
<i>Campylodiscus</i> sp.1	60	120				
Suriella						
<i>Suriella</i> sp.1	60					
Thalassionematales						
Thalassionemataceae						
Thalassionema						
<i>Thalassionema nitzschioides</i>	1440	1800		1560	2160	2280
<i>Thalassionema</i> sp.1	1380	1200	1560	900	1020	1140
Thalassiothrix						
<i>Thalassiothrix</i> sp.1		540		660		
<i>Thalassiothrix</i> sp.2	960	1260	1500	1200	600	1380



Sakamon Petchong

Phytoplankton density (individuals in the br

TAXA	MAWD- 1B2X	MAWD- 1C2	MAWD- 2C2X	MAWD- 3B2	MAWD- 3C2X	MAWD- 4B2X
Thalassiosiphysales						
Catenulaceae						
Amphora						
<i>Amphora</i> sp.1	240		240			
<i>Amphora</i> sp.2						
<i>Amphora</i> sp.3	120	180	120			
Thalassiosirales						
Stephanodiscaceae						
Cyclotella						
<i>Cyclotella</i> sp.1	600	600	660	420	600	420
Thalassiosiraceae						
Planktoniella						
<i>Planktoniella blanda</i>	1140	600	1020	1080	780	720
<i>Planktoniella sol</i>	840	480	960	840	840	660
Thalassiosira						
<i>Thalassiosira</i> sp.5	720	780	960	780	540	720
<i>Thalassiosira</i> sp.6	420	480	780	600	600	660
Pyrrophyphyta						
Dinophyceae						
Dinophysiales						
Amphisoleniaceae						
Amphisolenia						
<i>Amphisolenia bidentata</i>	600	420	600	300	420	900
Dinophysiaceae						
Dinophysis						
<i>Dinophysis caudata</i>	180	180				
<i>Dinophysis hastata</i>	240	240	300	240		240
<i>Dinophysis miles</i>	240		300			
<i>Dinophysis recurva</i>						
<i>Dinophysis schuettii</i>						
Histioneis						
<i>Histioneis hyalina</i>						
<i>Histioneis</i> sp.1	180	60	60			
Ornithocercus						
<i>Ornithocercus</i> sp.1						
<i>Ornithocercus thumii</i>		180				
Phalacroma						
<i>Phalacroma doryphorum</i>			180	240		
<i>Phalacroma mitra</i>						



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Phytoplankton density (individuals in the br

TAXA	MAWD- 1B2X	MAWD- 1C2	MAWD- 2C2X	MAWD- 3B2	MAWD- 3C2X	MAWD- 4B2X
Gonyaulacales						
Ceratiaceae						
Ceratium						
<i>Ceratium breve</i>						
<i>Ceratium candelabrum</i>	60	180				
<i>Ceratium carriense</i>	120					
<i>Ceratium claviger</i>	240	360	360		60	240
<i>Ceratium contortum</i>	420	480	420	360	480	
<i>Ceratium deflexum</i>	300	300	240	240	180	180
<i>Ceratium dens</i>		540	660	600	780	
<i>Ceratium extensum</i>	240	240	180			
<i>Ceratium falcatum</i>		240	120			
<i>Ceratium furca</i>	240	240	240	240	180	240
<i>Ceratium fusus</i>	240	180	180	180	180	180
<i>Ceratium gibberum</i>		300				
<i>Ceratium hircus</i>		180				
<i>Ceratium horridum</i>	240	480	180	240	180	360
<i>Ceratium kofoidii</i>	420	780	480	420	600	480
<i>Ceratium massiliense</i>				240		
<i>Ceratium porrectum</i>		600	480	420	240	480
<i>Ceratium teres</i>		240				
<i>Ceratium trichoceros</i>		420	300	420	300	420
<i>Ceratium tripos</i>	480	300	420	420	300	420
Ceratocoryaceae						
Ceratocorys						
<i>Ceratocorys armata</i>		240	180	240	300	120
<i>Ceratocorys horrida</i>		180				
Goniodomataceae						
Alexandrium						
<i>Alexandrium</i> sp.1	1200					
Goniodoma						
<i>Goniodoma</i> sp.1	240	120	240	120	240	240
<i>Goniodoma</i> sp.2						
Gonyaulacaceae						
Gonyaulax						
<i>Gonyaulax</i> sp.1						
Lingulodinium						
<i>Lingulodinium</i> sp.1	300	240	360	300	240	240
Oxytoxaceae						
Oxytoxum						
<i>Oxytoxum</i> sp.1		60		60		
<i>Oxytoxum</i> sp.3	300	300	420	360	180	240
<i>Oxytoxum</i> sp.5						
Pyrocystaceae						
Pyrocystis						
<i>Pyrocystis lunula</i>	180	240	240	60	180	180
<i>Pyrocystis noctiluca</i>		60				



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Phytoplankton density (individuals in the br

TAXA	MAWD-1B2X	MAWD-1C2	MAWD-2C2X	MAWD-3B2	MAWD-3C2X	MAWD-4B2X
Pyrophacaceae						
Pyrophacus						
<i>Pyrophacus horologium</i>			120			
<i>Pyrophacus steinii</i>	120	180	120	60	60	60
Gymnodiniales						
Gymnodiniaceae						
Gymnodinium						
<i>Gymnodinium</i> sp.2	300	300	420	300	300	240
<i>Gymnodinium</i> sp.6	240	60		240		300
Gyrodinium						
<i>Gyrodinium falcatum</i>	120	180	180	180		240
Peridinales						
Podolampadaceae						
Podolampas						
<i>Podolampas bipes</i>	300	240	300	240	240	360
<i>Podolampas elegans</i>			180			
<i>Podolampas palmipes</i>	420	480	420	420	360	420
<i>Podolampas spinifera</i>		180	180	300		180
Protopteridiniaceae						
Protopteridinium						
<i>Protopteridinium asymmetricum</i>	180		180	180	180	240
<i>Protopteridinium conicum</i>						
<i>Protopteridinium depressum</i>	360	420	480	360	300	540
<i>Protopteridinium diabolum</i>						
<i>Protopteridinium divergens</i>	480	540	300	300	480	300
<i>Protopteridinium elegans</i>		300	240			
<i>Protopteridinium globulum</i>	180	180	180	240	300	240
<i>Protopteridinium latispinum</i>	300	180	360	240	480	240
<i>Protopteridinium oceanicum</i>		180	120			
<i>Protopteridinium pallidum</i>						
<i>Protopteridinium pentagonum</i>			180			
<i>Protopteridinium</i> sp.1						
<i>Protopteridinium</i> sp.17	120					
<i>Protopteridinium</i> sp.22						
<i>Protopteridinium</i> sp.6						
Prorocentrales						
Prorocentraceae						
Prorocentrum						
<i>Prorocentrum compressum</i>		60				
<i>Prorocentrum micans</i>						
<i>Prorocentrum</i> sp.1			120			
<i>Prorocentrum</i> sp.2						
TOTAL	280380	243840	255540	215340	290640	224220



Sakamon Petchong

Phytoplankton density (individual in the bottle)

SPECIES/STATION	MAWG-1B2X	MAWG-3B2X	Control-3
Charophyta			
Conjugophyceae			
Desmiales			
Desmidiaceae			
Spondylosium			
<i>Spondylosium</i> sp.1	420	300	180
Staurostrum			
<i>Staurostrum</i> sp.1	60		120
<i>Staurostrum</i> sp.3	60		
Chlorophyta			
Chlorophyceae			
Chlamydomonadales			
Micractiniaceae			
Golenkinia			
<i>Golenkinia radiata</i>	300	300	240
Tetrasporales			
Palmellopsidaceae			
Sphaerocystis			
<i>Sphaerocystis</i> sp.1	3840	5940	7140
Chrysophyta			
Chrysophyceae			
Dictyochales			
Dictyochaceae			
Dictyocha			
<i>Dictyocha fibula</i>	360	660	420
<i>Dictyocha speculum</i> var. <i>octonaris</i>	240	360	180
Cyanobacteria			
Cyanophyceae			
Chroococcales			
Chroococcaceae			
Gloeocapsa			
<i>Gloeocapsa</i> sp.1	960	1320	540
Nostocales			
Oscillatoriaceae			
Oscillatoria			
<i>Oscillatoria erythraea</i>	161100	119520	97320
<i>Oscillatoria</i> sp.1	65520	50940	37920
<i>Oscillatoria</i> sp.2	960	420	540
<i>Oscillatoria thiebautii</i>	240	60	
Rivulariaceae			
Calothrix			
<i>Calothrix crustacea</i>	2760	2040	3120
Euglenophycota			
Euglenophyceae			
Euglenales			
Euglenaceae			
Phacus			
<i>Phacus</i> sp.1	120		



Phytoplankton density (individual in the bottle)

SPECIES/STATION	MAWG-1B2X	MAWG-3B2X	Control-3
Ochrophyta			
Bacillariophyceae			
Asterolamprales			
Asterolampraceae			
Asterolampra			
<i>Asterolampra marylandica</i>	300	300	420
Asteromphalus			
<i>Asteromphalus cleveanus</i>	600	360	540
<i>Asteromphalus elegans</i>	240	300	240
<i>Asteromphalus flabellatus</i>	120	120	180
<i>Asteromphalus</i> sp.1	360	120	240
Aulacoseirales			
Aulacoseiraceae			
Aulacoseira			
<i>Aulacoseira</i> sp.1	240		
Bacillariales			
Bacillariaceae			
Bacillaria			
<i>Bacillaria paxillifer</i>	2220	720	
Cylindrotheca			
<i>Cylindrotheca</i> sp.1	960	840	
Nitzschia			
<i>Nitzschia longissima</i>	60	120	180
<i>Nitzschia lorenziana</i>	240	120	300
<i>Nitzschia</i> sp.10	360	420	480
<i>Nitzschia</i> sp.3	120	240	360
Centrales			
Eupodiscaceae			
Odontella			
<i>Odontella mobiliensis</i>	180	240	180
Chaetocerotales			
Chaetocerotaceae			
Bacteriastrum			
<i>Bacteriastrum comosum</i>	1740	2280	960
<i>Bacteriastrum furcatum</i>	1320	1620	1440
<i>Bacteriastrum hyalinum</i>	1020	1500	1140
Chaetoceros			
<i>Chaetoceros aequatorialis</i>	240	420	420
<i>Chaetoceros affinis</i>	960	180	480
<i>Chaetoceros atlanticus</i>	420	360	780
<i>Chaetoceros coarctatus</i>	4320	4080	6480
<i>Chaetoceros compressus</i>	1800	4080	2580
<i>Chaetoceros costatus</i>	720	2400	
<i>Chaetoceros didymus</i>	900	2880	1020
<i>Chaetoceros diversus</i>	2400	3840	2340
<i>Chaetoceros lorenzianus</i>	1080	2520	1380
<i>Chaetoceros messanensis</i>	1080	780	1560
<i>Chaetoceros peruvianus</i>	60		300
<i>Chaetoceros pseudocurvisetus</i>	1980	1560	



Solomon Pichay

Phytoplankton density (individual in the bottle)

SPECIES/STATION	MAWG-1B2X	MAWG-3B2X	Control-3
Corethrales			
Corethraceae			
Corethron			
<i>Corethron criophilum</i>	420	60	60
Coscinodiscales			
Coscinodiscaceae			
Coscinodiscus			
<i>Coscinodiscus gigas</i>	60		
<i>Coscinodiscus</i> sp.1	300	480	420
<i>Coscinodiscus</i> sp.10	60	240	240
<i>Coscinodiscus</i> sp.11	180	240	300
<i>Coscinodiscus</i> sp.2	480	360	420
<i>Coscinodiscus</i> sp.5	600	540	420
<i>Coscinodiscus</i> sp.6	300	420	420
<i>Coscinodiscus</i> sp.8	180	180	180
Gossleriella			
<i>Gossleriella tropica</i>	420	780	600
Heliopeltaceae			
Actinoptychus			
<i>Actinoptychus</i> sp.1	420	240	480
Hemidiscaceae			
Pseudoguinaridia			
<i>Pseudoguinaridia recta</i>	840	720	420
Fragilariales			
Fragilariaceae			
Asterionella			
<i>Asterionella formosa</i>	240	180	180
Fragilaria			
<i>Fragilaria</i> sp.1	960	480	960
Hemiaulales			
Hemiaulaceae			
Climacodium			
<i>Climacodium biconcavum</i>	960	1080	1080
<i>Climacodium frauenfeldianum</i>	4200	5460	4740
Eucampia			
<i>Eucampia cornuta</i>	720	540	480
Hemiaulus			
<i>Hemiaulus membranaceus</i>	1440	1680	1740
<i>Hemiaulus sinensis</i>	600	1020	540
Leptocylindrales			
Leptocylindraceae			
Leptocylindrus			
<i>Leptocylindrus danicus</i>	600	1020	960
Lithodesmiales			
Lithodesmaceae			
Ditylum			
<i>Ditylum sol</i>	240	180	300
Melosirales			
Melosiraceae			
Melosira			
<i>Melosira dubia</i>	240		



Sakman Pichang

Phytoplankton density (individual in the bottle)

SPECIES/STATION	MAWG-1B2X	MAWG-3B2X	Control-3
Naviculales			
Diploneidaceae			
Diploneis			
<i>Diploneis</i> sp.1	600	360	840
Naviculaceae			
Anomoeneis			
<i>Anomoeneis</i> sp.1	120	240	300
Haslea			
<i>Haslea</i> sp.1	780	960	420
<i>Haslea wawriake</i>	60	240	120
Navicula			
<i>Navicula</i> sp.1	840	600	600
<i>Navicula</i> sp.3	300	540	480
<i>Navicula</i> sp.7	180	240	180
<i>Navicula</i> sp.8	60	120	240
Trachyneis			
<i>Trachyneis</i> sp.1	480	420	300
Pleurosigmataceae			
Gyrosigma			
<i>Gyrosigma</i> sp.1	420	660	480
<i>Gyrosigma</i> sp.2	120	480	240
<i>Gyrosigma</i> sp.3	360	660	300
Pleurosigma			
<i>Pleurosigma</i> sp.1	600	840	480
<i>Pleurosigma</i> sp.2	600	660	600
<i>Pleurosigma</i> sp.3	180	480	540
<i>Pleurosigma</i> sp.5	300	240	300
<i>Pleurosigma</i> sp.6	360	480	660
Rhizosoleniales			
Rhizosoleniaceae			
Dactyliosolen			
<i>Dactyliosolen fragilissimus</i>	480	600	
Guinardia			
<i>Guinardia flaccida</i>	600	420	360
<i>Guinardia striata</i>	1080	1680	960
Proboscia			
<i>Proboscia alata</i>	780	960	780
Pseudosolenia			
<i>Pseudosolenia calcar avis</i>	480	720	660
Rhizosolenia			
<i>Rhizosolenia bergonii</i>	60	240	240
<i>Rhizosolenia formosa</i>	240	180	300
<i>Rhizosolenia hyalina</i>	120	180	240
<i>Rhizosolenia pungens</i>	420	300	240
<i>Rhizosolenia robusta</i>	180	240	240
<i>Rhizosolenia</i> sp.1	300	360	240
<i>Rhizosolenia striata</i>	420	420	420
<i>Rhizosolenia styliiformis</i>	480	480	300



Phytoplankton density (individual in the bottle)

SPECIES/STATION	MAWG-1B2X	MAWG-3B2X	Control-3
Surirellales			
Entomoneidaceae			
Entomoneis			
<i>Entomoneis</i> sp.1	480	240	360
Surirellaceae			
Campylodiscus			
<i>Campylodiscus</i> sp.1	60		
Surirella			
<i>Surirella</i> sp.1	60	360	180
Thalassionematales			
Thalassionemataceae			
Thalassionema			
<i>Thalassionema nitzschioides</i>	1680	2520	1200
<i>Thalassionema</i> sp.1	1560	1560	1380
Thalassiothrix			
<i>Thalassiothrix</i> sp.1	900	240	420
<i>Thalassiothrix</i> sp.2	2100	1860	1380
Thalassiophysales			
Catenulaceae			
Amphora			
<i>Amphora</i> sp.2	180	60	240
Thalassiosirales			
Stephanodiscaceae			
Cyclotella			
<i>Cyclotella</i> sp.1	840	1380	960
Thalassiosiraceae			
Planktoniella			
<i>Planktoniella blanda</i>	660	900	960
<i>Planktoniella sol</i>	540	660	660
Thalassiosira			
<i>Thalassiosira</i> sp.5	1200	1320	840
<i>Thalassiosira</i> sp.6	1020	780	900
Pyrrophyphyta			
Dinophyceae			
Dinophysiales			
Amphisoleniaceae			
Amphisolenia			
<i>Amphisolenia bidentata</i>	480	720	480
Dinophysiaceae			
Dinophysis			
<i>Dinophysis hastata</i>	120	240	300
<i>Dinophysis schuettii</i>	60	240	360
Histioneis			
<i>Histioneis</i> sp.1	180	240	240
Ornithocercus			
<i>Ornithocercus</i> sp.1	120	180	180



Phytoplankton density (individual in the bottle)

SPECIES/STATION	MAWG-1B2X	MAWG-3B2X	Control-3
Gonyaulacales			
Ceratiaceae			
Ceratium			
<i>Ceratium claviger</i>	300	420	300
<i>Ceratium contortum</i>	360	300	240
<i>Ceratium deflexum</i>	120	120	240
<i>Ceratium furca</i>	420	480	480
<i>Ceratium fusus</i>	300	420	240
<i>Ceratium horridum</i>	480	300	300
<i>Ceratium kofoidii</i>	420	660	480
<i>Ceratium massiliense</i>	240	360	300
<i>Ceratium porrectum</i>	300	420	360
<i>Ceratium teres</i>	60	120	
<i>Ceratium trichoceros</i>	420	540	480
<i>Ceratium tripos</i>	360	660	540
Ceratocoryaceae			
Ceratocorys			
<i>Ceratocorys armata</i>	60	120	120
<i>Ceratocorys horrida</i>	240	180	120
Goniodomataceae			
Alexandrium			
<i>Alexandrium</i> sp.1	960	900	660
Goniodoma			
<i>Goniodoma</i> sp.1	180	300	240
Gonyaulacaceae			
Lingulodinium			
<i>Lingulodinium</i> sp.1	240	360	300
Oxytoxaceae			
Oxytoxum			
<i>Oxytoxum</i> sp.1	180	240	120
<i>Oxytoxum</i> sp.3	120	300	420
Pyrocystaceae			
Pyrocystis			
<i>Pyrocystis lunula</i>	360	300	180
Gymnodiniales			
Gymnodiniaceae			
Gymnodinium			
<i>Gymnodinium</i> sp.2	420	480	420
<i>Gymnodinium</i> sp.6	240	300	300
Gyrodinium			
<i>Gyrodinium falcatum</i>	60	240	240
Peridinales			
Podolampadaceae			
Podolampas			
<i>Podolampas bipes</i>	60	240	300
<i>Podolampas palmipes</i>	840	600	720
Protopteridiniaceae			
Protopteridinium			
<i>Protopteridinium asymmetricum</i>	60	180	120
<i>Protopteridinium depressum</i>	300	360	120
<i>Protopteridinium divergens</i>	120	180	60



Phytoplankton density (individual in the bottle)

SPECIES/STATION	MAWG-1B2X	MAWG-3B2X	Control-3
<i>Protoperdinium latispinum</i>	120	180	240
<i>Protoperdinium</i> sp.1	180	60	60
<i>Protoperdinium</i> sp.17	120	180	180
Prorocentrales			
Prorocentraceae			
Prorocentrum			
<i>Prorocentrum micans</i>	120	240	120
TOTAL	310440	269400	218760

หมายเหตุ

Oscillatoria erythraea

นับเป็นสาย

Oscillatoria sp.1

นับเป็นสาย

Oscillatoria sp.2

นับเป็นสาย

นับเป็นกลุ่ม

โดย1 กลุ่ม มี

จำนวน

ประมาณ

Oscillatoria thiebautii

200-300สาย



Sakorn Pichong

APPENDIX E
ANALYTICAL LABORATORY REPORTS:
ZOOPLANKTON COMMUNITY

Zooplankton Density (individuals in the bottle)

SPECIES/STATION	MAWA- 2B2X	MAWA- 3B2	MAWA- 4B2X	MAWA- 1C2	MAWA- 1CP2	MAWA- 3C2
Protozoa						
Granuloreticulosea						
Foraminiferida						
Foraminiferida.unid						
Foraminiferida				4		
Ctenophora						
Tenulaculata						
Cydlppida						
Pleurobrachiidae						
Pleurobrachiidae.unid						
Pleurobrachiidae spp.	3	2	3	9	4	2
Ciliophora						
Ciliatea						
Oligotrichida						
Rhabdonellidae						
Rhabdonella						
<i>Rhabdonella</i> sp.1		1		1	2	2
Cnidaria						
Anthozoa						
Anthozoa.unid						
Anthozoa spp.	3	6	3	2	5	2
Hydrozoa						
Anthoathecata						
Corymorphidae						
Euphysa						
<i>Euphysa</i> sp.1	2	2	1	1	2	2
Euphysora						
<i>Euphysora</i> sp.1	2		1		1	2
<i>Euphysora</i> sp.2						
Corynidae						
Corynidae.unid						
Corynidae sp.1	1		1		1	1
Corynidae sp.2						
Proboscldactylidae						
Proboscldactylidae.unid						
Proboscldactylidae spp.	3	3	4	2	3	2
Anthoathecatae						
Bougainvilliidae						
Bougainvilliidae.unid						
Bougainvilliidae sp.1	2		2	1		2
Bougainvilliidae sp.3	1	2	2	2	2	1
Bougainvilliidae sp.4						1



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Zooplankton Density (individuals in the bottle)

SPECIES/STATION	MAWA- 2B2X	MAWA- 3B2	MAWA- 4B2X	MAWA- 1C2	MAWA- 1CP2	MAWA- 3C2
Tubulariidae						
Tubulariidae.unid						
Tubulariidae sp.1	2	1		2	1	2
Tubulariidae sp.3		1	3	1	1	1
Hydrozoa.unid						
Hydrozoa spp.	2	3	2	3	2	1
Leptothecata						
Eutimidae						
Eutima						
<i>Eutima</i> sp.1	1	2	3	2	2	2
Leptothecatae						
Eirenidae						
Eirene						
<i>Eirene</i> sp.1	1	2	1	2	1	2
Eirenidae.unid						
Eirenidae sp.2		1				
Lovenellidae						
Lovenellidae.unid						
Lovenellidae spp.			1			2
Mitrocomidae						
Mitrocomidae.unid						
Mitrocomidae spp.	3	4	3	2	4	4
Siphonophora						
Abylidae						
Abylidae.unid						
Abylidae spp.	6	12	7	12	7	6
Siphonophorae						
Diphyidae						
Diphyidae.unid						
Diphyidae spp.	9	8	22	8	11	20
Trachymedusae						
Geryoniidae						
Liriope						
<i>Liriope</i> sp.1	3	2	3	2	3	3
Rhopalonematidae						
Rhopalonematidae.unid						
Rhopalonematidae spp.	4	2	3	2	3	5
Scyphozoa						
Coronatae						
Nausithoidae						
Nausithoe						
<i>Nausithoe</i> sp.1	2	1	2	1	2	2
<i>Nausithoe</i> sp.3	1	1	1			1



Sakamon Petchong

Zooplankton Density (individuals in the bottle)

SPECIES/STATION	MAWA- 2B2X	MAWA- 3B2	MAWA- 4B2X	MAWA- 1C2	MAWA- 1CP2	MAWA- 3C2
Rhizostomeae						
Rhizostomatidae						
Rhizostomatidae.unid						
Rhizostomatidae spp.						2
Platyhelminthes						
Turbellaria						
Turbellaria.unid						
Turbellaria spp.				2		
Annelida						
Polychaeta.unid						
Polychaete larvae	11	4	10	9	5	3
Mollusca						
Bivalvia						
Bivalvia.unid						
Bivalve larvae	3	3	4	8	4	3
Cephalopoda						
Cephalopoda.unid						
Squid larvae						
Gastropoda						
Gastropoda.unid						
Gastropoda sp.	4	3	5	4	4	6
Neotaenioglossa						
Atlantidae						
Atlanta						
<i>Atlanta</i> sp.	2	3	3	2	3	2
Thecosomata						
Cavoliniidae						
Cavoliniidae.unid						
Cavoliniidae sp.1	4	3	3	4	2	
Cavoliniidae sp.2						
Creseis						
<i>Creseis acicula</i>	3		2	6		
<i>Creseis virgula</i>						
Diacria						
<i>Diacria</i> sp.1	2	2	1	4	2	
<i>Diacria</i> sp.2						
Arthropoda						
Malacostraca						
Amphipoda						
Amphipoda sp.	1	1		2	3	
Caprellidae						
Caprellidae.unid						
Caprellidae spp.	2	1	4	3	2	2



Sakamon P. Hong

Zooplankton Density (individuals in the bottle)

SPECIES/STATION	MAWA- 2B2X	MAWA- 3B2	MAWA- 4B2X	MAWA- 1C2	MAWA- 1CP2	MAWA- 3C2
Dexaminidae						
Dexaminidae.unid						
Dexaminidae spp.	1	1		2	1	
Hyperiididae						
Hyperiididae.unid						
Hyperiididae sp.1	6	4	2	3	5	2
Hyperiididae sp.2	7	4	3	5	7	3
Hyperiididae sp.3	3	3	2	2	6	2
Hyperiididae sp.4	2	3	2	4	3	2
Hyperiididae sp.5	2	3	2	1	3	2
Oxycephalidae						
Rhabdosoma						
<i>Rhabdosoma</i> spp.	4	5	4	3	4	5
Tullbergella						
<i>Tullbergella</i> spp.	1	2	1	1	1	
Cumacea				2		
Cumacea.unid						
Cumacea sp.				2		
Decapoda						
Alpheidae						
Alpheidae.unid						
Alpheidae spp.	1	2		1	1	
Callianassidae						
Callianassidae.unid						
Callianassidae spp.	1			1		
Crangonidae						
Crangonidae.unid						
Crangonidae spp.	1	1	1	2	1	2
Decapoda.unid						
Decapoda.unid						
Crab zoea	1			2	1	1
Dendrobranchiata.unid						
Dendrobranchiata.unid						
Shrimp larvae sp.C	1	2	1	2	2	2
Shrimp larvae sp.J	3	2	2	1	1	2
Shrimp larvae sp.R	2	1	2	1	1	2
Shrimp larvae sp.S		2	1		1	1
Shrimp larvae sp.T			1			
Diogenidae						
Diogenidae.unid						
Diogenidae sp.1	1	2	1	1	1	1
Diogenidae sp.2						
Diogenidae sp.3	2		2	1	2	2



Sakamon Petchong

Zooplankton Density (individuals in the bottle)

SPECIES/STATION	MAWA- 2B2X	MAWA- 3B2	MAWA- 4B2X	MAWA- 1C2	MAWA- 1CP2	MAWA- 3C2
Hippidae						
Hippidae.unid						
Hippidae spp.				1	1	
Hippolytidae						
Hippolytidae.unid						
Hippolytidae spp.	2	2	2	1	2	2
Laomediidae						
Laomediidae.unid						
Laomediidae spp.	1	1	3	2	1	1
Luciferidae						
Lucifer						
<i>Lucifer spp.</i>	3	4	3	8	2	3
Paguridae						
Paguridae.unid						
Paguridae spp.	4	2	2	3	2	2
Palaemonidae						
Palaemonidae.unid						
Palaemonidae sp.1	1	1	1	1		1
Palaemonidae sp.3	1	2	2		1	1
Parapaguridae						
Parapaguridae.unid						
Parapaguridae spp.	2	1	3	3	2	2
Pasiphaeidae						
Leptochela						
<i>Leptochela sp.1</i>	3	4	4	2	4	3
Pleocyemata.unid						
Pleocyemata.unid						
Brachyura Larvae	8	4	5	11	8	6
Porcellanidae						
Porcellanidae.unid						
Porcellanidae spp.	2			1		
Scyllaridae						
Scyllaridae.unid						
Phyllosoma larvae						
Sergestidae						
Sergestidae.unid						
Sergestidae spp.	3	2	2	3	2	2
Solenoceridae						
Solenoceridae.unid						
Solenoceridae spp.	4	4	3	1	4	3
Upogebiidae						
Upogebiidae.unid						
Upogebiidae spp.	3	4	4	6	5	8



Sakamon Phothong

Zooplankton Density (individuals in the bottle)

SPECIES/STATION	MAWA- 2B2X	MAWA- 3B2	MAWA- 4B2X	MAWA- 1C2	MAWA- 1CP2	MAWA- 3C2
Malacostraca.unid						
<i>Mysid sp.</i>						1
Mysida						
Mysidae						
Siriella						
<i>Siriella sp.1</i>				1	1	
Stomatopoda						
Squillidae						
Squilla						
Alima larvae	1	3		1	2	
Stomatopoda.unid						
Erichthus larvae				1		
Maxillopoda						
Calanoida						
Acartiidae						
Acartiidae.unid						
Acartiidae spp.	56	55	67	102	65	82
Calanidae						
Calanidae.unid						
Calanidae spp.	410	413	294	356	411	411
Centropagidae						
Centropagidae.unid						
Centropagidae spp.	60	48	43	55	45	43
Eucalanidae						
Eucalanidae.unid						
Eucalanidae spp.	91	92	70	111	90	96
Euchaetidae						
Euchaetidae.unid						
Euchaetidae spp.	10	6	8	21	12	14
Paracalanidae						
Paracalanidae.unid						
Paracalanidae spp.	24	17	66	44	57	26
Pontellidae						
Pontellidae.unid						
Pontellidae spp.	36	34	32	60	26	38
Temoridae						
Temoridae.unid						
Temoridae spp.	15	51	14	22	14	29
Tortanidae						
Tortanidae.unid						
Tortanidae spp.	7	12	25	35	40	16
Tortanus						
<i>Tortanus spp.</i>	3	9	19	26	13	17



Sakamisa P. Hing

Zooplankton Density (individuals in the bottle)

SPECIES/STATION	MAWA- 2B2X	MAWA- 3B2	MAWA- 4B2X	MAWA- 1C2	MAWA- 1CP2	MAWA- 3C2
Copepoda.unid						
Copepod Nauplii	166	168	126	219	198	153
Cyclopoida						
Oithonidae						
Oithona						
Oithona spp.	12	6	8	17	9	9
Harpacticoida						
Ectinosomatidae						
Microsetella						
<i>Microsetella</i> spp.	120	88	76	108	77	135
Poecilostomatoida						
Corycaeidae						
Corycaeus						
<i>Corycaeus</i> spp.	5	4	10	18	10	18
Oncaeidae						
Oncaea						
<i>Oncaea</i> spp.	3	7	5	21	8	4
Sapphirinidae						
Copilia						
<i>Copilia</i> spp.	2	3	6	4	2	4
Sappharina						
<i>Sapphirina</i> spp.	4	4	3	5	6	7
Ostracoda						
Halocyprida						
Halocyprididae						
Euconchoecia						
<i>Euconchoecia</i> sp.1	17	16	32	22	35	31
Myodocopida						
Cypridinidae						
Cypridinidae.unid						
Cypridinidae sp.1	13	10	26	6	11	21
Cypridinidae sp.2	6	5	17	12	7	13
Echinodermata						
Echinodermata.unid						
Echinoderm Larvae	3	6	4	12	4	8
Chaetognatha						
Sagittoidea						
Aphragmophora						
Sagittidae						
Sagitta						
<i>Sagitta</i> spp.	180	118	79	130	150	210



Sakamon P. Thong

Zooplankton Density (individuals in the bottle)

SPECIES/STATION	MAWA- 2B2X	MAWA- 3B2	MAWA- 4B2X	MAWA- 1C2	MAWA- 1CP2	MAWA- 3C2
Chordata	50	46	38	45	48	38
Appendicularia						
Copelata						
Oikopleuridae						
Oikopleura						
<i>Oikopleura spp.</i>	28	25	13	15	20	25
Thaliacea						
Doliolida						
Doliolidae						
Doliioletta						
<i>Doliioletta spp.</i>	10	4	8	7	12	3
Doliolum						
<i>Doliolum spp.</i>	4	3	3	6	4	2
Salpida						
Salpidae						
Salpa						
<i>Salpa spp.</i>	5	12	10	5	9	4
Thalia						
<i>Thalia spp.</i>	3	2		5	3	
Actinopterygii						
Actinopterygii.unid						
Fish Egg			3	6		4
Fish larvae			1	1		
TOTAL	1453	1365	1229	1635	1498	1573



Sakamon Phatthong

Zooplankton Density (individuals in the

SPECIES/STATION	MAWB- 1B2X	MAWB- 2B2X	MAWB- 3B2X	MAWB- 4B2X	MAWB- 1C2X	MAWB- 3C2
Protozoa						
Granuloreticulosea						
Foraminiferida						
Foraminiferida.unid						
Foraminiferida						
Ctenophora						
Tenlaculata						
Cydippida						
Pleurobrachiidae						
Pleurobrachiidae.unid						
Pleurobrachiidae spp.	4	6	6	4	2	2
Ciliophora						
Ciliatea						
Oligotrichida						
Rhabdonellidae						
Rhabdonella						
<i>Rhabdonella</i> sp.1	2					1
Cnidaria						
Anthozoa						
Anthozoa.unid						
Anthozoa spp.	4	4	4	3	3	2
Hydrozoa						
Anthoathecata						
Corymorphidae						
Euphysa						
<i>Euphysa</i> sp.1	2	2	1	2	1	1
Euphysora						
<i>Euphysora</i> sp.1	1	2			1	
<i>Euphysora</i> sp.2				2		
Corynidae						
Corynidae.unid						
Corynidae sp.1	1	1	2			
Corynidae sp.2						
Proboscoidactylidae						
Proboscoidactylidae.unid						
Proboscoidactylidae spp.	3	5	4	4	3	2
Anthoathecatae						
Bougainvilliidae						
Bougainvilliidae.unid						
Bougainvilliidae sp.1	2	3	2	1	2	1
Bougainvilliidae sp.3	1	2	1	1	2	2
Bougainvilliidae sp.4						



Sakamon Petchong

Zooplankton Density (individuals in the

SPECIES/STATION	MAWB- 1B2X	MAWB- 2B2X	MAWB- 3B2X	MAWB- 4B2X	MAWB- 1C2X	MAWB- 3C2
Tubulariidae						
Tubulariidae.unid						
Tubulariidae sp.1	1	3	1	3	3	2
Tubulariidae sp.3			1	1		
Hydrozoa.unid						
Hydrozoa spp.	2	4	2	2	2	3
Leptothecata						
Eutimidae						
Eutima						
<i>Eutima</i> sp.1	3	3	3	3	1	2
Leptothecatae						
Eirenidae						
Eirene						
<i>Eirene</i> sp.1	1	3	1	2	1	2
Eirenidae.unid						
Eirenidae sp.2						
Lovenellidae						
Lovenellidae.unid						
Lovenellidae spp.	1	2	3	2	2	
Mitrocomidae						
Mitrocomidae.unid						
Mitrocomidae spp.	4	5	5	4	4	2
Siphonophora						
Abylidae						
Abylidae.unid						
Abylidae spp.	7	18	16	8	8	12
Siphonophorae						
Diphyidae						
Diphyidae.unid						
Diphyidae spp.	11	39	20	167	143	8
Trachymedusae						
Geryoniidae						
Liriope						
<i>Liriope</i> sp.1	6	4	4	4	3	2
Rhopalonematidae						
Rhopalonematidae.unid						
Rhopalonematidae spp.	3	5	4	7	3	2
Scyphozoa						
Coronatae						
Nausithoidae						
Nausithoe						
<i>Nausithoe</i> sp.1	2	2	2	2	2	1
<i>Nausithoe</i> sp.3		1	2	1		



Sakamon Petchong

Zooplankton Density (individuals in the

SPECIES/STATION	MAWB- 1B2X	MAWB- 2B2X	MAWB- 3B2X	MAWB- 4B2X	MAWB- 1C2X	MAWB- 3C2
Rhizostomeae						
Rhizostomatidae						
Rhizostomatidae.unid						
Rhizostomatidae spp.	2	1	1	1	1	
Platyhelminthes						
Turbellaria						
Turbellaria.unid						
Turbellaria spp.	1	1	2	2	1	2
Annelida						
Polychaeta.unid						
Polychaete larvae	113	21	13	5	8	8
Mollusca						
Bivalvia						
Bivalvia.unid						
Bivalve larvae	4	10	140	4	3	8
Cephalopoda						
Cephalopoda.unid						
Squid larvae		1	2			
Gastropoda						
Gastropoda.unid						
Gastropoda sp.	6	22	102	9	5	4
Neotaenioglossa						
Atlantidae						
Atlanta						
Atlanta sp.	3	5	8	2	1	2
Thecosomata						
Cavoliniidae						
Cavoliniidae.unid						
Cavoliniidae sp.1	4	6	8	2	5	4
Cavoliniidae sp.2	3	3	3		3	
Creseis						
Creseis acicula	5	8	2			6
Creseis virgula	3	4				
Diacria						
Diacria sp.1	2	2	2			4
Diacria sp.2	2	2				
Arthropoda						
Malacostraca						
Amphipoda						
Amphipoda sp.		2	1			2
Caprellidae						
Caprellidae.unid						
Caprellidae spp.	3	4	1	1	5	3



Sakamon P. Hong

Zooplankton Density (individuals in the

SPECIES/STATION	MAWB- 1B2X	MAWB- 2B2X	MAWB- 3B2X	MAWB- 4B2X	MAWB- 1C2X	MAWB- 3C2
Dexaminidae						
Dexaminidae.unid						
Dexaminidae spp.	1	2	1	1	1	2
Hyperiididae						
Hyperiididae.unid						
Hyperiididae sp.1	3	7	4	3	5	3
Hyperiididae sp.2	7	16	18	4	3	5
Hyperiididae sp.3	4	4	3	3	4	2
Hyperiididae sp.4	6	8	8	3	6	4
Hyperiididae sp.5	4	3	4	2	2	1
Oxycephalidae						
Rhabdosoma						
<i>Rhabdosoma</i> spp.	5	10	6	4	4	3
Tullbergella						
<i>Tullbergella</i> spp.	2	2		1	2	1
Cumacea						2
Cumacea.unid						
Cumacea sp.						2
Decapoda						
Alpheidae						
Alpheidae.unid						
Alpheidae spp.	2	3	2	2	3	1
Callianassidae						
Callianassidae.unid						
Callianassidae spp.	1	2	2		1	1
Crangonidae						
Crangonidae.unid						
Crangonidae spp.	1	2	1	1	1	2
Decapoda.unid						
Decapoda.unid						
Crab zoea	1		3	2		2
Dendrobranchiata.unid						
Dendrobranchiata.unid						
Shrimp larvae sp.C	2	3	1	1	1	2
Shrimp larvae sp.J	2	2	2	1	2	1
Shrimp larvae sp.R	2	2	3	1	2	1
Shrimp larvae sp.S						
Shrimp larvae sp.T	1					
Diogenidae						
Diogenidae.unid						
Diogenidae sp.1	2	2	2	1	2	1
Diogenidae sp.2						
Diogenidae sp.3	2	1		2	2	1



Sakamon P. Hong

Zooplankton Density (individuals in the

SPECIES/STATION	MAWB- 1B2X	MAWB- 2B2X	MAWB- 3B2X	MAWB- 4B2X	MAWB- 1C2X	MAWB- 3C2
Hippidae						
Hippidae.unid						
Hippidae spp.						1
Hippolytidae						
Hippolytidae.unid						
Hippolytidae spp.	2	2	2	2	2	1
Laomediidae						
Laomediidae.unid						
Laomediidae spp.	3	1	4	3	2	2
Luciferidae						
Lucifer						
<i>Lucifer spp.</i>	4	3	3	3	3	8
Paguridae						
Paguridae.unid						
Paguridae spp.	4	4	1	2	4	3
Palaemonidae						
Palaemonidae.unid						
Palaemonidae sp.1	2	1		2		
Palaemonidae sp.3	2	1	1	1	1	
Parapaguridae						
Parapaguridae.unid						
Parapaguridae spp.	2	2	4	3	3	3
Pasiphaeidae						
Leptochela						
<i>Leptochela sp.1</i>	3	5	5	5	2	2
Pleocyemata.unid						
Pleocyemata.unid						
Brachyura Larvae	5	20	32	6	30	11
Porcellanidae						
Porcellanidae.unid						
Porcellanidae spp.	2	2				1
Scyllaridae						
Scyllaridae.unid						
Phyllosoma larvae	2	1	1	1	1	
Sergestidae						
Sergestidae.unid						
Sergestidae spp.	2	4	4	2	2	3
Solenoceridae						
Solenoceridae.unid						
Solenoceridae spp.	3	6	5	6	5	1
Upogebiidae						
Upogebiidae.unid						
Upogebiidae spp.	4	8	12	10	10	6



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Zooplankton Density (individuals in the

SPECIES/STATION	MAWB- 1B2X	MAWB- 2B2X	MAWB- 3B2X	MAWB- 4B2X	MAWB- 1C2X	MAWB- 3C2
Malacostraca.unid						
<i>Mysid sp.</i>						
Mysida						
Mysidae						
Siriella						
<i>Siriella sp.1</i>						
Stomatopoda						
Squillidae						
Squilla						
Alima larvae	1	4	2	3	2	1
Stomatopoda.unid						
Erichthus larvae						1
Maxillopoda						
Calanoida						
Acartiidae						
Acartiidae.unid						
Acartiidae spp.	65	138	54	43	45	90
Calanidae						
Calanidae.unid						
Calanidae spp.	422	542	416	422	468	465
Centropagidae						
Centropagidae.unid						
Centropagidae spp.	38	79	45	45	70	63
Eucalanidae						
Eucalanidae.unid						
Eucalanidae spp.	76	188	172	67	215	174
Euchaetidae						
Euchaetidae.unid						
Euchaetidae spp.	14	13	19	10	32	21
Paracalanidae						
Paracalanidae.unid						
Paracalanidae spp.	27	66	38	37	56	60
Pontellidae						
Pontellidae.unid						
Pontellidae spp.	18	32	25	21	27	44
Temoridae						
Temoridae.unid						
Temoridae spp.	30	44	12	14	14	35
Tortanidae						
Tortanidae.unid						
Tortanidae spp.	21	26	49	22	49	21
Tortanus						
<i>Tortanus spp.</i>	15	10	8	6	15	16



Zooplankton Density (individuals in the

SPECIES/STATION	MAWB- 1B2X	MAWB- 2B2X	MAWB- 3B2X	MAWB- 4B2X	MAWB- 1C2X	MAWB- 3C2
Copepoda.unid						
Copepod Nauplii	311	396	387	316	630	192
Cyclopoida						
Oithonidae						
Oithona						
Oithona spp.	11	15	4	4	18	6
Harpacticoida						
Ectinosomatidae						
Microsetella						
<i>Microsetella</i> spp.	149	133	166	145	159	218
Poecilostomatoida						
Corycaeidae						
Corycaeus						
<i>Corycaeus</i> spp.	8	8	9	8	7	4
Oncaeidae						
Oncaea						
<i>Oncaea</i> spp.	11	11	11	12	4	12
Sapphirinidae						
Copilia						
<i>Copilia</i> spp.	5	4	7	6	3	5
Sappharina						
<i>Sapphirina</i> spp.	6	3	4	8	3	4
Ostracoda						
Halocyprida						
Halocyprididae						
Euconchoecia						
<i>Euconchoecia</i> sp.1	36	56	31	122	24	45
Myodocopida						
Cypridinidae						
Cypridinidae.unid						
Cypridinidae sp.1	31	42	25	55	40	150
Cypridinidae sp.2	17	29	6	32	21	68
Echinodermata						
Echinodermata.unid						
Echinoderm Larvae	210	13	4	6	22	12
Chaetognatha						
Sagittoidea						
Aphragmophora						
Sagittidae						
Sagitta						
<i>Sagitta</i> spp.	155	220	138	250	160	230



Sakamon P. Hong

Zooplankton Density (individuals in the

SPECIES/STATION	MAWB- 1B2X	MAWB- 2B2X	MAWB- 3B2X	MAWB- 4B2X	MAWB- 1C2X	MAWB- 3C2
Chordata	53	60	81	75	184	39
Appendicularia						
Copelata						
Oikopleuridae						
Oikopleura						
<i>Oikopleura spp.</i>	30	22	30	30	24	15
Thaliacea						
Doliolida						
Doliolidae						
Doliioletta						
<i>Doliioletta spp.</i>	5	20	12	22	25	7
Doliolum						
<i>Doliolum spp.</i>	2				3	6
Salpida						
Salpidae						
Salpa						
<i>Salpa spp.</i>	6	11	37	14	105	5
Thalia						
<i>Thalia spp.</i>	1			5	12	5
Actinopterygii						
Actinopterygii.unid						
Fish Egg	4	2		3	10	
Fish larvae	5	5	2	1	5	1
TOTAL	2030	2467	2216	2056	2592	2143



Sakamon Phothong

Zooplankton Density (individuals in the

SPECIES/STATION	MAWC- 1B2X	MAWC- 2B2X	MAWC- 3B2X	MAWC- 4B2X	MAWC- 1C2	MAWC- 3C2
Protozoa						
Granuloreticulosea						
Foraminiferida						
Foraminiferida.unid						
Foraminiferida						
Ctenophora						
Tenlaculata						
Cydippida						
Pleurobrachiidae						
Pleurobrachiidae.unid						
Pleurobrachiidae spp.	4	1				3
Ciliophora						
Ciliatea						
Oligotrichida						
Rhabdonellidae						
Rhabdonella						
<i>Rhabdonella</i> sp.1					1	2
Cnidaria						
Anthozoa						
Anthozoa.unid						
Anthozoa spp.	4	3	1	2	1	3
Hydrozoa						
Anthoathecata						
Corymorphidae						
Euphysa						
<i>Euphysa</i> sp.1	2	1	1	2	2	2
Euphysora						
<i>Euphysora</i> sp.1	1	1			1	2
<i>Euphysora</i> sp.2	1					
Corynidae						
Corynidae.unid						
Corynidae sp.1	2	1	1		1	1
Corynidae sp.2	0					
Proboscoidactylidae						
Proboscoidactylidae.unid						
Proboscoidactylidae spp.	3	3	4	2	3	4
Anthoathecatae						
Bougainvilliidae						
Bougainvilliidae.unid						
Bougainvilliidae sp.1	2	2	2	1	2	2
Bougainvilliidae sp.3	1	1	1	2		2
Bougainvilliidae sp.4	1					1



Sakamon Petchong

Zooplankton Density (individuals in the

SPECIES/STATION	MAWC- 1B2X	MAWC- 2B2X	MAWC- 3B2X	MAWC- 4B2X	MAWC- 1C2	MAWC- 3C2
Tubulariidae						
Tubulariidae.unid						
Tubulariidae sp.1	1	1	3	2	1	2
Tubulariidae sp.3	1	1			1	1
Hydrozoa.unid						
Hydrozoa spp.	2	2	1	3		3
Leptothecata						
Eutimidae						
Eutima						
<i>Eutima</i> sp.1	2	2	3	1	3	2
Leptothecatae						
Eirenidae						
Eirene						
<i>Eirene</i> sp.1	1	1	1	2	1	2
Eirenidae.unid						
Eirenidae sp.2						
Lovenellidae						
Lovenellidae.unid						
Lovenellidae spp.	1	1				1
Mitrocomidae						
Mitrocomidae.unid						
Mitrocomidae spp.	5	4	4	3	4	4
Siphonophora						
Abylidae						
Abylidae.unid						
Abylidae spp.	8	3	5	5	6	8
Siphonophorae						
Diphyidae						
Diphyidae.unid						
Diphyidae spp.	18	16	13	18	12	15
Trachymedusae						
Geryoniidae						
Liriope						
<i>Liriope</i> sp.1	3	3	4	3	3	3
Rhopalonematidae						
Rhopalonematidae.unid						
Rhopalonematidae spp.	4	6	4	4	3	3
Scyphozoa						
Coronatae						
Nausithoidae						
Nausithoe						
<i>Nausithoe</i> sp.1	3	2	2	1	2	2
<i>Nausithoe</i> sp.3	1	1		1		1



Sakamon Petchong

Zooplankton Density (individuals in the

SPECIES/STATION	MAWC- 1B2X	MAWC- 2B2X	MAWC- 3B2X	MAWC- 4B2X	MAWC- 1C2	MAWC- 3C2
Rhizostomeae						
Rhizostomatidae						
Rhizostomatidae.unid						
Rhizostomatidae spp.	3	1	1	1		1
Platyhelminthes						
Turbellaria						
Turbellaria.unid						
Turbellaria spp.	2	3	2		1	2
Annelida						
Polychaeta.unid						
Polychaete larvae	4	6	4	3	7	11
Mollusca						
Bivalvia						
Bivalvia.unid						
Bivalve larvae	6	2	4	3	4	12
Cephalopoda						
Cephalopoda.unid						
Squid larvae			1			2
Gastropoda						
Gastropoda.unid						
Gastropoda sp.	6	3	5	2	5	8
Neotaenioglossa						
Atlantidae						
Atlanta						
<i>Atlanta</i> sp.	2		2			6
Thecosomata						
Cavoliniidae						
Cavoliniidae.unid						
Cavoliniidae sp.1	4	3			2	6
Cavoliniidae sp.2	2					4
Creseis						
<i>Creseis acicula</i>	2	3	6			4
<i>Creseis virgula</i>						2
Diacria						
<i>Diacria</i> sp.1	2		4			3
<i>Diacria</i> sp.2						2
Arthropoda						
Malacostraca						
Amphipoda						
Amphipoda sp.	1			1		2
Caprellidae						
Caprellidae.unid						
Caprellidae spp.	2	1	3	4	1	4



Sakamon P. Hong

Zooplankton Density (individuals in the

SPECIES/STATION	MAWC- 1B2X	MAWC- 2B2X	MAWC- 3B2X	MAWC- 4B2X	MAWC- 1C2	MAWC- 3C2
Dexaminidae						
Dexaminidae.unid						
Dexaminidae spp.	1		2		1	1
Hyperiididae						
Hyperiididae.unid						
Hyperiididae sp.1	4	2	3	4	2	6
Hyperiididae sp.2	8	2	5	8	6	13
Hyperiididae sp.3	4	1	2	3	3	5
Hyperiididae sp.4	8	3	4	3	4	9
Hyperiididae sp.5	2		1	2	5	3
Oxycephalidae						
Rhabdosoma						
<i>Rhabdosoma</i> spp.	7	5	3	3	5	4
Tullbergella						
<i>Tullbergella</i> spp.	1	1	2	2	1	1
Cumacea						
Cumacea.unid						
Cumacea sp.						
Decapoda						
Alpheidae						
Alpheidae.unid						
Alpheidae spp.	2	1	1	1	1	2
Callianassidae						
Callianassidae.unid						
Callianassidae spp.	2			1		
Crangonidae						
Crangonidae.unid						
Crangonidae spp.	2			2	1	3
Decapoda.unid						
Decapoda.unid						
Crab zoea	1		2			1
Dendrobranchiata.unid						
Dendrobranchiata.unid						
Shrimp larvae sp.C	1		2	1	2	3
Shrimp larvae sp.J	2	2	1	1	2	2
Shrimp larvae sp.R	2	3	1	1	2	2
Shrimp larvae sp.S	1					1
Shrimp larvae sp.T						1
Diogenidae						
Diogenidae.unid						
Diogenidae sp.1	2	2	1	1	2	2
Diogenidae sp.2		1				
Diogenidae sp.3	2		1		2	2



Sakamon P. Hong

Zooplankton Density (individuals in the

SPECIES/STATION	MAWC- 1B2X	MAWC- 2B2X	MAWC- 3B2X	MAWC- 4B2X	MAWC- 1C2	MAWC- 3C2
Hippidae						
Hippidae.unid						
Hippidae spp.						
Hippolytidae						
Hippolytidae.unid						
Hippolytidae spp.	2	2	2	2	2	2
Laomediidae						
Laomediidae.unid						
Laomediidae spp.	3		2	1		1
Luciferidae						
Lucifer						
<i>Lucifer spp.</i>	10			3		4
Paguridae						
Paguridae.unid						
Paguridae spp.	2	2	4	4	2	4
Palaemonidae						
Palaemonidae.unid						
Palaemonidae sp.1	1	1				1
Palaemonidae sp.3	1	1			1	1
Parapaguridae						
Parapaguridae.unid						
Parapaguridae spp.	2	2			2	2
Pasiphaeidae						
Leptochela						
<i>Leptochela sp.1</i>	6	6	2	3	3	3
Pleocyemata.unid						
Pleocyemata.unid						
Brachyura Larvae	18	10	6	18	16	20
Porcellanidae						
Porcellanidae.unid						
Porcellanidae spp.		2	1			2
Scyllaridae						
Scyllaridae.unid						
Phyllosoma larvae						1
Sergestidae						
Sergestidae.unid						
Sergestidae spp.	2		3	3	2	2
Solenoceridae						
Solenoceridae.unid						
Solenoceridae spp.	4	5	3	3	4	5
Upogebiidae						
Upogebiidae.unid						
Upogebiidae spp.	8	12	10	6	8	11



Sakamon Phothong

Zooplankton Density (individuals in the

SPECIES/STATION	MAWC- 1B2X	MAWC- 2B2X	MAWC- 3B2X	MAWC- 4B2X	MAWC- 1C2	MAWC- 3C2
Malacostraca.unid						
<i>Mysid sp.</i>						
Mysida						
Mysidae						
Siriella						
<i>Siriella sp.1</i>						
Stomatopoda						
Squillidae						
Squilla						
Alima larvae	2		1	1		2
Stomatopoda.unid						
Erichthus larvae			1			
Maxillopoda						
Calanoida						
Acartiidae						
Acartiidae.unid						
Acartiidae spp.	58	54	62	44	82	133
Calanidae						
Calanidae.unid						
Calanidae spp.	314	288	277	298	266	490
Centropagidae						
Centropagidae.unid						
Centropagidae spp.	100	45	89	61	33	78
Eucalanidae						
Eucalanidae.unid						
Eucalanidae spp.	93	87	53	83	70	166
Euchaetidae						
Euchaetidae.unid						
Euchaetidae spp.	13	10	7	14	13	21
Paracalanidae						
Paracalanidae.unid						
Paracalanidae spp.	48	22	24	29	22	67
Pontellidae						
Pontellidae.unid						
Pontellidae spp.	27	39	31	39	16	44
Temoridae						
Temoridae.unid						
Temoridae spp.	15	46	10	42	18	35
Tortanidae						
Tortanidae.unid						
Tortanidae spp.	33	57	12	31	25	27
Tortanus						
<i>Tortanus spp.</i>	5	14	6	12	13	10



Sakorn Pichong

Zooplankton Density (individuals in the

SPECIES/STATION	MAWC- 1B2X	MAWC- 2B2X	MAWC- 3B2X	MAWC- 4B2X	MAWC- 1C2	MAWC- 3C2
Copepoda.unid						
Copepod Nauplii	292	170	168	177	194	315
Cyclopoida						
Oithonidae						
Oithona						
Oithona spp.	10	5	3	4	6	9
Harpacticoida						
Ectinosomatidae						
Microsetella						
<i>Microsetella</i> spp.	88	114	123	90	91	178
Poecilostomatoida						
Corycaeidae						
Corycaeus						
<i>Corycaeus</i> spp.	6	12	5	6	11	6
Oncaeidae						
Oncaea						
<i>Oncaea</i> spp.	9	7	4	17	7	3
Sapphirinidae						
Copilia						
<i>Copilia</i> spp.	3	4	3	4	6	5
Sappharina						
<i>Sapphirina</i> spp.	3	4	3	3	3	4
Ostracoda						
Halocyprida						
Halocyprididae						
Euconchoecia						
<i>Euconchoecia</i> sp.1	40	139	32	30	35	37
Myodocopida						
Cypridinidae						
Cypridinidae.unid						
Cypridinidae sp.1	25	15	26	19	23	34
Cypridinidae sp.2	16	8	10	6	12	21
Echinodermata						
Echinodermata.unid						
Echinoderm Larvae	5	14	4	3	4	3
Chaetognatha						
Sagittoidea						
Aphragmophora						
Sagittidae						
Sagitta						
<i>Sagitta</i> spp.	218	183	155	106	80	163



Sakamon P. Hong

Zooplankton Density (individuals in the

SPECIES/STATION	MAWC- 1B2X	MAWC- 2B2X	MAWC- 3B2X	MAWC- 4B2X	MAWC- 1C2	MAWC- 3C2
Chordata	70	66	90	66	62	455
Appendicularia						
Copelata						
Oikopleuridae						
Oikopleura						
<i>Oikopleura spp.</i>	24	23	31	20	23	28
Thaliacea						
Doliolida						
Doliolidae						
Doliolletta						
<i>Doliolletta spp.</i>	16	16	22	12	14	210
Doliolum						
<i>Doliolum spp.</i>	6	4	10	6	5	45
Salpida						
Salpidae						
Salpa						
<i>Salpa spp.</i>	20	23	24	20	20	161
Thalia						
<i>Thalia spp.</i>				5		8
Actinopterygii						
Actinopterygii.unid						
Fish Egg	4		3	2		2
Fish larvae				1		1
TOTAL	1711	1547	1345	1327	1238	2564



Sakamon Phatthong

Zooplankton Density (individuals in the

SPECIES/STATION	MAWD- 1B2X	MAWD- 3B2	MAWD- 4B2X	MAWD- 1C2	MAWD- 2C2X	MAWD- 3C2X
Protozoa						
Granuloreticulosea						
Foraminiferida						
Foraminiferida.unid						
Foraminiferida						
Ctenophora						
Tenulaculata						
Cydippida						
Pleurobrachiidae						
Pleurobrachiidae.unid						
Pleurobrachiidae spp.	2		4		2	
Ciliophora						
Ciliata						
Oligotrichida						
Rhabdonellidae						
Rhabdonella						
<i>Rhabdonella</i> sp.1						
Cnidaria						
Anthozoa						
Anthozoa.unid						
Anthozoa spp.	1	1	1	1	1	
Hydrozoa						
Anthoathecata						
Corymorphidae						
Euphysa						
<i>Euphysa</i> sp.1	2	1	1	1	2	
Euphysora						
<i>Euphysora</i> sp.1	1			1	2	
<i>Euphysora</i> sp.2						
Corynidae						
Corynidae.unid						
Corynidae sp.1	1		1		1	
Corynidae sp.2						
Proboscoidactylidae						
Proboscoidactylidae.unid						
Proboscoidactylidae spp.	2	2	4	2	3	2
Anthoathecatae						
Bougainvilliidae						
Bougainvilliidae.unid						
Bougainvilliidae sp.1	2	2	3	2	2	2
Bougainvilliidae sp.3	1	1	2	2	2	2
Bougainvilliidae sp.4						



Sakamon Petchong

Zooplankton Density (individuals in the

SPECIES/STATION	MAWD- 1B2X	MAWD- 3B2	MAWD- 4B2X	MAWD- 1C2	MAWD- 2C2X	MAWD- 3C2X
Tubulariidae						
Tubulariidae.unid						
Tubulariidae sp.1	1	1	1	2	1	2
Tubulariidae sp.3	1	1	1		1	2
Hydrozoa.unid						
Hydrozoa spp.	2	2	3	1	2	2
Leptothecata						
Eutimidae						
Eutima						
<i>Eutima</i> sp.1	2			2	2	
Leptothecatae						
Eirenidae						
Eirene						
<i>Eirene</i> sp.1	2	1	2	2	1	2
Eirenidae.unid						
Eirenidae sp.2						
Lovenellidae						
Lovenellidae.unid						
Lovenellidae spp.		1		1		2
Mitrocomidae						
Mitrocomidae.unid						
Mitrocomidae spp.	2	3	4	4	3	4
Siphonophora						
Abylidae						
Abylidae.unid						
Abylidae spp.	7	5	5	4	7	5
Siphonophorae						
Diphyidae						
Diphyidae.unid						
Diphyidae spp.	17	7	10	18	11	17
Trachymedusae						
Geryoniidae						
Liriope						
<i>Liriope</i> sp.1	3	1	3	3	3	2
Rhopalonematidae						
Rhopalonematidae.unid						
Rhopalonematidae spp.	5	3	6	5	5	3
Scyphozoa						
Coronatae						
Nausithoidae						
Nausithoe						
<i>Nausithoe</i> sp.1	2	1	1	1	2	1
<i>Nausithoe</i> sp.3		1	1		1	1



Zooplankton Density (individuals in the

SPECIES/STATION	MAWD- 1B2X	MAWD- 3B2	MAWD- 4B2X	MAWD- 1C2	MAWD- 2C2X	MAWD- 3C2X
Rhizostomeae						
Rhizostomatidae						
Rhizostomatidae.unid						
Rhizostomatidae spp.						
Platyhelminthes						
Turbellaria						
Turbellaria.unid						
Turbellaria spp.	2	3		2		
Annelida						
Polychaeta.unid						
Polychaete larvae	9	8	4	4	5	6
Mollusca						
Bivalvia						
Bivalvia.unid						
Bivalve larvae	8	5	4	4	12	3
Cephalopoda						
Cephalopoda.unid						
Squid larvae						
Gastropoda						
Gastropoda.unid						
Gastropoda sp.	4	5	3	4	7	4
Neotaenioglossa						
Atlantidae						
Atlanta						
<i>Atlanta</i> sp.	2	4	5	2	2	4
Thecosomata						
Cavoliniidae						
Cavoliniidae.unid						
Cavoliniidae sp.1					2	
Cavoliniidae sp.2						
Creseis						
<i>Creseis acicula</i>					6	
<i>Creseis virgula</i>						
Diacria						
<i>Diacria</i> sp.1			2		3	
<i>Diacria</i> sp.2						
Arthropoda						
Malacostraca						
Amphipoda						
Amphipoda sp.					1	
Caprellidae						
Caprellidae.unid						
Caprellidae spp.	3	2	3	4	4	4



Sakamon Petchong

Zooplankton Density (individuals in the

SPECIES/STATION	MAWD- 1B2X	MAWD- 3B2	MAWD- 4B2X	MAWD- 1C2	MAWD- 2C2X	MAWD- 3C2X
Dexaminidae						
Dexaminidae.unid						
Dexaminidae spp.					1	1
Hyperiididae						
Hyperiididae.unid						
Hyperiididae sp.1		2	2		2	5
Hyperiididae sp.2	5	6	4		6	8
Hyperiididae sp.3		3	2		3	3
Hyperiididae sp.4	4	2	2		3	5
Hyperiididae sp.5						1
Oxycephalidae						
Rhabdosoma						
<i>Rhabdosoma</i> spp.	3	3	5	5	5	5
Tullbergella						
<i>Tullbergella</i> spp.						
Cumacea						
Cumacea.unid						
Cumacea sp.						
Decapoda						
Alpheidae						
Alpheidae.unid						
Alpheidae spp.	1	1			1	1
Callianassidae						
Callianassidae.unid						
Callianassidae spp.						
Crangonidae						
Crangonidae.unid						
Crangonidae spp.					1	
Decapoda.unid						
Decapoda.unid						
Crab zoea						
Dendrobranchiata.unid						
Dendrobranchiata.unid						
Shrimp larvae sp.C	2		2		1	2
Shrimp larvae sp.J	1	2	1	1	1	2
Shrimp larvae sp.R	1	2	3	1	1	3
Shrimp larvae sp.S						
Shrimp larvae sp.T						
Diogenidae						
Diogenidae.unid						
Diogenidae sp.1	1	1		1	1	1
Diogenidae sp.2						
Diogenidae sp.3		1	1		1	1



Sakamon Petchong

Zooplankton Density (individuals in the

SPECIES/STATION	MAWD- 1B2X	MAWD- 3B2	MAWD- 4B2X	MAWD- 1C2	MAWD- 2C2X	MAWD- 3C2X
Hippidae						
Hippidae.unid						
Hippidae spp.						
Hippolytidae						
Hippolytidae.unid						
Hippolytidae spp.		1	1	1	2	2
Laomediidae						
Laomediidae.unid						
Laomediidae spp.		2	4		2	2
Luciferidae						
Lucifer						
<i>Lucifer spp.</i>	3		3			
Paguridae						
Paguridae.unid						
Paguridae spp.	2	1	3	3	3	3
Palaemonidae						
Palaemonidae.unid						
Palaemonidae sp.1						
Palaemonidae sp.3		1	1	1		
Parapaguridae						
Parapaguridae.unid						
Parapaguridae spp.	3	2	2	3	2	2
Pasiphaeidae						
Leptochela						
<i>Leptochela sp.1</i>	3	4	3	2	2	3
Pleocyemata.unid						
Pleocyemata.unid						
Brachyura Larvae	16	6	13	5	8	9
Porcellanidae						
Porcellanidae.unid						
Porcellanidae spp.						
Scyllaridae						
Scyllaridae.unid						
Phyllosoma larvae						
Sergestidae						
Sergestidae.unid						
Sergestidae spp.	2		1	2		2
Solenoceridae						
Solenoceridae.unid						
Solenoceridae spp.	3	2	3	5	3	3
Upogebiidae						
Upogebiidae.unid						
Upogebiidae spp.	3	4	4	10	5	5



Sakamon Phitong

Zooplankton Density (individuals in the

SPECIES/STATION	MAWD- 1B2X	MAWD- 3B2	MAWD- 4B2X	MAWD- 1C2	MAWD- 2C2X	MAWD- 3C2X
Malacostraca.unid						
<i>Mysid sp.</i>						
Mysida						
Mysidae						
Siriella						
<i>Siriella sp.1</i>						
Stomatopoda				1	2	
Squillidae				1	2	
Squilla				1	2	
Alima larvae	2			1	2	
Stomatopoda.unid						
Erichthus larvae						
Maxillopoda						
Calanoida						
Acartiidae						
Acartiidae.unid						
Acartiidae spp.	45	42	42	62	43	50
Calanidae						
Calanidae.unid						
Calanidae spp.	414	400	290	565	390	245
Centropagidae						
Centropagidae.unid						
Centropagidae spp.	38	40	37	55	65	70
Eucalanidae						
Eucalanidae.unid						
Eucalanidae spp.	96	120	74	170	147	81
Euchaetidae						
Euchaetidae.unid						
Euchaetidae spp.						
Paracalanidae						
Paracalanidae.unid						
Paracalanidae spp.	40	56	39	44	31	22
Pontellidae						
Pontellidae.unid						
Pontellidae spp.	23	34	25	60	50	36
Temoridae						
Temoridae.unid						
Temoridae spp.	12	33	12	22	31	27
Tortanidae						
Tortanidae.unid						
Tortanidae spp.	26	28	28	35	22	14
Tortanus						
<i>Tortanus spp.</i>	10	7	6	26	18	5



Sakamon Petchong

Zooplankton Density (individuals in the

SPECIES/STATION	MAWD- 1B2X	MAWD- 3B2	MAWD- 4B2X	MAWD- 1C2	MAWD- 2C2X	MAWD- 3C2X
Copepoda.unid						
Copepod Nauplii	222	286	148	288	225	193
Cyclopoida						
Oithonidae						
Oithona						
Oithona spp.						
Harpacticoida						
Ectinosomatidae						
Microsetella						
<i>Microsetella</i> spp.	59	87	127	244	121	113
Poecilostomatoida						
Corycaeidae						
Corycaeus						
<i>Corycaeus</i> spp.						
Oncaeidae						
Oncaea						
<i>Oncaea</i> spp.						
Sapphirinidae						
Copilia						
<i>Copilia</i> spp.	2	6	3	4	6	7
Sappharina						
<i>Sappharina</i> spp.	3	3	3	5	3	4
Ostracoda						
Halocyprida						
Halocyprididae						
Euconchoecia						
<i>Euconchoecia</i> sp.1	27	31	45	46	19	12
Myodocopida						
Cypridinidae						
Cypridinidae.unid						
Cypridinidae sp.1	141	50	16	36	33	8
Cypridinidae sp.2	46	23	30	22	18	12
Echinodermata						
Echinodermata.unid						
Echinoderm Larvae	22	12	5	3	5	4
Chaetognatha						
Sagittoidea						
Aphragmophora						
Sagittidae						
Sagitta						
<i>Sagitta</i> spp.	80	85	90	115	135	200



Zooplankton Density (individuals in the

SPECIES/STATION	MAWD- 1B2X	MAWD- 3B2	MAWD- 4B2X	MAWD- 1C2	MAWD- 2C2X	MAWD- 3C2X
Chordata	52	37	51	27	79	81
Appendicularia						
Copelata						
Oikopleuridae						
Oikopleura						
<i>Oikopleura spp.</i>	13	11	26	9	23	35
Thaliacea						
Doliolida						
Doliolidae						
Doliioletta						
<i>Doliioletta spp.</i>	17	16	18	10	16	22
Doliolum						
<i>Doliolum spp.</i>	4				11	7
Salpida						
Salpidae						
Salpa						
<i>Salpa spp.</i>	15	8	7	8	24	16
Thalia						
<i>Thalia spp.</i>	2					
Actinopterygii						
Actinopterygii.unid						
Fish Egg		2			2	
Fish larvae	1				3	1
TOTAL	1497	1487	1205	1942	1593	1323



Sakamon Phatthong

Zooplankton density (individual in the bottle)

SPECIES/STATION	MAWG-1B2X	MAWG-3B2X	Control-3
Protozoa			
Granuloreticulosea			
Foraminiferida			
Foraminiferida.unid			
Foraminiferida	3		
Ciliophora			
Ciliatea			
Oligotrichida			
Rhabdonellidae			
Rhabdonella			
<i>Rhabdonella</i> sp.1	1	2	3
Cnidaria			
Anthozoa			
Anthozoa.unid			
Anthozoa spp.	2	4	6
Hydrozoa			
Anthoathecata			
Corymorphidae			
Euphysa			
<i>Euphysa</i> sp.1	2	1	3
Euphysora			
<i>Euphysora</i> sp.1	1	2	
Corynidae			
Corynidae.unid			
Corynidae sp.1	1	2	2
Proboscoidactylidae			
Proboscoidactylidae.unid			
Proboscoidactylidae spp.	3	4	4
Anthoathecatae			
Bougainvilliidae			
Bougainvilliidae.unid			
Bougainvilliidae sp.1	2	3	3
Porpitidae			
Porpitidae.unid			
Porpitidae spp.	1		
Tubulariidae			
Tubulariidae.unid			
Tubulariidae sp.1	1	3	3
Leptothecata			
Eutimidae			
Eutima			
<i>Eutima</i> sp.1	2	3	2
Leptothecatae			
Eirenidae			
Eirene			
<i>Eirene</i> sp.1	2	2	2
<i>Eirene</i> sp.2	1	2	2
Lovenellidae			
Lovenellidae.unid			
Lovenellidae spp.	2	1	3



Johnston P. Hing

Zooplankton density (individual in the bottle)

SPECIES/STATION	MAWG-1B2X	MAWG-3B2X	Control-3
Mitrocomidae			
Mitrocomidae.unid			
Mitrocomidae spp.	3	4	5
Siphonophora			
Abylidae			
Abylidae.unid			
Abylidae spp.	8	6	10
Siphonophorae			
Diphyidae			
Diphyidae.unid			
Diphyidae spp.	15	20	29
Trachymedusae			
Geryoniidae			
Liriope			
<i>Liriope</i> sp.1	3	4	2
Rhopalonematidae			
Rhopalonematidae.unid			
Rhopalonematidae spp.	6	3	4
Scyphozoa			
Coronatae			
Nausithoidae			
Nausithoe			
<i>Nausithoe</i> sp.1	2	1	4
Ctenophora			
Tenlaculata			
Cydippida			
Pleurobrachiidae			
Pleurobrachiidae.unid			
Pleurobrachiidae spp.	4	5	5
Platyhelminthes			
Turbellaria			
Turbellaria.unid			
<i>Turbellaria</i> spp.	1		1
Annelida			
Polychaeta.unid			
Polychaete larvae	13	17	12
Arthropoda			
Malacostraca			
Amphipoda			
Caprellidae			
Caprellidae.unid			
Caprellidae spp.	3	2	2
Dexaminidae			
Dexaminidae.unid			
Dexaminidae spp.	2	1	1
Hyperiididae			
Hyperiididae.unid			
Hyperiididae sp.1	6	5	3
Hyperiididae sp.2	11	5	6
Hyperiididae sp.3	5	3	4
Hyperiididae sp.4	8	8	2
Hyperiididae sp.5	2	3	



Johnston P. Hing

Zooplankton density (individual in the bottle)

SPECIES/STATION	MAWG-1B2X	MAWG-3B2X	Control-3
Oxycephalidae			
Rhabdosoma			
<i>Rhabdosoma</i> spp.	3	2	5
Tullbergella			
<i>Tullbergella</i> spp.	1	1	1
Decapoda			
Alpheidae			
Alpheidae.unid			
Alpheidae spp.	1		
Callianassidae			
Callianassidae.unid			
Callianassidae spp.	1		
Crangonidae			
Crangonidae.unid			
Crangonidae spp.	2	1	2
Decapoda.unid			
Decapoda.unid			
Crab larvae	2		
Crab zoea	1	2	3
Dendrobranchiata.unid			
Dendrobranchiata.unid			
Shrimp larvae sp.C	2	3	3
Shrimp larvae sp.J	2	2	1
Shrimp larvae sp.R	1		
Shrimp larvae sp.S	2		
Diogenidae			
Diogenidae.unid			
Diogenidae sp.1	1	2	2
Diogenidae sp.3	1		2
Hippolytidae			
Hippolytidae.unid			
Hippolytidae spp.	3	1	1
Laomediidae			
Laomediidae.unid			
Laomediidae spp.	2	2	3
Luciferidae			
Lucifer			
<i>Lucifer</i> spp.	4	10	6
Paguridae			
Paguridae.unid			
Paguridae spp.	3	4	4
Palaemonidae			
Palaemonidae.unid			
Palaemonidae sp.1	2	1	3
Palaemonidae sp.3	1	2	2
Parapaguridae			
Parapaguridae.unid			
Parapaguridae spp.	4	3	5
Pasiphaeidae			
Leptochela			
<i>Leptochela</i> sp.1	4	6	3



Zooplankton density (individual in the bottle)

SPECIES/STATION	MAWG-1B2X	MAWG-3B2X	Control-3
Pleocyemata.unid			
Pleocyemata.unid			
Brachyura Larvae	6	11	9
Porcellanidae			
Porcellanidae.unid			
Porcellanidae spp.	1		2
Scyllaridae			
Scyllaridae.unid			
Phyllosoma larvae	1		
Sergestidae			
Sergestidae.unid			
Sergestidae spp.	3	2	2
Solenoceridae			
Solenoceridae.unid			
Solenoceridae spp.	4	3	3
Upogebiidae			
Upogebiidae.unid			
Upogebiidae spp.	6	5	7
Mysida			
Mysidae			
Mysidae.unid			
Mysidae sp.	2	1	
Mysidacea			
Mysidacea.unid			
Mysidacea.unid			
Mysidacea	1		
Stomatopoda			
Squillidae			
Squilla			
Alima larvae	1	3	1
Stomatopoda.unid			
Erichthus larvae	1		
Maxillopoda			
Calanoida			
Acartiidae			
Acartiidae.unid			
Acartiidae spp.	55	61	80
Calanidae			
Calanidae.unid			
Calanidae spp.	611	455	456
Centropagidae			
Centropagidae.unid			
Centropagidae spp.	66	44	43
Eucalanidae			
Eucalanidae.unid			
Eucalanidae spp.	200	128	210
Euchaetidae			
Euchaetidae.unid			
Euchaetidae spp.	21	31	25
Paracalanidae			
Paracalanidae.unid			
Paracalanidae spp.	57	45	71



Johnnie P. Hing

Zooplankton density (individual in the bottle)

SPECIES/STATION	MAWG-1B2X	MAWG-3B2X	Control-3
Pontellidae			
Pontellidae.unid			
Pontellidae spp.	70	34	48
Temoridae			
Temoridae.unid			
Temoridae spp.	32	67	29
Tortanidae			
Tortanidae.unid			
Tortanidae spp.	53	48	67
Tortanus			
<i>Tortanus</i> spp.	40	22	24
Copepoda.unid			
Copepoda.unid			
Copepoda.unid			
Copepod Nauplii	321	316	293
Harpacticoida			
Ectinosomatidae			
Microsetella			
<i>Microsetella</i> spp.	289	119	161
Poecilostomatoida			
Corycaeidae			
Corycaeus			
<i>Corycaeus</i> spp.	22	14	36
Sapphirinidae			
Copilia			
<i>Copilia</i> spp.	5	8	4
Sappharina			
<i>Sappharina</i> spp.	3	4	5
Ostracoda			
Halocyprida			
Halocyprididae			
Euconchoecia			
<i>Euconchoecia</i> sp.1	71	60	45
Myodocopida			
Cypridinidae			
Cypridinidae.unid			
Cypridinidae sp.1	48	31	54
Cypridinidae sp.2	59	26	33
Echinodermata			
Echinodermata.unid			
Echinoderm Larvae	4	11	8



Johnston P. Hing

Zooplankton density (individual in the bottle)

SPECIES/STATION	MAWG-1B2X	MAWG-3B2X	Control-3
Mollusca			
Bivalvia			
Bivalvia.unid			
Bivalve larvae	12	7	4
Cephalopoda			
Cephalopoda.unid			
Squid larvae	1		
Gastropoda			
Gastropoda.unid			
Gastropoda sp.	3	4	3
Neotaenioglossa			
Atlantidae			
Atlanta			
<i>Atlanta</i> sp.	3	2	2
Pterotracheidae			
Pterotracheidae.unid			
Pterotracheidae sp.1	1	5	2
Thecosomata			
Cavoliniidae			
Cavoliniidae.unid			
Cavoliniidae sp.1	3	4	4
Creseis			
<i>Creseis acicula</i>	4	4	3
<i>Creseis virgula</i>	2		
Diacria			
<i>Diacria</i> sp.1	2	5	4
<i>Diacria</i> sp.2	1	1	
Chaetognatha			
Sagittoidea			
Aphragmophora			
Sagittidae			
Sagitta			
<i>Sagitta</i> spp.	314	453	228



Johnston P. Hing

Zooplankton density (individual in the bottle)

SPECIES/STATION	MAWG-1B2X	MAWG-3B2X	Control-3
Chordata			
Actinopterygii			
Actinopterygii.unid			
Fish Egg	10	1	3
Fish larvae	2	5	1
Appendicularia			
Copelata			
Oikopleuridae			
Oikopleura			
<i>Oikopleura</i> spp.	26	38	34
Thaliacea			
Doliolida			
Doliolidae			
Dolioletta			
<i>Dolioletta</i> spp.	31	24	22
Salpida			
Salpidae			
Salpa			
<i>Salpa</i> spp.	17	39	16
Thalia			
<i>Thalia</i> spp.	8	12	11
TOTAL	2652	2311	2222



Johnston P. Hing

APPENDIX F
ANALYTICAL LABORATORY REPORTS:
FISH TISSUE RESULTS



ANALYTICAL REPORT

PREPARED FOR

Attn: Ted Donn
Tetra Tech, Inc.
3697 Mt. Diablo Blvd.
Suite 150
Lafayette, California 94549

Generated 8/28/2023 4:31:54 PM

JOB DESCRIPTION

Gulf of Thailand 2023 - Project T41423.19

JOB NUMBER

580-130145-3

Eurofins Seattle

Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



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Authorized for release by
Lilly-Anna LaCount, Project Manager
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Case Narrative

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.19

Job ID: 580-130145-3

Job ID: 580-130145-3

Laboratory: Eurofins Seattle

Narrative

Job Narrative
580-130145-3

Comments

No additional comments.

Receipt

The samples were received on 8/2/2023 9:20 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was -20.0° C.

Metals

Method 1632A: The following samples were diluted due to the nature of the sample matrix: MAWG-1143 (580-130145-123), MAWG-1161 (580-130145-128), (580-130145-A-76-C), (580-130145-A-76-D MS), (580-130145-A-76-E MSD), (580-130145-A-128-H MS) and (580-130145-A-128-I MSD). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Tetra Tech, Inc.

Job ID: 580-130145-3

Project/Site: Gulf of Thailand 2023 - Project T41423.19

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-3

Project/Site: Gulf of Thailand 2023 - Project T41423.19

Client Sample ID: MAWG-1141

Lab Sample ID: 580-130145-119

Date Collected: 07/01/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	120		6.8	3.2	ng/g		08/14/23 10:35	08/24/23 17:34	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.19

Job ID: 580-130145-3

Client Sample ID: MAWG-1141-DUP

Lab Sample ID: 580-130145-120

Date Collected: 07/01/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	91		7.3	3.4	ng/g		08/14/23 10:35	08/24/23 13:00	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-3

Project/Site: Gulf of Thailand 2023 - Project T41423.19

Client Sample ID: MAWG-1142

Lab Sample ID: 580-130145-121

Date Collected: 07/01/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	16		0.91	0.43	ng/g		08/14/23 10:35	08/25/23 18:57	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.19

Job ID: 580-130145-3

Client Sample ID: MAWG-1142-DUP

Lab Sample ID: 580-130145-122

Date Collected: 07/01/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	16		0.91	0.43	ng/g		08/14/23 10:35	08/25/23 19:02	20

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-3

Project/Site: Gulf of Thailand 2023 - Project T41423.19

Client Sample ID: MAWG-1143

Lab Sample ID: 580-130145-123

Date Collected: 07/01/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.048	0.034	mg/Kg		08/16/23 16:48	08/17/23 14:29	50

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	13		0.93	0.44	ng/g		08/14/23 10:35	08/25/23 19:06	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.19

Job ID: 580-130145-3

Client Sample ID: MAWG-1144

Lab Sample ID: 580-130145-124

Date Collected: 07/01/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	25		0.91	0.43	ng/g		08/14/23 10:35	08/25/23 19:10	20

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-3

Project/Site: Gulf of Thailand 2023 - Project T41423.19

Client Sample ID: MAWG-1145

Lab Sample ID: 580-130145-125

Date Collected: 07/01/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	73		7.1	3.4	ng/g		08/14/23 10:35	08/24/23 17:55	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-3

Project/Site: Gulf of Thailand 2023 - Project T41423.19

Client Sample ID: MAWG-1145-DUP

Lab Sample ID: 580-130145-126

Date Collected: 07/01/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	79		7.2	3.4	ng/g		08/14/23 10:35	08/24/23 17:59	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-3

Project/Site: Gulf of Thailand 2023 - Project T41423.19

Client Sample ID: MAWG-1149

Lab Sample ID: 580-130145-127

Date Collected: 07/01/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	28		0.99	0.46	ng/g		08/14/23 10:35	08/25/23 19:22	20

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-3

Project/Site: Gulf of Thailand 2023 - Project T41423.19

Client Sample ID: MAWG-1161

Lab Sample ID: 580-130145-128

Date Collected: 07/01/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.050	0.035	mg/Kg		08/16/23 16:48	08/17/23 12:02	50

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	120		6.9	3.2	ng/g		08/14/23 10:35	08/24/23 18:08	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-3

Project/Site: Gulf of Thailand 2023 - Project T41423.19

Client Sample ID: MAWG-1181

Lab Sample ID: 580-130145-129

Date Collected: 07/01/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	81		6.8	3.2	ng/g		08/14/23 10:35	08/24/23 18:20	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-3

Project/Site: Gulf of Thailand 2023 - Project T41423.19

Client Sample ID: MAWG-1182

Lab Sample ID: 580-130145-130

Date Collected: 07/01/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	55		7.2	3.4	ng/g		08/14/23 10:35	08/24/23 18:24	150

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.19

Job ID: 580-130145-3

Method: 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Lab Sample ID: 580-130145-128 MS

Matrix: Tissue

Analysis Batch: 434948

Client Sample ID: MAWG-1161

Prep Type: Total/NA

Prep Batch: 434825

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Inorganic Arsenic	ND		0.199	0.133		mg/Kg		67	50 - 150

Lab Sample ID: 580-130145-128 MSD

Matrix: Tissue

Analysis Batch: 434948

Client Sample ID: MAWG-1161

Prep Type: Total/NA

Prep Batch: 434825

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Inorganic Arsenic	ND		0.196	0.128		mg/Kg		65	50 - 150	3	35

Method: 1631B - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 580-434439/1-A

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434439

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/14/23 10:35	08/24/23 11:21	20

Lab Sample ID: MB 580-434439/2-A

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434439

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/14/23 10:35	08/24/23 11:25	20

Lab Sample ID: MB 580-434439/3-A

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434439

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/14/23 10:35	08/24/23 11:29	20

Lab Sample ID: LCS 580-434439/4-A

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 434439

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	396	426		ng/g		108	75 - 125

Lab Sample ID: LCSD 580-434439/5-A

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 434439

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	396	418		ng/g		105	75 - 125	2	24

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QC Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-3

Project/Site: Gulf of Thailand 2023 - Project T41423.19

Method: 1631B - Mercury, Low Level (CVAFS) (Continued)

Lab Sample ID: 580-130145-120 MS

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: MAWG-1141-DUP

Prep Type: Total/NA

Prep Batch: 434439

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	91		377	503		ng/g		109	71 - 125

Lab Sample ID: 580-130145-120 MSD

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: MAWG-1141-DUP

Prep Type: Total/NA

Prep Batch: 434439

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	91		366	495		ng/g		110	71 - 125	2	24

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.19

Job ID: 580-130145-3

Client Sample ID: MAWG-1141

Lab Sample ID: 580-130145-119

Date Collected: 07/01/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434439	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 17:34

Client Sample ID: MAWG-1141-DUP

Lab Sample ID: 580-130145-120

Date Collected: 07/01/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434439	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 13:00

Client Sample ID: MAWG-1142

Lab Sample ID: 580-130145-121

Date Collected: 07/01/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434439	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435967	COW	EET SEA	08/25/23 18:57

Client Sample ID: MAWG-1142-DUP

Lab Sample ID: 580-130145-122

Date Collected: 07/01/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434439	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435967	COW	EET SEA	08/25/23 19:02

Client Sample ID: MAWG-1143

Lab Sample ID: 580-130145-123

Date Collected: 07/01/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			434839	D1C	EET SEA	08/03/23 15:57
Total/NA	Prep	1632			434825	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 14:29
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434439	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435967	COW	EET SEA	08/25/23 19:06

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.19

Job ID: 580-130145-3

Client Sample ID: MAWG-1144

Lab Sample ID: 580-130145-124

Date Collected: 07/01/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434439	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435967	COW	EET SEA	08/25/23 19:10

Client Sample ID: MAWG-1145

Lab Sample ID: 580-130145-125

Date Collected: 07/01/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434439	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 17:55

Client Sample ID: MAWG-1145-DUP

Lab Sample ID: 580-130145-126

Date Collected: 07/01/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434439	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 17:59

Client Sample ID: MAWG-1149

Lab Sample ID: 580-130145-127

Date Collected: 07/01/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434439	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435967	COW	EET SEA	08/25/23 19:22

Client Sample ID: MAWG-1161

Lab Sample ID: 580-130145-128

Date Collected: 07/01/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			434839	D1C	EET SEA	08/03/23 15:57
Total/NA	Prep	1632			434825	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 12:02
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434439	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 18:08

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.19

Job ID: 580-130145-3

Client Sample ID: MAWG-1181

Date Collected: 07/01/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-129

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434439	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 18:20

Client Sample ID: MAWG-1182

Date Collected: 07/01/23 23:59

Date Received: 08/02/23 09:20

Lab Sample ID: 580-130145-130

Matrix: Tissue

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	70:30 Acid Prep			434439	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 18:24

Laboratory References:

EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.19

Job ID: 580-130145-3

Laboratory: Eurofins Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	70:30 Acid Prep	Tissue	Mercury
1632A	1632	Tissue	Inorganic Arsenic
ANAB	Dept. of Defense ELAP	L2236	01-19-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1632A	1632	Tissue	Inorganic Arsenic
ANAB	Dept. of Energy	L2236	01-19-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1632A	1632	Tissue	Inorganic Arsenic
ANAB	ISO/IEC 17025	L2236	01-19-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1632A	1632	Tissue	Inorganic Arsenic
California	State	2954	07-07-23 *
Florida	NELAP	E87575	06-30-23 *
Louisiana (All)	NELAP	03073	07-01-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1632A	1632	Tissue	Inorganic Arsenic
Maine	State	WA01273	05-02-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	70:30 Acid Prep	Tissue	Mercury
1632A	1632	Tissue	Inorganic Arsenic
Montana (UST)	State	NA	04-14-27
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	70:30 Acid Prep	Tissue	Mercury
1632A	1632	Tissue	Inorganic Arsenic
New Jersey	NELAP	WA014	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	70:30 Acid Prep	Tissue	Mercury
1632A	1632	Tissue	Inorganic Arsenic

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Seattle

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project T41423.19

Job ID: 580-130145-3

Laboratory: Eurofins Seattle (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11662	03-31-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1631B	70:30 Acid Prep	Tissue	Mercury
1632A	1632	Tissue	Inorganic Arsenic

Oregon	NELAP	4167	07-07-24
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1632A	1632	Tissue	Inorganic Arsenic

US Fish & Wildlife	US Federal Programs	A20571	06-30-23 *
USDA	US Federal Programs	525-23-4-22573	01-04-26

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1631B	70:30 Acid Prep	Tissue	Mercury
1632A	1632	Tissue	Inorganic Arsenic

Washington	State	C788	07-13-23 *
Wisconsin	State	399133460	08-31-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1632A	1632	Tissue	Inorganic Arsenic

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Tetra Tech, Inc.

Job ID: 580-130145-3

Project/Site: Gulf of Thailand 2023 - Project T41423.19

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-130145-119	MAWG-1141	Tissue	07/01/23 23:59	08/02/23 09:20
580-130145-120	MAWG-1141-DUP	Tissue	07/01/23 23:59	08/02/23 09:20
580-130145-121	MAWG-1142	Tissue	07/01/23 23:59	08/02/23 09:20
580-130145-122	MAWG-1142-DUP	Tissue	07/01/23 23:59	08/02/23 09:20
580-130145-123	MAWG-1143	Tissue	07/01/23 23:59	08/02/23 09:20
580-130145-124	MAWG-1144	Tissue	07/01/23 23:59	08/02/23 09:20
580-130145-125	MAWG-1145	Tissue	07/01/23 23:59	08/02/23 09:20
580-130145-126	MAWG-1145-DUP	Tissue	07/01/23 23:59	08/02/23 09:20
580-130145-127	MAWG-1149	Tissue	07/01/23 23:59	08/02/23 09:20
580-130145-128	MAWG-1161	Tissue	07/01/23 23:59	08/02/23 09:20
580-130145-129	MAWG-1181	Tissue	07/01/23 23:59	08/02/23 09:20
580-130145-130	MAWG-1182	Tissue	07/01/23 23:59	08/02/23 09:20

Ship to:
Lilly-Anna LaCount
Eurofins - Frontier Global Sci.
5755 8th St. E
Fife, WA 98424
USA

CHAIN OF CUSTODY

Report to:
Dr. Ted Donn
Tetra Tech
3697 Mt. Diablo Blvd.
Lafayette, CA
ted.donn@tetratech.com



580-130145 Chain of Custody

General Notes:

Please report results separately for each Project ID
Please report all results to the MDL. J-flag results between MDL and RL
Please report results in PDF format with Excel EDD deliverable
Quote: see proposal of 19 July 2020 for agreed rates
Please INVOICE separately for each Project ID

Project ID	SampleID	Date	Time	Medium	Preservation	Hg (EPA 1631E)	Total Arsenic - (EPA 1640)	Total Inorganic Arsenic (EPA 1632)	Hg (Tissue, EPA 1631B)	Total Arsenic (EPA 1638M)	Total Inorganic Arsenic (EPA 1632)	Barium (EPA 1638M)
T423.22	PACPP-TB	5/11/2023	14:26	SW	FROZEN	1	1	1				
T423.22	PACPP-WB	5/21/2023	8:30	SW	FROZEN	1	1	1				
T423.22	PACPP-EQ-PRE	5/21/2023	8:35	SW	FROZEN	1	1	1				
T423.22	PACPP-SW-1	5/21/2023	11:57	SW	FROZEN	1	1	1				
T423.22	PACPP-SW-10	5/21/2023	11:51	SW	FROZEN	1	1	1				
T423.22	PACPP-SW-20	5/21/2023	11:38	SW	FROZEN	1	1	1				
T423.22	PACPP-SW-20-DUP	5/21/2023	11:45	SW	FROZEN	1	1	1				
T423.22	PACPP-SW-40	5/21/2023	11:30	SW	FROZEN	1	1	1				
T423.22	PACPP-SW-B	5/21/2023	11:20	SW	FROZEN	1	1	1				
T423.22	PACPP-FB	5/21/2023	12:04	SW	FROZEN	1	1	1				
T423.22	PACPP-EQ-POST	5/21/2023	12:10	SW	FROZEN	1	1	1				
MKT2023	SKLMKT-001	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-001-DUP	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-002	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-003	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-003-DUP	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-004	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-005	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-006	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-007	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-008	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-008-DUP	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-009	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-010	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-011	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-012	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-013	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-014	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-014-DUP	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-015	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-016	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-017	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-018	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-019	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-020	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-021	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-022	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-023	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-024	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-025	5/11/2023		Tiss-Fish	FROZEN				1			

Relinquished by: *SKL*

1 AUG 2023

Received by:

Relinquished by:

Received by:

SKL 8/3/23 5:26

Therm. ID: Dig. 3 Cust. Seal: Y/N 1 of 5
Incor. Corr. Temp. 19.9/-10.0

Ship to:
Lilly-Anna LaCount
Eurofins - Frontier Global Sci.
5755 8th St. E
Fife, WA 98424
USA

CHAIN OF CUSTODY

Report to:
Dr. Ted Donn
Tetra Tech
3697 Mt. Diablo Blvd.
Lafayette, CA
ted.donn@tetratech.com

Project ID	SampleID	Date	Time	Medium	Preservation	Hg (EPA 1631E)	Total Arsenic - (EPA 1640)	Total Inorganic Arsenic (EPA 1632)	Hg (Tissue, EPA 1631B)	Total Arsenic (EPA 1638M)	Total Inorganic Arsenic (EPA 1632)	Barium (EPA 1638M)
MKT2023	SKLMKT-026	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-027	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-028	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-029	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-030	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-031	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-032	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-033	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-034	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-035	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-036	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-037	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-038	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-039	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-040	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-041	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-042	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-043	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-044	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-045	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-046	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-047	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-048	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-048-DUP	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-049	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-050	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-051	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-052	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-053	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-054	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-055	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-056	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-057	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-058	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-059	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-060	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-061	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-062	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-063	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-064	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-065	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-066	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-067	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-068	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-069	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-070	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-071	5/11/2023		Tiss-Fish	FROZEN				1			

Relinquished by:

1 AUG 2023

Relinquished by:

Received by:

5/13/23 9:20

Received by:


Ship to:
Lilly Anna LaCount
Eurofins - Frontier Global Sci.
5755 8th St. E
Fife, WA 98424
USA

CHAIN OF CUSTODY

Report to:
Dr. Ted Donn
Tetra Tech
3697 Mt. Diablo Blvd.
Lafayette, CA
ted.donn@tetratech.com

Project ID	SampleID	Date	Time	Medium	Preservation	Hg (EPA 1631E)	Total Arsenic - (EPA 1640)	Total Inorganic Arsenic (EPA 1632)	Hg (Tissue, EPA 1631B)	Total Arsenic (EPA 1638M)	Total Inorganic Arsenic (EPA 1632)	Barium (EPA 1638M)
MKT2023	SKLMKT-072	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-073	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-074	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-075	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-076	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-077	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-078	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-079	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-080	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-081	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-081-DUP	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-082	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-083	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-084	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-085	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-086	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-087	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-088	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-089	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-090	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-091	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-092	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-093	5/11/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1001	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1001-DUP	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1002	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1002-DUP	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1003	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1003-DUP	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1005	5/17/2023		Tiss-Fish	FROZEN				1		1	
T41423.17	YUWA-1022	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1023	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1027	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1028	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1041	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1042	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1043	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1044	5/17/2023		Tiss-Fish	FROZEN				1		1	
T41423.17	YUWA-1046	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1047	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1048	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1049	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1141	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1141-DUP	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1142	7/1/2023		Tiss-Fish	FROZEN				1			

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Fife, WA 98424
USA

CHAIN OF CUSTODY

Report to:
Dr. Ted Donn
Tetra Tech
3697 Mt. Diablo Blvd.
Lafayette, CA
ted.donn@tetratech.com

Project ID	SampleID	Date	Time	Medium	Preservation	Hg (EPA 1631E)	Total Arsenic - (EPA 1640)	Total Inorganic Arsenic (EPA 1632)	Hg (Tissue, EPA 1631B)	Total Arsenic (EPA 1638M)	Total Inorganic Arsenic (EPA 1632)	Barium (EPA 1638M)
T41423.19	MAWG-1142-DUP	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1143	7/1/2023		Tiss-Fish	FROZEN				1		1	
T41423.19	MAWG-1144	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1145	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1145-DUP	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1149	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1161	7/1/2023		Tiss-Fish	FROZEN				1		1	
T41423.19	MAWG-1181	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1182	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1121	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1121-DUP	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1122	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1123	7/3/2023		Tiss-Fish	FROZEN				1		1	1
T41423.20	LAWA-1124	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1124-DUP	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1125	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1126	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1127	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1129	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1130	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1132	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1132-DUP	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1201	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1202	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1203	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1204	7/3/2023		Tiss-Fish	FROZEN				1		1	1
T41423.20	LAWA-1205	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1206	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1207	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1208	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1209	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1210	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1211	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1212	7/3/2023		Tiss-Fish	FROZEN				1		1	1
T41423.20	LAWA-1214	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1214-DUP	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1215	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1216	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1217	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1218	7/3/2023		Tiss-Fish	FROZEN				1		1	1
T41423.20	LAWA-1219	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1219-DUP	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1220	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1221	7/3/2023		Tiss-Fish	FROZEN				1			

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Fife, WA 98424
USA

CHAIN OF CUSTODY

Report to:
Dr. Ted Donn
Tetra Tech
3697 Mt. Diablo Blvd.
Lafayette, CA
ted.donn@tetratech.com

Project ID	SampleID	Date	Time	Medium	Preservation	Hg (EPA 1631E)	Total Arsenic - (EPA 1640)	Total Inorganic Arsenic (EPA 1632)	Hg (Tissue, EPA 1631B)	Total Arsenic (EPA 1638M)	Total Inorganic Arsenic (EPA 1632)	Barium (EPA 1638M)
T41423.22	PACPP-1081	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1081-DUP	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1082	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1083	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1084	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1085	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1086	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1087	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1087-DUP	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1088	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1089	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1090	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1091	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1092	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1092-DUP	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1093	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1094	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1095	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1096	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1097	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1098	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1099	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1100	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1101	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1101-DUP	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1102	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1103	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1104	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1105	5/22/2023		Tiss-Fish	FROZEN				1	1	1	

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Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 580-130145-3

Login Number: 130145

List Number: 1

Creator: Groden, Kyle J

List Source: Eurofins Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

PREPARED FOR

Attn: Ted Donn
Tetra Tech, Inc.
3697 Mt. Diablo Blvd.
Suite 150
Lafayette, California 94549

Generated 8/29/2023 7:38:31 AM

JOB DESCRIPTION

Gulf of Thailand 2023 - Project MKT2023

JOB NUMBER

580-130145-1

Eurofins Seattle

Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



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Authorized for release by
Lilly-Anna LaCount, Project Manager
Lilly-Anna.Lacount@et.eurofinsus.com
(253)922-2310

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Case Narrative

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Job ID: 580-130145-1

Laboratory: Eurofins Seattle

Narrative

Job Narrative 580-130145-1

Comments

No additional comments.

Receipt

The samples were received on 8/2/2023 9:20 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was -20.0° C.

Metals

Method 1632A: The following samples were diluted due to the nature of the sample matrix: SKLMKT-004 (580-130145-6), SKLMKT-013 (580-130145-16), SKLMKT-022 (580-130145-26), SKLMKT-032 (580-130145-36), SKLMKT-042 (580-130145-46), SKLMKT-051 (580-130145-56), SKLMKT-061 (580-130145-66), SKLMKT-071 (580-130145-76), SKLMKT-080 (580-130145-85), SKLMKT-091 (580-130145-97), PACPP-1101 (580-130145-190), (580-130145-A-76-D MS), (580-130145-A-76-E MSD), (580-130145-A-128-G), (580-130145-A-128-H MS), (580-130145-A-128-I MSD), (580-130145-A-194-C), (580-130145-A-194-D MS) and (580-130145-A-194-E MSD). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-001

Lab Sample ID: 580-130145-1

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1100		14	6.6	ng/g		08/11/23 12:12	08/22/23 15:40	300

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-001-DUP

Lab Sample ID: 580-130145-2

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1300		15	7.0	ng/g		08/11/23 12:12	08/22/23 15:45	300

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-002

Lab Sample ID: 580-130145-3

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1700		22	11	ng/g		08/11/23 12:12	08/22/23 15:57	500

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-003

Lab Sample ID: 580-130145-4

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	470		18	8.6	ng/g		08/11/23 12:12	08/22/23 16:01	400

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-003-DUP

Lab Sample ID: 580-130145-5

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	450		19	9.0	ng/g		08/11/23 12:12	08/22/23 16:05	400

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-004

Lab Sample ID: 580-130145-6

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.050	0.035	mg/Kg		08/16/23 16:48	08/17/23 12:33	50

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	200		15	2.5	ng/g		08/14/23 14:21	08/21/23 18:34	50

Method: EPA 1638 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.022	J B	0.039	0.0039	mg/Kg		08/14/23 14:21	08/16/23 17:22	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-005

Lab Sample ID: 580-130145-7

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	410		18	8.5	ng/g		08/11/23 12:12	08/22/23 16:09	400

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-006

Lab Sample ID: 580-130145-8

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	130		10	4.7	ng/g		08/11/23 12:12	08/22/23 12:39	200

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-007

Lab Sample ID: 580-130145-9

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	270		20	9.3	ng/g		08/11/23 12:12	08/22/23 16:14	400

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-008

Lab Sample ID: 580-130145-10

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	120		14	6.6	ng/g		08/11/23 12:12	08/22/23 19:29	300

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-008-DUP

Lab Sample ID: 580-130145-11

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	120		15	6.9	ng/g		08/11/23 12:12	08/22/23 19:33	300

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-009

Lab Sample ID: 580-130145-12

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	110		14	6.4	ng/g		08/11/23 12:12	08/22/23 19:37	300

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-010

Lab Sample ID: 580-130145-13

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	210		20	9.2	ng/g		08/11/23 12:12	08/22/23 16:30	400

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-011

Lab Sample ID: 580-130145-14

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	190		19	8.8	ng/g		08/11/23 12:12	08/22/23 16:34	400

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-012

Lab Sample ID: 580-130145-15

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	230		20	9.3	ng/g		08/11/23 12:12	08/22/23 16:47	400

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-013

Lab Sample ID: 580-130145-16

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.049	0.034	mg/Kg		08/16/23 16:48	08/17/23 12:40	50

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	160		14	2.4	ng/g		08/14/23 14:21	08/21/23 18:39	50

Method: EPA 1638 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.029	J B	0.039	0.0039	mg/Kg		08/14/23 14:21	08/16/23 17:26	1

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-014

Lab Sample ID: 580-130145-17

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	130		9.0	4.2	ng/g		08/11/23 12:12	08/22/23 12:35	200

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-014-DUP

Lab Sample ID: 580-130145-18

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	130		15	6.8	ng/g		08/11/23 12:12	08/22/23 19:41	300

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-015

Lab Sample ID: 580-130145-19

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	78		7.3	3.4	ng/g		08/11/23 12:12	08/22/23 19:45	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-016

Lab Sample ID: 580-130145-20

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	87		7.0	3.3	ng/g		08/11/23 12:12	08/22/23 19:49	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-017

Lab Sample ID: 580-130145-21

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	440		19	8.8	ng/g		08/11/23 12:12	08/22/23 17:03	400

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-018

Lab Sample ID: 580-130145-22

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	63		1.0	0.47	ng/g		08/11/23 12:12	08/22/23 19:53	20

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-019

Lab Sample ID: 580-130145-23

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	150		15	6.9	ng/g		08/11/23 12:12	08/23/23 12:51	300

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-020

Lab Sample ID: 580-130145-24

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	140		14	6.8	ng/g		08/11/23 12:12	08/23/23 12:55	300

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-021

Lab Sample ID: 580-130145-25

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	150		14	6.7	ng/g		08/11/23 12:12	08/23/23 12:59	300

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-022

Lab Sample ID: 580-130145-26

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.050	0.035	mg/Kg		08/16/23 16:48	08/17/23 12:46	50

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	260		14	2.3	ng/g		08/14/23 14:21	08/21/23 18:43	50

Method: EPA 1638 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.015	J B	0.037	0.0037	mg/Kg		08/14/23 14:21	08/16/23 17:29	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-023

Lab Sample ID: 580-130145-27

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	230		20	9.3	ng/g		08/11/23 12:12	08/22/23 18:10	400

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-024

Lab Sample ID: 580-130145-28

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	290		18	8.6	ng/g		08/11/23 12:12	08/22/23 18:14	400

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-025

Lab Sample ID: 580-130145-29

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	93		7.4	3.5	ng/g		08/11/23 12:12	08/22/23 15:36	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-026

Lab Sample ID: 580-130145-30

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	79		7.0	3.3	ng/g		08/11/23 12:12	08/23/23 13:03	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-027

Lab Sample ID: 580-130145-31

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	130		7.2	3.4	ng/g		08/11/23 12:12	08/23/23 13:07	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-028

Lab Sample ID: 580-130145-32

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	76		7.3	3.4	ng/g		08/11/23 12:12	08/22/23 15:32	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-029

Lab Sample ID: 580-130145-33

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	140		14	6.4	ng/g		08/11/23 12:12	08/23/23 13:11	300

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-030

Lab Sample ID: 580-130145-34

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	68		0.94	0.44	ng/g		08/11/23 12:12	08/23/23 13:24	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-031

Lab Sample ID: 580-130145-35

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	59		0.93	0.44	ng/g		08/11/23 12:12	08/23/23 13:28	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-032

Lab Sample ID: 580-130145-36

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.050	0.035	mg/Kg		08/16/23 16:48	08/17/23 12:52	50

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	66		15	2.5	ng/g		08/14/23 14:21	08/21/23 18:47	50

Method: EPA 1638 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.094	B	0.040	0.0040	mg/Kg		08/14/23 14:21	08/16/23 17:40	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-033

Lab Sample ID: 580-130145-37

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	36		0.97	0.46	ng/g		08/11/23 12:12	08/23/23 13:32	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-034

Lab Sample ID: 580-130145-38

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	46		0.96	0.45	ng/g		08/11/23 12:12	08/23/23 13:36	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-035

Lab Sample ID: 580-130145-39

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	31		0.97	0.46	ng/g		08/11/23 12:12	08/23/23 13:41	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-036

Lab Sample ID: 580-130145-40

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	400		18	8.6	ng/g		08/11/23 12:12	08/22/23 19:00	400

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-037

Lab Sample ID: 580-130145-41

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	710		19	9.0	ng/g		08/11/23 12:12	08/22/23 19:04	400

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-038

Lab Sample ID: 580-130145-42

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	600		19	8.8	ng/g		08/11/23 12:12	08/22/23 19:16	400

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-039

Lab Sample ID: 580-130145-43

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	390		19	9.0	ng/g		08/11/23 12:12	08/22/23 19:20	400

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-040

Lab Sample ID: 580-130145-44

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	130		15	6.9	ng/g		08/11/23 12:12	08/23/23 13:45	300

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-041

Lab Sample ID: 580-130145-45

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	540		7.4	3.5	ng/g		08/11/23 14:29	08/23/23 15:24	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-042

Lab Sample ID: 580-130145-46

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.050	0.035	mg/Kg		08/16/23 16:48	08/17/23 12:58	50

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	190		14	2.3	ng/g		08/14/23 14:21	08/21/23 15:49	50

Method: EPA 1638 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.071	B	0.037	0.0037	mg/Kg		08/14/23 14:21	08/16/23 16:20	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-043

Lab Sample ID: 580-130145-47

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	620		7.3	3.4	ng/g		08/11/23 14:29	08/23/23 15:28	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-044

Lab Sample ID: 580-130145-48

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	190		7.4	3.5	ng/g		08/11/23 14:29	08/23/23 15:33	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-045

Lab Sample ID: 580-130145-49

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	190		7.0	3.3	ng/g		08/11/23 14:29	08/23/23 15:37	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-046

Lab Sample ID: 580-130145-50

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	200		7.2	3.4	ng/g		08/11/23 14:29	08/23/23 15:41	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-047

Lab Sample ID: 580-130145-51

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	260		7.0	3.3	ng/g		08/11/23 14:29	08/23/23 12:34	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-048

Lab Sample ID: 580-130145-52

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	210		7.1	3.3	ng/g		08/11/23 14:29	08/23/23 15:53	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-048-DUP

Lab Sample ID: 580-130145-53

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	200		6.9	3.2	ng/g		08/11/23 14:29	08/23/23 15:57	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-049

Lab Sample ID: 580-130145-54

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	210		7.4	3.5	ng/g		08/11/23 14:29	08/23/23 16:02	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-050

Lab Sample ID: 580-130145-55

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	140		6.9	3.2	ng/g		08/11/23 14:29	08/23/23 12:38	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-051

Lab Sample ID: 580-130145-56

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.049	0.035	mg/Kg		08/16/23 16:48	08/17/23 13:04	50

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	110		14	2.3	ng/g		08/14/23 14:21	08/21/23 18:51	50

Method: EPA 1638 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.023	J B	0.037	0.0037	mg/Kg		08/14/23 14:21	08/16/23 17:44	1

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-052

Lab Sample ID: 580-130145-57

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	180		7.2	3.4	ng/g		08/11/23 14:29	08/23/23 16:06	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-053

Lab Sample ID: 580-130145-58

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	130		7.1	3.3	ng/g		08/11/23 14:29	08/23/23 16:10	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-054

Lab Sample ID: 580-130145-59

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	53		6.9	3.3	ng/g		08/11/23 14:29	08/23/23 16:14	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-055

Lab Sample ID: 580-130145-60

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	130		7.5	3.5	ng/g		08/11/23 14:29	08/23/23 16:18	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-056

Lab Sample ID: 580-130145-61

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	630		7.2	3.4	ng/g		08/11/23 14:29	08/23/23 16:22	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-057

Lab Sample ID: 580-130145-62

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	300		7.4	3.5	ng/g		08/11/23 14:29	08/23/23 16:26	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-058

Lab Sample ID: 580-130145-63

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	100		6.9	3.3	ng/g		08/11/23 14:29	08/23/23 16:31	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-059

Lab Sample ID: 580-130145-64

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	150		7.1	3.3	ng/g		08/11/23 14:29	08/23/23 16:47	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-060

Lab Sample ID: 580-130145-65

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	98		7.2	3.4	ng/g		08/11/23 14:29	08/23/23 16:51	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-061

Lab Sample ID: 580-130145-66

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.050	0.035	mg/Kg		08/16/23 16:48	08/17/23 13:11	50

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	82		14	2.3	ng/g		08/14/23 14:21	08/21/23 18:55	50

Method: EPA 1638 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.034	J B	0.037	0.0037	mg/Kg		08/14/23 14:21	08/16/23 17:48	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-062

Lab Sample ID: 580-130145-67

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	90		7.5	3.5	ng/g		08/11/23 14:29	08/23/23 16:55	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-063

Lab Sample ID: 580-130145-68

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	84		7.5	3.5	ng/g		08/11/23 14:29	08/23/23 17:00	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-064

Lab Sample ID: 580-130145-69

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	300		7.1	3.3	ng/g		08/11/23 14:29	08/23/23 17:04	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-065

Lab Sample ID: 580-130145-70

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	370		7.2	3.4	ng/g		08/11/23 14:29	08/23/23 12:42	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-066

Lab Sample ID: 580-130145-71

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	240		6.7	3.2	ng/g		08/11/23 14:29	08/23/23 17:08	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-067

Lab Sample ID: 580-130145-72

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	340		6.7	3.2	ng/g		08/11/23 14:29	08/23/23 17:12	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-068

Lab Sample ID: 580-130145-73

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	130		6.7	3.2	ng/g		08/11/23 14:29	08/23/23 17:16	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-069

Lab Sample ID: 580-130145-74

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	130		7.3	3.4	ng/g		08/11/23 14:29	08/23/23 17:20	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-070

Lab Sample ID: 580-130145-75

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	180		7.2	3.4	ng/g		08/11/23 14:29	08/23/23 17:33	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-071

Lab Sample ID: 580-130145-76

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.049	0.034	mg/Kg		08/16/23 16:48	08/17/23 11:43	50

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	180		15	2.5	ng/g		08/14/23 14:21	08/21/23 18:59	50

Method: EPA 1638 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.023	J B	0.040	0.0040	mg/Kg		08/14/23 14:21	08/16/23 17:51	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-072

Lab Sample ID: 580-130145-77

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	250		7.0	3.3	ng/g		08/11/23 14:29	08/23/23 17:37	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-073

Lab Sample ID: 580-130145-78

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	64		7.4	3.5	ng/g		08/11/23 14:29	08/23/23 17:41	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-074

Lab Sample ID: 580-130145-79

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	100		7.1	3.3	ng/g		08/11/23 14:29	08/23/23 17:45	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-075

Lab Sample ID: 580-130145-80

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	140		7.5	3.5	ng/g		08/11/23 14:29	08/23/23 17:49	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-076

Lab Sample ID: 580-130145-81

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	210		7.1	3.4	ng/g		08/11/23 14:29	08/23/23 12:47	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-077

Lab Sample ID: 580-130145-82

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	68		7.4	3.5	ng/g		08/11/23 14:29	08/23/23 17:54	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-078

Lab Sample ID: 580-130145-83

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	31		0.98	0.46	ng/g		08/11/23 14:29	08/25/23 19:47	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-079

Lab Sample ID: 580-130145-84

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	280		7.0	3.3	ng/g		08/11/23 14:29	08/23/23 18:02	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-080

Lab Sample ID: 580-130145-85

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.047	0.033	mg/Kg		08/16/23 16:48	08/17/23 13:17	50

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	230		14	2.4	ng/g		08/14/23 14:21	08/21/23 15:53	50

Method: EPA 1638 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.019	J B	0.039	0.0039	mg/Kg		08/14/23 14:21	08/16/23 16:31	1

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-081

Lab Sample ID: 580-130145-86

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	330		7.2	3.4	ng/g		08/11/23 14:29	08/23/23 18:06	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-081-DUP

Lab Sample ID: 580-130145-87

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	320		6.7	3.1	ng/g		08/11/23 14:29	08/23/23 18:10	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-082

Lab Sample ID: 580-130145-88

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	320		7.2	3.4	ng/g		08/11/23 14:29	08/23/23 18:23	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-083

Lab Sample ID: 580-130145-89

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	130		6.8	3.2	ng/g		08/11/23 14:29	08/23/23 18:27	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-084

Lab Sample ID: 580-130145-90

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	110		6.7	3.2	ng/g		08/14/23 10:35	08/24/23 15:26	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-085

Lab Sample ID: 580-130145-91

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	97		7.4	3.5	ng/g		08/14/23 10:35	08/24/23 12:48	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-086

Lab Sample ID: 580-130145-92

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	260		7.5	3.5	ng/g		08/14/23 10:35	08/24/23 12:52	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-087

Lab Sample ID: 580-130145-93

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	180		7.4	3.5	ng/g		08/14/23 10:35	08/24/23 15:30	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-088

Lab Sample ID: 580-130145-94

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	66		7.5	3.5	ng/g		08/14/23 10:35	08/24/23 15:34	150

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-089

Lab Sample ID: 580-130145-95

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	48		0.97	0.46	ng/g		08/14/23 10:35	08/24/23 20:58	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-090

Lab Sample ID: 580-130145-96

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	57		7.1	3.3	ng/g		08/14/23 10:35	08/24/23 15:51	150

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-091

Lab Sample ID: 580-130145-97

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.049	0.034	mg/Kg		08/16/23 16:48	08/17/23 13:23	50

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	37		15	2.5	ng/g		08/14/23 14:21	08/21/23 19:03	50

Method: EPA 1638 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.013	J B	0.040	0.0040	mg/Kg		08/14/23 14:21	08/16/23 17:55	1

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-092

Lab Sample ID: 580-130145-98

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	29		0.94	0.44	ng/g		08/14/23 10:35	08/24/23 21:02	20

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Client Sample ID: SKLMKT-093

Lab Sample ID: 580-130145-99

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1631B - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	13		0.92	0.43	ng/g		08/14/23 10:35	08/24/23 21:06	20

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: PACPP-1101

Lab Sample ID: 580-130145-190

Date Collected: 05/22/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Method: EPA 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.048	0.034	mg/Kg		08/16/23 16:48	08/17/23 16:09	50

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Method: 1632A - Arsenic Speciation by Hydride- Generation Cryo-Trapping GC-AAS

Lab Sample ID: MB 580-434825/1-A

Matrix: Tissue

Analysis Batch: 434948

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434825

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.010	0.0070	mg/Kg		08/16/23 16:48	08/17/23 11:05	10

Lab Sample ID: MB 580-434825/2-A

Matrix: Tissue

Analysis Batch: 434948

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434825

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Inorganic Arsenic	ND		0.010	0.0070	mg/Kg		08/16/23 16:48	08/17/23 11:11	10

Lab Sample ID: LCS 580-434825/4-A

Matrix: Tissue

Analysis Batch: 434948

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 434825

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Inorganic Arsenic	0.200	0.208		mg/Kg		104	50 - 150

Lab Sample ID: LCSD 580-434825/5-A

Matrix: Tissue

Analysis Batch: 434948

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 434825

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD Limit
Inorganic Arsenic	0.200	0.196		mg/Kg		98	50 - 150	6 35

Lab Sample ID: 580-130145-76 MS

Matrix: Tissue

Analysis Batch: 434948

Client Sample ID: SKLMKT-071

Prep Type: Total/NA

Prep Batch: 434825

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Inorganic Arsenic	ND		0.200	0.128		mg/Kg		64	50 - 150

Lab Sample ID: 580-130145-76 MSD

Matrix: Tissue

Analysis Batch: 434948

Client Sample ID: SKLMKT-071

Prep Type: Total/NA

Prep Batch: 434825

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD Limit
Inorganic Arsenic	ND		0.198	0.139		mg/Kg		70	50 - 150	8 35

Method: 1631B - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 580-434354/1-A

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434354

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/11/23 12:12	08/22/23 12:43	20

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Method: 1631B - Mercury, Low Level (CVAFS) (Continued)

Lab Sample ID: MB 580-434354/2-A

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434354

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/11/23 12:12	08/22/23 12:47	20

Lab Sample ID: MB 580-434354/3-A

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434354

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/11/23 12:12	08/22/23 12:52	20

Lab Sample ID: LCS 580-434354/4-A

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 434354

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	396	422		ng/g		106	75 - 125

Lab Sample ID: LCSD 580-434354/5-A

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 434354

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	396	399		ng/g		101	75 - 125	5	24

Lab Sample ID: 580-130145-8 MS

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: SKLMKT-006

Prep Type: Total/NA

Prep Batch: 434354

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	130		386	475		ng/g		90	71 - 125

Lab Sample ID: 580-130145-8 MSD

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: SKLMKT-006

Prep Type: Total/NA

Prep Batch: 434354

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	130		390	516		ng/g		100	71 - 125	8	24

Lab Sample ID: 580-130145-17 MS

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: SKLMKT-014

Prep Type: Total/NA

Prep Batch: 434354

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	130		389	516		ng/g		100	71 - 125

Lab Sample ID: 580-130145-17 MSD

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: SKLMKT-014

Prep Type: Total/NA

Prep Batch: 434354

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	130		376	517		ng/g		104	71 - 125	0	24

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Method: 1631B - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 580-434357/1-A

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434357

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/11/23 12:12	08/22/23 17:12	20

Lab Sample ID: MB 580-434357/2-A

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434357

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/11/23 12:12	08/22/23 17:16	20

Lab Sample ID: MB 580-434357/3-A

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434357

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/11/23 12:12	08/22/23 17:20	20

Lab Sample ID: LCS 580-434357/4-A

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 434357

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	396	395		ng/g		100	75 - 125

Lab Sample ID: LCSD 580-434357/5-A

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 434357

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	396	397		ng/g		100	75 - 125	0	24

Lab Sample ID: 580-130145-29 MS

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: SKLMKT-025

Prep Type: Total/NA

Prep Batch: 434357

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	93		396	510		ng/g		105	71 - 125

Lab Sample ID: 580-130145-29 MSD

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: SKLMKT-025

Prep Type: Total/NA

Prep Batch: 434357

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	93		390	484		ng/g		100	71 - 125	5	24

Lab Sample ID: 580-130145-32 MS

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: SKLMKT-028

Prep Type: Total/NA

Prep Batch: 434357

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	76		365	442		ng/g		100	71 - 125

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Method: 1631B - Mercury, Low Level (CVAFS)

Lab Sample ID: 580-130145-32 MSD

Matrix: Tissue

Analysis Batch: 435504

Client Sample ID: SKLMKT-028

Prep Type: Total/NA

Prep Batch: 434357

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	76		370	449		ng/g		101	71 - 125	2	24

Lab Sample ID: MB 580-434373/1-A

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434373

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/11/23 14:29	08/23/23 13:49	20

Lab Sample ID: MB 580-434373/2-A

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434373

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/11/23 14:29	08/23/23 13:53	20

Lab Sample ID: MB 580-434373/3-A

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434373

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/11/23 14:29	08/23/23 13:57	20

Lab Sample ID: LCS 580-434373/4-A

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 434373

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	396	408		ng/g		103	75 - 125

Lab Sample ID: LCSD 580-434373/5-A

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 434373

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	396	400		ng/g		101	75 - 125	2	24

Lab Sample ID: 580-130145-51 MS

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: SKLMKT-047

Prep Type: Total/NA

Prep Batch: 434373

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	260		380	631		ng/g		97	71 - 125

Lab Sample ID: 580-130145-51 MSD

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: SKLMKT-047

Prep Type: Total/NA

Prep Batch: 434373

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	260		382	626		ng/g		95	71 - 125	1	24

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Method: 1631B - Mercury, Low Level (CVAFS)

Lab Sample ID: 580-130145-55 MS

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: SKLMKT-050

Prep Type: Total/NA

Prep Batch: 434373

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	140		396	540		ng/g		102	71 - 125

Lab Sample ID: 580-130145-55 MSD

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: SKLMKT-050

Prep Type: Total/NA

Prep Batch: 434373

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Mercury	140		371	495		ng/g		97	71 - 125	9	24

Lab Sample ID: MB 580-434409/1-A

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434409

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/11/23 14:29	08/23/23 14:01	20

Lab Sample ID: MB 580-434409/2-A

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434409

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/11/23 14:29	08/23/23 14:18	20

Lab Sample ID: MB 580-434409/3-A

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434409

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/11/23 14:29	08/23/23 14:22	20

Lab Sample ID: LCS 580-434409/4-A

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 434409

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	396	382		ng/g		96	75 - 125

Lab Sample ID: LCSD 580-434409/5-A

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 434409

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Mercury	396	404		ng/g		102	75 - 125	6	24

Lab Sample ID: 580-130145-70 MS

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: SKLMKT-065

Prep Type: Total/NA

Prep Batch: 434409

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	370		392	802		ng/g		110	71 - 125

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Method: 1631B - Mercury, Low Level (CVAFS)

Lab Sample ID: 580-130145-70 MSD

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: SKLMKT-065

Prep Type: Total/NA

Prep Batch: 434409

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	370		385	749		ng/g		98	71 - 125	7	24

Lab Sample ID: 580-130145-81 MS

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: SKLMKT-076

Prep Type: Total/NA

Prep Batch: 434409

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	210		381	587		ng/g		98	71 - 125		

Lab Sample ID: 580-130145-81 MSD

Matrix: Tissue

Analysis Batch: 435790

Client Sample ID: SKLMKT-076

Prep Type: Total/NA

Prep Batch: 434409

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	210		355	565		ng/g		99	71 - 125	4	24

Lab Sample ID: MB 580-434435/1-A

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434435

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/14/23 10:35	08/24/23 11:08	20

Lab Sample ID: MB 580-434435/2-A

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434435

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/14/23 10:35	08/24/23 11:13	20

Lab Sample ID: MB 580-434435/3-A

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434435

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.47	ng/g		08/14/23 10:35	08/24/23 11:17	20

Lab Sample ID: LCS 580-434435/4-A

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 434435

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	396	418		ng/g		105	75 - 125		

Lab Sample ID: LCSD 580-434435/5-A

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 434435

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	396	427		ng/g		108	75 - 125	2	24

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Method: 1631B - Mercury, Low Level (CVAFS)

Lab Sample ID: 580-130145-91 MS

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: SKLMKT-085

Prep Type: Total/NA

Prep Batch: 434435

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	97		368	484		ng/g		105	71 - 125		

Lab Sample ID: 580-130145-91 MSD

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: SKLMKT-085

Prep Type: Total/NA

Prep Batch: 434435

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Mercury	97		379	511		ng/g		109	71 - 125	5	24

Lab Sample ID: 580-130145-92 MS

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: SKLMKT-086

Prep Type: Total/NA

Prep Batch: 434435

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	260		355	626		ng/g		103	71 - 125		

Lab Sample ID: 580-130145-92 MSD

Matrix: Tissue

Analysis Batch: 435791

Client Sample ID: SKLMKT-086

Prep Type: Total/NA

Prep Batch: 434435

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Mercury	260		392	647		ng/g		99	71 - 125	3	24

Lab Sample ID: 580-130145-46 MS

Matrix: Tissue

Analysis Batch: 435373

Client Sample ID: SKLMKT-042

Prep Type: Total/NA

Prep Batch: 434568

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	190		365	562		ng/g		102	71 - 125		

Lab Sample ID: 580-130145-46 MSD

Matrix: Tissue

Analysis Batch: 435373

Client Sample ID: SKLMKT-042

Prep Type: Total/NA

Prep Batch: 434568

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Mercury	190		383	568		ng/g		98	71 - 125	1	24

Lab Sample ID: 580-130145-85 MS

Matrix: Tissue

Analysis Batch: 435373

Client Sample ID: SKLMKT-080

Prep Type: Total/NA

Prep Batch: 434568

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	230		381	580		ng/g		91	71 - 125		

Lab Sample ID: 580-130145-85 MSD

Matrix: Tissue

Analysis Batch: 435373

Client Sample ID: SKLMKT-080

Prep Type: Total/NA

Prep Batch: 434568

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Mercury	230		370	624		ng/g		105	71 - 125	7	24

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Method: 1631B - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 580-434568/1-A
Matrix: Tissue
Analysis Batch: 435373

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 434568

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		3.0	0.50	ng/g		08/14/23 14:21	08/21/23 14:09	10

Lab Sample ID: MB 580-434568/2-A
Matrix: Tissue
Analysis Batch: 435373

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 434568

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		3.0	0.50	ng/g		08/14/23 14:21	08/21/23 14:13	10

Lab Sample ID: MB 580-434568/3-A
Matrix: Tissue
Analysis Batch: 435373

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 434568

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		3.0	0.50	ng/g		08/14/23 14:21	08/21/23 14:26	10

Lab Sample ID: LCS 580-434568/4-A
Matrix: Tissue
Analysis Batch: 435373

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 434568

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	396	392		ng/g		99	75 - 125

Lab Sample ID: LCSD 580-434568/5-A
Matrix: Tissue
Analysis Batch: 435373

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 434568

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	396	390		ng/g		98	75 - 125	1	24

Method: 1638 - Metals (ICP/MS)

Lab Sample ID: 580-130145-46 MS
Matrix: Tissue
Analysis Batch: 434975

Client Sample ID: SKLMKT-042
Prep Type: Total/NA
Prep Batch: 434568

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	0.071	B	4.60	4.49		mg/Kg		96	80 - 120

Lab Sample ID: 580-130145-46 MSD
Matrix: Tissue
Analysis Batch: 434975

Client Sample ID: SKLMKT-042
Prep Type: Total/NA
Prep Batch: 434568

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Barium	0.071	B	4.83	5.03		mg/Kg		103	80 - 120	11	20

Eurofins Seattle

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Method: 1638 - Metals (ICP/MS) (Continued)

Lab Sample ID: 580-130145-85 MS

Matrix: Tissue

Analysis Batch: 434975

Client Sample ID: SKLMKT-080

Prep Type: Total/NA

Prep Batch: 434568

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	0.019	J B	4.80	4.97		mg/Kg		103	80 - 120

Lab Sample ID: 580-130145-85 MSD

Matrix: Tissue

Analysis Batch: 434975

Client Sample ID: SKLMKT-080

Prep Type: Total/NA

Prep Batch: 434568

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Barium	0.019	J B	4.67	4.85		mg/Kg		103	80 - 120	2	20

Lab Sample ID: MB 580-434568/1-A

Matrix: Tissue

Analysis Batch: 434975

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 434568

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.00887	J	0.040	0.0040	mg/Kg		08/14/23 14:21	08/16/23 15:28	1

Lab Sample ID: MB 580-434568/2-A

Matrix: Tissue

Analysis Batch: 434975

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 434568

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.00409	J	0.040	0.0040	mg/Kg		08/14/23 14:21	08/16/23 15:32	1

Lab Sample ID: LCS 580-434568/4-A

Matrix: Tissue

Analysis Batch: 434975

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 434568

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	5.00	5.17		mg/Kg		103	85 - 115

Lab Sample ID: LCSD 580-434568/5-A

Matrix: Tissue

Analysis Batch: 434975

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 434568

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Barium	5.00	5.18		mg/Kg		104	85 - 115	0	20

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-001

Lab Sample ID: 580-130145-1

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		300	435504	AJD	EET SEA	08/22/23 15:40

Client Sample ID: SKLMKT-001-DUP

Lab Sample ID: 580-130145-2

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		300	435504	AJD	EET SEA	08/22/23 15:45

Client Sample ID: SKLMKT-002

Lab Sample ID: 580-130145-3

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		500	435504	AJD	EET SEA	08/22/23 15:57

Client Sample ID: SKLMKT-003

Lab Sample ID: 580-130145-4

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 16:01

Client Sample ID: SKLMKT-003-DUP

Lab Sample ID: 580-130145-5

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 16:05

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-004

Lab Sample ID: 580-130145-6

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	1632			434825	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 12:33
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1631B		50	435373	CL	EET SEA	08/21/23 18:34
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1638		1	434975	V1R	EET SEA	08/16/23 17:22

Client Sample ID: SKLMKT-005

Lab Sample ID: 580-130145-7

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 16:09

Client Sample ID: SKLMKT-006

Lab Sample ID: 580-130145-8

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		200	435504	AJD	EET SEA	08/22/23 12:39

Client Sample ID: SKLMKT-007

Lab Sample ID: 580-130145-9

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 16:14

Client Sample ID: SKLMKT-008

Lab Sample ID: 580-130145-10

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		300	435504	AJD	EET SEA	08/22/23 19:29

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-008-DUP

Lab Sample ID: 580-130145-11

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		300	435504	AJD	EET SEA	08/22/23 19:33

Client Sample ID: SKLMKT-009

Lab Sample ID: 580-130145-12

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		300	435504	AJD	EET SEA	08/22/23 19:37

Client Sample ID: SKLMKT-010

Lab Sample ID: 580-130145-13

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 16:30

Client Sample ID: SKLMKT-011

Lab Sample ID: 580-130145-14

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 16:34

Client Sample ID: SKLMKT-012

Lab Sample ID: 580-130145-15

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 16:47

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-013

Lab Sample ID: 580-130145-16

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	1632			434825	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 12:40
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1631B		50	435373	CL	EET SEA	08/21/23 18:39
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1638		1	434975	V1R	EET SEA	08/16/23 17:26

Client Sample ID: SKLMKT-014

Lab Sample ID: 580-130145-17

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		200	435504	AJD	EET SEA	08/22/23 12:35

Client Sample ID: SKLMKT-014-DUP

Lab Sample ID: 580-130145-18

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		300	435504	AJD	EET SEA	08/22/23 19:41

Client Sample ID: SKLMKT-015

Lab Sample ID: 580-130145-19

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		150	435504	AJD	EET SEA	08/22/23 19:45

Client Sample ID: SKLMKT-016

Lab Sample ID: 580-130145-20

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		150	435504	AJD	EET SEA	08/22/23 19:49

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-017

Lab Sample ID: 580-130145-21

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 17:03

Client Sample ID: SKLMKT-018

Lab Sample ID: 580-130145-22

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434354	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		20	435504	AJD	EET SEA	08/22/23 19:53

Client Sample ID: SKLMKT-019

Lab Sample ID: 580-130145-23

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		300	435790	D1C	EET SEA	08/23/23 12:51

Client Sample ID: SKLMKT-020

Lab Sample ID: 580-130145-24

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		300	435790	D1C	EET SEA	08/23/23 12:55

Client Sample ID: SKLMKT-021

Lab Sample ID: 580-130145-25

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		300	435790	D1C	EET SEA	08/23/23 12:59

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-022

Lab Sample ID: 580-130145-26

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	1632			434825	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 12:46
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1631B		50	435373	CL	EET SEA	08/21/23 18:43
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1638		1	434975	V1R	EET SEA	08/16/23 17:29

Client Sample ID: SKLMKT-023

Lab Sample ID: 580-130145-27

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 18:10

Client Sample ID: SKLMKT-024

Lab Sample ID: 580-130145-28

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 18:14

Client Sample ID: SKLMKT-025

Lab Sample ID: 580-130145-29

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		150	435504	AJD	EET SEA	08/22/23 15:36

Client Sample ID: SKLMKT-026

Lab Sample ID: 580-130145-30

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 13:03

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-027

Lab Sample ID: 580-130145-31

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 13:07

Client Sample ID: SKLMKT-028

Lab Sample ID: 580-130145-32

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		150	435504	AJD	EET SEA	08/22/23 15:32

Client Sample ID: SKLMKT-029

Lab Sample ID: 580-130145-33

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		300	435790	D1C	EET SEA	08/23/23 13:11

Client Sample ID: SKLMKT-030

Lab Sample ID: 580-130145-34

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		20	435790	D1C	EET SEA	08/23/23 13:24

Client Sample ID: SKLMKT-031

Lab Sample ID: 580-130145-35

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		20	435790	D1C	EET SEA	08/23/23 13:28

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-032

Lab Sample ID: 580-130145-36

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	1632			434825	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 12:52
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1631B		50	435373	CL	EET SEA	08/21/23 18:47
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1638		1	434975	V1R	EET SEA	08/16/23 17:40

Client Sample ID: SKLMKT-033

Lab Sample ID: 580-130145-37

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		20	435790	D1C	EET SEA	08/23/23 13:32

Client Sample ID: SKLMKT-034

Lab Sample ID: 580-130145-38

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		20	435790	D1C	EET SEA	08/23/23 13:36

Client Sample ID: SKLMKT-035

Lab Sample ID: 580-130145-39

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		20	435790	D1C	EET SEA	08/23/23 13:41

Client Sample ID: SKLMKT-036

Lab Sample ID: 580-130145-40

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 19:00

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-037

Lab Sample ID: 580-130145-41

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 19:04

Client Sample ID: SKLMKT-038

Lab Sample ID: 580-130145-42

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 19:16

Client Sample ID: SKLMKT-039

Lab Sample ID: 580-130145-43

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		400	435504	AJD	EET SEA	08/22/23 19:20

Client Sample ID: SKLMKT-040

Lab Sample ID: 580-130145-44

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434357	D1C	EET SEA	08/11/23 12:12
Total/NA	Analysis	1631B		300	435790	D1C	EET SEA	08/23/23 13:45

Client Sample ID: SKLMKT-041

Lab Sample ID: 580-130145-45

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 15:24

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-042

Lab Sample ID: 580-130145-46

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	1632			434825	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 12:58
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1631B		50	435373	CL	EET SEA	08/21/23 15:49
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1638		1	434975	V1R	EET SEA	08/16/23 16:20

Client Sample ID: SKLMKT-043

Lab Sample ID: 580-130145-47

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 15:28

Client Sample ID: SKLMKT-044

Lab Sample ID: 580-130145-48

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 15:33

Client Sample ID: SKLMKT-045

Lab Sample ID: 580-130145-49

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 15:37

Client Sample ID: SKLMKT-046

Lab Sample ID: 580-130145-50

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 15:41

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-047

Lab Sample ID: 580-130145-51

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 12:34

Client Sample ID: SKLMKT-048

Lab Sample ID: 580-130145-52

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 15:53

Client Sample ID: SKLMKT-048-DUP

Lab Sample ID: 580-130145-53

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 15:57

Client Sample ID: SKLMKT-049

Lab Sample ID: 580-130145-54

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 16:02

Client Sample ID: SKLMKT-050

Lab Sample ID: 580-130145-55

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 12:38

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-051

Lab Sample ID: 580-130145-56

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	1632			434825	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 13:04
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1631B		50	435373	CL	EET SEA	08/21/23 18:51
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1638		1	434975	V1R	EET SEA	08/16/23 17:44

Client Sample ID: SKLMKT-052

Lab Sample ID: 580-130145-57

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 16:06

Client Sample ID: SKLMKT-053

Lab Sample ID: 580-130145-58

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 16:10

Client Sample ID: SKLMKT-054

Lab Sample ID: 580-130145-59

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 16:14

Client Sample ID: SKLMKT-055

Lab Sample ID: 580-130145-60

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 16:18

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-056

Lab Sample ID: 580-130145-61

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 16:22

Client Sample ID: SKLMKT-057

Lab Sample ID: 580-130145-62

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 16:26

Client Sample ID: SKLMKT-058

Lab Sample ID: 580-130145-63

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 16:31

Client Sample ID: SKLMKT-059

Lab Sample ID: 580-130145-64

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 16:47

Client Sample ID: SKLMKT-060

Lab Sample ID: 580-130145-65

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 16:51

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-061

Lab Sample ID: 580-130145-66

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	1632			434825	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 13:11
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1631B		50	435373	CL	EET SEA	08/21/23 18:55
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1638		1	434975	V1R	EET SEA	08/16/23 17:48

Client Sample ID: SKLMKT-062

Lab Sample ID: 580-130145-67

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434373	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 16:55

Client Sample ID: SKLMKT-063

Lab Sample ID: 580-130145-68

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 17:00

Client Sample ID: SKLMKT-064

Lab Sample ID: 580-130145-69

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 17:04

Client Sample ID: SKLMKT-065

Lab Sample ID: 580-130145-70

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 12:42

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-066

Lab Sample ID: 580-130145-71

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 17:08

Client Sample ID: SKLMKT-067

Lab Sample ID: 580-130145-72

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 17:12

Client Sample ID: SKLMKT-068

Lab Sample ID: 580-130145-73

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 17:16

Client Sample ID: SKLMKT-069

Lab Sample ID: 580-130145-74

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 17:20

Client Sample ID: SKLMKT-070

Lab Sample ID: 580-130145-75

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 17:33

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-071

Lab Sample ID: 580-130145-76

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	1632			434825	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 11:43
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1631B		50	435373	CL	EET SEA	08/21/23 18:59
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1638		1	434975	V1R	EET SEA	08/16/23 17:51

Client Sample ID: SKLMKT-072

Lab Sample ID: 580-130145-77

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 17:37

Client Sample ID: SKLMKT-073

Lab Sample ID: 580-130145-78

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 17:41

Client Sample ID: SKLMKT-074

Lab Sample ID: 580-130145-79

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 17:45

Client Sample ID: SKLMKT-075

Lab Sample ID: 580-130145-80

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 17:49

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-076

Lab Sample ID: 580-130145-81

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 12:47

Client Sample ID: SKLMKT-077

Lab Sample ID: 580-130145-82

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 17:54

Client Sample ID: SKLMKT-078

Lab Sample ID: 580-130145-83

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		20	435967	COW	EET SEA	08/25/23 19:47

Client Sample ID: SKLMKT-079

Lab Sample ID: 580-130145-84

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 18:02

Client Sample ID: SKLMKT-080

Lab Sample ID: 580-130145-85

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	1632			434825	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 13:17
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1631B		50	435373	CL	EET SEA	08/21/23 15:53
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1638		1	434975	V1R	EET SEA	08/16/23 16:31

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-081

Lab Sample ID: 580-130145-86

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 18:06

Client Sample ID: SKLMKT-081-DUP

Lab Sample ID: 580-130145-87

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 18:10

Client Sample ID: SKLMKT-082

Lab Sample ID: 580-130145-88

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 18:23

Client Sample ID: SKLMKT-083

Lab Sample ID: 580-130145-89

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434409	D1C	EET SEA	08/11/23 14:29
Total/NA	Analysis	1631B		150	435790	D1C	EET SEA	08/23/23 18:27

Client Sample ID: SKLMKT-084

Lab Sample ID: 580-130145-90

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434435	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 15:26

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-085

Lab Sample ID: 580-130145-91

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434435	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 12:48

Client Sample ID: SKLMKT-086

Lab Sample ID: 580-130145-92

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434435	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 12:52

Client Sample ID: SKLMKT-087

Lab Sample ID: 580-130145-93

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434435	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 15:30

Client Sample ID: SKLMKT-088

Lab Sample ID: 580-130145-94

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434435	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 15:34

Client Sample ID: SKLMKT-089

Lab Sample ID: 580-130145-95

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434435	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435791	D1C	EET SEA	08/24/23 20:58

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Client Sample ID: SKLMKT-090

Lab Sample ID: 580-130145-96

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434435	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		150	435791	D1C	EET SEA	08/24/23 15:51

Client Sample ID: SKLMKT-091

Lab Sample ID: 580-130145-97

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	1632			434825	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 13:23
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1631B		50	435373	CL	EET SEA	08/21/23 19:03
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	HNO3 Prep			434568	AJD	EET SEA	08/14/23 14:21
Total/NA	Analysis	1638		1	434975	V1R	EET SEA	08/16/23 17:55

Client Sample ID: SKLMKT-092

Lab Sample ID: 580-130145-98

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434435	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435791	D1C	EET SEA	08/24/23 21:02

Client Sample ID: SKLMKT-093

Lab Sample ID: 580-130145-99

Date Collected: 05/11/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433644	COW	EET SEA	08/03/23 12:53
Total/NA	Prep	70:30 Acid Prep			434435	V1R	EET SEA	08/14/23 10:35
Total/NA	Analysis	1631B		20	435791	D1C	EET SEA	08/24/23 21:06

Client Sample ID: PACPP-1101

Lab Sample ID: 580-130145-190

Date Collected: 05/22/23 23:59

Matrix: Tissue

Date Received: 08/02/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	In House			433667	COW	EET SEA	08/03/23 15:57
Total/NA	Prep	1632			434828	D1C	EET SEA	08/16/23 16:48
Total/NA	Analysis	1632A		50	434948	D1C	EET SEA	08/17/23 16:09

Eurofins Seattle

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Laboratory References:
EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

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Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Laboratory: Eurofins Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	70:30 Acid Prep	Tissue	Mercury
1631B	HNO3 Prep	Tissue	Mercury
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium
ANAB	Dept. of Defense ELAP	L2236	01-19-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium
ANAB	Dept. of Energy	L2236	01-19-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium
ANAB	ISO/IEC 17025	L2236	01-19-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium
California	State	2954	07-07-23 *
Florida	NELAP	E87575	06-30-23 *
Louisiana (All)	NELAP	03073	07-01-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1632A	1632	Tissue	Inorganic Arsenic
Maine	State	WA01273	05-02-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	70:30 Acid Prep	Tissue	Mercury
1631B	HNO3 Prep	Tissue	Mercury
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium
Montana (UST)	State	NA	04-14-27
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	70:30 Acid Prep	Tissue	Mercury

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Seattle

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Laboratory: Eurofins Seattle (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	HNO3 Prep	Tissue	Mercury
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium
New Jersey	NELAP	WA014	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	70:30 Acid Prep	Tissue	Mercury
1631B	HNO3 Prep	Tissue	Mercury
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium
New York	NELAP	11662	03-31-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	70:30 Acid Prep	Tissue	Mercury
1631B	HNO3 Prep	Tissue	Mercury
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium
Oregon	NELAP	4167	07-07-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1632A	1632	Tissue	Inorganic Arsenic
US Fish & Wildlife	US Federal Programs	A20571	06-30-23 *
USDA	US Federal Programs	525-23-4-22573	01-04-26
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1631B	70:30 Acid Prep	Tissue	Mercury
1631B	HNO3 Prep	Tissue	Mercury
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium
Washington	State	C788	07-13-23 *
Wisconsin	State	399133460	08-31-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
1632A	1632	Tissue	Inorganic Arsenic
1638	HNO3 Prep	Tissue	Barium

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Seattle

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Gulf of Thailand 2023 - Project MKT2023

Job ID: 580-130145-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-130145-1	SKLMKT-001	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-2	SKLMKT-001-DUP	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-3	SKLMKT-002	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-4	SKLMKT-003	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-5	SKLMKT-003-DUP	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-6	SKLMKT-004	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-7	SKLMKT-005	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-8	SKLMKT-006	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-9	SKLMKT-007	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-10	SKLMKT-008	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-11	SKLMKT-008-DUP	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-12	SKLMKT-009	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-13	SKLMKT-010	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-14	SKLMKT-011	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-15	SKLMKT-012	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-16	SKLMKT-013	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-17	SKLMKT-014	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-18	SKLMKT-014-DUP	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-19	SKLMKT-015	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-20	SKLMKT-016	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-21	SKLMKT-017	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-22	SKLMKT-018	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-23	SKLMKT-019	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-24	SKLMKT-020	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-25	SKLMKT-021	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-26	SKLMKT-022	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-27	SKLMKT-023	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-28	SKLMKT-024	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-29	SKLMKT-025	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-30	SKLMKT-026	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-31	SKLMKT-027	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-32	SKLMKT-028	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-33	SKLMKT-029	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-34	SKLMKT-030	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-35	SKLMKT-031	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-36	SKLMKT-032	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-37	SKLMKT-033	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-38	SKLMKT-034	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-39	SKLMKT-035	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-40	SKLMKT-036	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-41	SKLMKT-037	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-42	SKLMKT-038	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-43	SKLMKT-039	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-44	SKLMKT-040	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-45	SKLMKT-041	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-46	SKLMKT-042	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-47	SKLMKT-043	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-48	SKLMKT-044	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-49	SKLMKT-045	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-50	SKLMKT-046	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-51	SKLMKT-047	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-52	SKLMKT-048	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-53	SKLMKT-048-DUP	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-54	SKLMKT-049	Tissue	05/11/23 23:59	08/02/23 09:20

Sample Summary

Client: Tetra Tech, Inc.

Job ID: 580-130145-1

Project/Site: Gulf of Thailand 2023 - Project MKT2023

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-130145-55	SKLMKT-050	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-56	SKLMKT-051	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-57	SKLMKT-052	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-58	SKLMKT-053	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-59	SKLMKT-054	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-60	SKLMKT-055	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-61	SKLMKT-056	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-62	SKLMKT-057	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-63	SKLMKT-058	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-64	SKLMKT-059	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-65	SKLMKT-060	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-66	SKLMKT-061	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-67	SKLMKT-062	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-68	SKLMKT-063	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-69	SKLMKT-064	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-70	SKLMKT-065	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-71	SKLMKT-066	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-72	SKLMKT-067	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-73	SKLMKT-068	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-74	SKLMKT-069	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-75	SKLMKT-070	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-76	SKLMKT-071	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-77	SKLMKT-072	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-78	SKLMKT-073	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-79	SKLMKT-074	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-80	SKLMKT-075	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-81	SKLMKT-076	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-82	SKLMKT-077	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-83	SKLMKT-078	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-84	SKLMKT-079	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-85	SKLMKT-080	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-86	SKLMKT-081	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-87	SKLMKT-081-DUP	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-88	SKLMKT-082	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-89	SKLMKT-083	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-90	SKLMKT-084	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-91	SKLMKT-085	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-92	SKLMKT-086	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-93	SKLMKT-087	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-94	SKLMKT-088	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-95	SKLMKT-089	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-96	SKLMKT-090	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-97	SKLMKT-091	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-98	SKLMKT-092	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-99	SKLMKT-093	Tissue	05/11/23 23:59	08/02/23 09:20
580-130145-190	PACPP-1101	Tissue	05/22/23 23:59	08/02/23 09:20

Ship to:
Lilly-Anna LaCount
Eurofins - Frontier Global Sci.
5755 8th St. E
Fife, WA 98424
USA

CHAIN OF CUSTODY

Report to:
Dr. Ted Donn
Tetra Tech
3697 Mt. Diablo Blvd.
Lafayette, CA
ted.donn@tetratech.com



580-130145 Chain of Custody

General Notes:

Please report results separately for each Project ID
Please report all results to the MDL. J-flag results between MDL and RL
Please report results in PDF format with Excel EDD deliverable
Quote: see proposal of 19 July 2020 for agreed rates
Please INVOICE separately for each Project ID

Project ID	SampleID	Date	Time	Medium	Preservation	Hg (EPA 1631E)	Total Arsenic - (EPA 1640)	Total Inorganic Arsenic (EPA 1632)	Hg (Tissue, EPA 1631B)	Total Arsenic (EPA 1638M)	Total Inorganic Arsenic (EPA 1632)	Barium (EPA 1638M)
T423.22	PACPP-TB	5/11/2023	14:26	SW	FROZEN	1	1	1				
T423.22	PACPP-WB	5/21/2023	8:30	SW	FROZEN	1	1	1				
T423.22	PACPP-EQ-PRE	5/21/2023	8:35	SW	FROZEN	1	1	1				
T423.22	PACPP-SW-1	5/21/2023	11:57	SW	FROZEN	1	1	1				
T423.22	PACPP-SW-10	5/21/2023	11:51	SW	FROZEN	1	1	1				
T423.22	PACPP-SW-20	5/21/2023	11:38	SW	FROZEN	1	1	1				
T423.22	PACPP-SW-20-DUP	5/21/2023	11:45	SW	FROZEN	1	1	1				
T423.22	PACPP-SW-40	5/21/2023	11:30	SW	FROZEN	1	1	1				
T423.22	PACPP-SW-B	5/21/2023	11:20	SW	FROZEN	1	1	1				
T423.22	PACPP-FB	5/21/2023	12:04	SW	FROZEN	1	1	1				
T423.22	PACPP-EQ-POST	5/21/2023	12:10	SW	FROZEN	1	1	1				
MKT2023	SKLMKT-001	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-001-DUP	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-002	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-003	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-003-DUP	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-004	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-005	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-006	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-007	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-008	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-008-DUP	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-009	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-010	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-011	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-012	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-013	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-014	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-014-DUP	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-015	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-016	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-017	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-018	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-019	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-020	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-021	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-022	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-023	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-024	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-025	5/11/2023		Tiss-Fish	FROZEN				1			

Relinquished by: *SKL*

1 AUG 2023

Received by:

Relinquished by:

Received by:

8/3/23 5:26

Therm. ID: Dig 3 Cust. Seal: Y/N 1 of 5
Incor Corr Temp 19.6/10.6

Ship to:
Lilly-Anna LaCount
Eurofins - Frontier Global Sci.
5755 8th St. E
Fife, WA 98424
USA

CHAIN OF CUSTODY

Report to:
Dr. Ted Donn
Tetra Tech
3697 Mt. Diablo Blvd.
Lafayette, CA
ted.donn@tetratech.com

Project ID	SampleID	Date	Time	Medium	Preservation	Hg (EPA 1631E)	Total Arsenic - (EPA 1640)	Total Inorganic Arsenic (EPA 1632)	Hg (Tissue, EPA 1631B)	Total Arsenic (EPA 1638M)	Total Inorganic Arsenic (EPA 1632)	Barium (EPA 1638M)
MKT2023	SKLMKT-026	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-027	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-028	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-029	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-030	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-031	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-032	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-033	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-034	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-035	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-036	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-037	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-038	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-039	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-040	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-041	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-042	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-043	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-044	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-045	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-046	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-047	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-048	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-048-DUP	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-049	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-050	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-051	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-052	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-053	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-054	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-055	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-056	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-057	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-058	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-059	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-060	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-061	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-062	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-063	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-064	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-065	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-066	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-067	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-068	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-069	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-070	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-071	5/11/2023		Tiss-Fish	FROZEN				1		1	1

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CHAIN OF CUSTODY

Report to:
Dr. Ted Donn
Tetra Tech
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ted.donn@tetratech.com

Project ID	SampleID	Date	Time	Medium	Preservation	Hg (EPA 1631E)	Total Arsenic - (EPA 1640)	Total Inorganic Arsenic (EPA 1632)	Hg (Tissue, EPA 1631B)	Total Arsenic (EPA 1638M)	Total Inorganic Arsenic (EPA 1632)	Barium (EPA 1638M)
MKT2023	SKLMKT-072	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-073	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-074	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-075	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-076	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-077	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-078	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-079	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-080	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-081	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-081-DUP	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-082	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-083	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-084	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-085	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-086	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-087	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-088	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-089	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-090	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-091	5/11/2023		Tiss-Fish	FROZEN				1		1	1
MKT2023	SKLMKT-092	5/11/2023		Tiss-Fish	FROZEN				1			
MKT2023	SKLMKT-093	5/11/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1001	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1001-DUP	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1002	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1002-DUP	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1003	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1003-DUP	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1005	5/17/2023		Tiss-Fish	FROZEN				1		1	
T41423.17	YUWA-1022	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1023	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1027	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1028	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1041	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1042	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1043	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1044	5/17/2023		Tiss-Fish	FROZEN				1		1	
T41423.17	YUWA-1046	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1047	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1048	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.17	YUWA-1049	5/17/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1141	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1141-DUP	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1142	7/1/2023		Tiss-Fish	FROZEN				1			

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CHAIN OF CUSTODY

Report to:
Dr. Ted Donn
Tetra Tech
3697 Mt. Diablo Blvd.
Lafayette, CA
ted.donn@tetratech.com

Project ID	SampleID	Date	Time	Medium	Preservation	Hg (EPA 1631E)	Total Arsenic - (EPA 1640)	Total Inorganic Arsenic (EPA 1632)	Hg (Tissue, EPA 1631B)	Total Arsenic (EPA 1638M)	Total Inorganic Arsenic (EPA 1632)	Barium (EPA 1638M)
T41423.19	MAWG-1142-DUP	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1143	7/1/2023		Tiss-Fish	FROZEN				1		1	
T41423.19	MAWG-1144	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1145	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1145-DUP	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1149	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1161	7/1/2023		Tiss-Fish	FROZEN				1		1	
T41423.19	MAWG-1181	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.19	MAWG-1182	7/1/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1121	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1121-DUP	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1122	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1123	7/3/2023		Tiss-Fish	FROZEN				1		1	1
T41423.20	LAWA-1124	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1124-DUP	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1125	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1126	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1127	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1129	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1130	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1132	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1132-DUP	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1201	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1202	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1203	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1204	7/3/2023		Tiss-Fish	FROZEN				1		1	1
T41423.20	LAWA-1205	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1206	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1207	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1208	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1209	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1210	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1211	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1212	7/3/2023		Tiss-Fish	FROZEN				1		1	1
T41423.20	LAWA-1214	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1214-DUP	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1215	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1216	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1217	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1218	7/3/2023		Tiss-Fish	FROZEN				1		1	1
T41423.20	LAWA-1219	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1219-DUP	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1220	7/3/2023		Tiss-Fish	FROZEN				1			
T41423.20	LAWA-1221	7/3/2023		Tiss-Fish	FROZEN				1			

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CHAIN OF CUSTODY

Report to:
Dr. Ted Donn
Tetra Tech
3697 Mt. Diablo Blvd.
Lafayette, CA
ted.donn@tetratech.com

Project ID	SampleID	Date	Time	Medium	Preservation	Hg (EPA 1631E)	Total Arsenic - (EPA 1640)	Total Inorganic Arsenic (EPA 1632)	Hg (Tissue, EPA 1631B)	Total Arsenic (EPA 1638M)	Total Inorganic Arsenic (EPA 1632)	Barium (EPA 1638M)
T41423.22	PACPP-1081	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1081-DUP	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1082	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1083	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1084	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1085	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1086	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1087	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1087-DUP	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1088	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1089	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1090	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1091	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1092	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1092-DUP	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1093	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1094	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1095	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1096	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1097	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1098	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1099	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1100	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1101	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1101-DUP	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1102	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1103	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1104	5/22/2023		Tiss-Fish	FROZEN				1	1	1	
T41423.22	PACPP-1105	5/22/2023		Tiss-Fish	FROZEN				1	1	1	

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Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 580-130145-1

Login Number: 130145

List Number: 1

Creator: Groden, Kyle J

List Source: Eurofins Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	