ภาคผนวก ค

ใบรับรองผลการตรวจวัดคุณภาพสิ่งแวดล้อม

ภาคผนวก ค-1

คุณภาพอากาศในบรรยากาศ

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23123995
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 2815650-1

Sample Description Air Quality
Location สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออก(มาบตาพุด)(A1)(GPS 47P 0730907, 1405264)
Date Analysis Commenced Nov 09, 2023
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
23123995-1	Nov 01 - Nov 02, 2023	0.053	0.035	758	28
23123995-2	Nov 02 - Nov 03, 2023	0.084	0.031	758	29
23123995-3	Nov 03 - Nov 04, 2023	0.057	0.033	758	29
23123995-4	Nov 04 - Nov 05, 2023	0.066	0.042	758	28
23123995-5	Nov 05 - Nov 06, 2023	0.050	0.024	758	28
23123995-6	Nov 06 - Nov 07, 2023	0.065	0.039	758	29
23123995-7	Nov 07 - Nov 08, 2023	0.052	0.031	758	28
Guideline		0.33	0.12	-	-

Reference Method
Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B
Particulate Metter (PM-10) : US EPA 40 CFR Part 50 Appendix J

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
Sampled By : Nantawat Sarin

Remark :
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by ThanitaK.
Thanita Kulsuriwong
Scientist (4)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report 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.

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23123995
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 2815650-2

Sample Description Air Quality
Location วัดหนองแฟบ(A2) (GPS 47P 0729828, 1403318)
Date Analysis Commenced Nov 09, 2023
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
23123995-8	Nov 01 - Nov 02, 2023	0.035	0.023	758	28
23123995-9	Nov 02 - Nov 03, 2023	0.051	0.033	758	29
23123995-10	Nov 03 - Nov 04, 2023	0.050	0.031	758	29
23123995-11	Nov 04 - Nov 05, 2023	0.050	0.029	758	28
23123995-12	Nov 05 - Nov 06, 2023	0.049	0.019	758	28
23123995-13	Nov 06 - Nov 07, 2023	0.052	0.041	758	29
23123995-14	Nov 07 - Nov 08, 2023	0.032	0.025	758	28
Guideline		0.33	0.12	-	-

Reference Method
Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B
Particulate Metter (PM-10) : US EPA 40 CFR Part 50 Appendix J

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
Sampled By : Nantawat Sarin

Remark :
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by ThanitaK.
Thanita Kulsuriwong
Scientist (4)

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23123995
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 2815650-3

Sample Description Air Quality
Location วัดมาบชลูด(A3) (GPS 47P 0730826, 1407360)
Date Analysis Commenced Nov 09, 2023
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
23123995-15	Nov 01 - Nov 02, 2023	0.078	0.052	758	28
23123995-16	Nov 02 - Nov 03, 2023	0.085	0.046	758	29
23123995-17	Nov 03 - Nov 04, 2023	0.071	0.033	758	29
23123995-18	Nov 04 - Nov 05, 2023	0.047	0.029	758	28
23123995-19	Nov 05 - Nov 06, 2023	0.038	0.018	758	28
23123995-20	Nov 06 - Nov 07, 2023	0.062	0.032	758	29
23123995-21	Nov 07 - Nov 08, 2023	0.039	0.023	758	28
Guideline		0.33	0.12	-	-

Reference Method
Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B
Particulate Metter (PM-10) : US EPA 40 CFR Part 50 Appendix J

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
Sampled By : Nantawat Sarin

Remark :
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by ThanitaK.
Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23123992
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 2815643-1

Sample Description Air Quality
Location สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออก(มาบตาพุด)(A1)(GPS 47P 0730907, 1405264)
Parameter Nitrogen dioxide (ppm)
Measurement Date Nov 01, 2023 - Nov 08, 2023
Measurement by Nantawat Sarin

Time	23123992-1 Nov 01, 2023	23123992-2 Nov 02, 2023	23123992-3 Nov 03, 2023	23123992-4 Nov 04, 2023	23123992-5 Nov 05, 2023	23123992-6 Nov 06, 2023	23123992-7 Nov 07, 2023
10:00 AM - 11:00 AM	0.011	0.014	0.020	0.032	0.017	0.016	0.020
11:00 AM - 12:00 PM	0.011	0.014	0.017	0.022	0.019	0.018	0.023
12:00 PM - 01:00 PM	0.020	0.015	0.017	0.024	0.026	0.019	0.027
01:00 PM - 02:00 PM	0.021	0.014	0.013	0.015	0.022	0.014	0.016
02:00 PM - 03:00 PM	0.022	0.016	0.015	0.014	0.020	0.012	0.018
03:00 PM - 04:00 PM	0.022	0.016	0.012	0.020	0.015	0.013	0.017
04:00 PM - 05:00 PM	0.020	0.025	0.010	0.026	0.013	0.015	0.018
05:00 PM - 06:00 PM	0.022	0.019	0.012	0.024	0.017	0.017	0.017
06:00 PM - 07:00 PM	0.021	0.025	0.018	0.026	0.012	0.026	0.018
07:00 PM - 08:00 PM	0.021	0.026	0.024	0.031	0.012	0.029	0.020
08:00 PM - 09:00 PM	0.023	0.031	0.023	0.027	0.014	0.032	0.021
09:00 PM - 10:00 PM	0.020	0.034	0.020	0.025	0.011	0.030	0.017
10:00 PM - 11:00 PM	0.018	0.028	0.029	0.022	0.013	0.026	0.015
11:00 PM - 12:00 AM	0.018	0.028	0.022	0.019	0.014	0.024	0.013
12:00 AM - 01:00 AM	0.014	0.022	0.020	0.017	0.011	0.021	0.012
01:00 AM - 02:00 AM	0.014	0.021	0.016	0.016	0.008	0.015	0.012
02:00 AM - 03:00 AM	0.013	0.014	0.012	0.016	0.008	0.015	0.009
03:00 AM - 04:00 AM	0.011	0.014	0.012	0.015	0.007	0.012	0.007
04:00 AM - 05:00 AM	0.009	0.014	0.015	0.014	0.007	0.010	0.007
05:00 AM - 06:00 AM	0.010	0.011	0.017	0.013	0.010	0.010	0.009
06:00 AM - 07:00 AM	0.009	0.014	0.018	0.013	0.010	0.011	0.009
07:00 AM - 08:00 AM	0.015	0.018	0.018	0.016	0.014	0.014	0.013
08:00 AM - 09:00 AM	0.016	0.020	0.020	0.017	0.014	0.014	0.014
09:00 AM - 10:00 AM	0.019	0.017	0.023	0.017	0.016	0.018	0.018
Average	0.017	0.020	0.018	0.020	0.014	0.018	0.015
1hr - Maximum	0.023	0.034	0.029	0.032	0.026	0.032	0.027
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).
Reference Method : US EPAMethod Part 50 App. F (Chemiluminescence)

Approved by Orawan R.
Orawan Rakyong
Scientist (3)

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23123992
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 283551-f1

Sample Description Air (uality
Location วัดหนองแฟบ)A2G)SP7 49P 092-828, 1403318G
Parameter Nitrogen dioxide)ppmG
Measurement Date Nov 01, 2023 f Nov 08, 2023
Measurement by Nantawat 7arin

Time	23123- - 2f8 Nov 01, 2023	23123- - 2f- Nov 02, 2023	23123- - 2f10 Nov 03, 2023	23123- - 2f11 Nov 04, 2023	23123- - 2f12 Nov 05, 2023	23123- - 2f13 Nov 06, 2023	23123- - 2f14 Nov 09, 2023
11:00 AM f 12:00 PM	0.011	0.009	0.010	0.012	0.016	0.009	0.010
12:00 PM f 01:00 PM	0.012	0.011	0.011	0.010	0.012	0.00-	0.00-
01:00 PM f 02:00 PM	0.006	0.008	0.006	0.009	0.012	0.006	0.008
02:00 PM f 03:00 PM	0.010	0.008	0.005	0.008	0.013	0.005	0.005
03:00 PM f 04:00 PM	0.015	0.005	0.003	0.010	0.014	0.005	0.005
04:00 PM f 05:00 PM	0.011	0.015	0.004	0.008	0.012	0.005	0.008
05:00 PM f 06:00 PM	0.009	0.009	0.005	0.010	0.012	0.00-	0.014
06:00 PM f 09:00 PM	0.008	0.011	0.010	0.020	0.019	0.012	0.010
09:00 PM f 08:00 PM	0.006	0.013	0.016	0.020	0.00-	0.013	0.014
08:00 PM f 0- :00 PM	0.005	0.020	0.008	0.014	0.009	0.01-	0.016
0- :00 PM f 10:00 PM	0.00-	0.013	0.014	0.015	0.006	0.026	0.013
10:00 PM f 11:00 PM	0.008	0.012	0.00-	0.016	0.009	0.025	0.013
11:00 PM f 12:00 AM	0.010	0.014	0.009	0.014	0.013	0.020	0.011
12:00 AM f 01:00 AM	0.008	0.019	0.00-	0.012	0.009	0.020	0.013
01:00 AM f 02:00 AM	0.006	0.008	0.012	0.011	0.006	0.019	0.010
02:00 AM f 03:00 AM	0.006	0.005	0.013	0.012	0.009	0.011	0.008
03:00 AM f 04:00 AM	0.005	0.005	0.012	0.012	0.009	0.00-	0.004
04:00 AM f 05:00 AM	0.004	0.00-	0.010	0.012	0.009	0.015	0.004
05:00 AM f 06:00 AM	0.004	0.00-	0.011	0.012	0.009	0.014	0.006
06:00 AM f 09:00 AM	0.004	0.010	0.012	0.011	0.008	0.008	0.00-
09:00 AM f 08:00 AM	0.006	0.010	0.011	0.011	0.010	0.009	0.009
08:00 AM f 0- :00 AM	0.013	0.013	0.013	0.00-	0.009	0.014	0.011
0- :00 AM f 10:00 AM	0.012	0.010	0.018	0.008	0.011	0.015	0.008
10:00 AM f 11:00 AM	0.009	0.011	0.016	0.014	0.010	0.010	0.008
Average	0.008	0.011	0.010	0.012	0.010	0.012	0.00-
1hr f Maximum	0.015	0.020	0.018	0.020	0.019	0.026	0.016
7tandard 1hr f Average	0.190	0.190	0.190	0.190	0.190	0.190	0.190

7tandard : NotiQcation oQthe National Environment Board No. 33, 200-)B.E. 2552G
ReQrence Method : U7 EPAMethod Part 50 App. F)ChemiluminescenceG

Approved by

Orawan R.
Orawan Rakyong
7cientist)3G

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23123992
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 2835520-1

Sample Description Air Quality
Location วัดมาบชลูด(A3) (GPS 47P 0730826, 1407360)
Parameter Nitrogen dio9ide (ppm)
Measurement Date Nov 01, 2023 - Nov 08, 2023
Measurement by Nantax at Sarin

Time	23123ww2-15 Nov 01, 2023	23123ww2-16 Nov 02, 2023	23123ww2-17 Nov 03, 2023	23123ww2-18 Nov 04, 2023	23123ww2-1w Nov 05, 2023	23123ww2-20 Nov 06, 2023	23123ww2-21 Nov 07, 2023
12:00 PM - 01:00 PM	0.004	0.006	0.007	0.018	0.010	0.006	0.012
01:00 PM - 02:00 PM	0.004	0.004	0.005	0.010	0.008	0.012	0.013
02:00 PM - 03:00 PM	0.004	0.003	0.005	0.010	0.008	0.00w	0.011
03:00 PM - 04:00 PM	0.004	0.003	0.004	0.008	0.007	0.008	0.00w
04:00 PM - 05:00 PM	0.004	0.005	0.011	0.006	0.008	0.008	0.008
05:00 PM - 06:00 PM	0.006	0.006	0.008	0.006	0.005	0.008	0.011
06:00 PM - 07:00 PM	0.008	0.011	0.008	0.005	0.006	0.010	0.011
07:00 PM - 08:00 PM	0.00w	0.012	0.010	0.005	0.010	0.013	0.014
08:00 PM - 0w:00 PM	0.012	0.012	0.008	0.008	0.010	0.020	0.016
0w:00 PM - 10:00 PM	0.015	0.015	0.012	0.011	0.010	0.024	0.016
10:00 PM - 11:00 PM	0.010	0.015	0.013	0.016	0.012	0.022	0.015
11:00 PM - 12:00 AM	0.012	0.011	0.011	0.015	0.014	0.018	0.013
12:00 AM - 01:00 AM	0.010	0.01w	0.014	0.014	0.015	0.016	0.012
01:00 AM - 02:00 AM	0.010	0.016	0.014	0.011	0.011	0.013	0.011
02:00 AM - 03:00 AM	0.008	0.011	0.014	0.00w	0.012	0.011	0.010
03:00 AM - 04:00 AM	0.008	0.010	0.013	0.00w	0.010	0.013	0.007
04:00 AM - 05:00 AM	0.007	0.00w	0.010	0.008	0.007	0.010	0.005
05:00 AM - 06:00 AM	0.006	0.008	0.00w	0.007	0.006	0.00w	0.006
06:00 AM - 07:00 AM	0.005	0.008	0.011	0.006	0.008	0.006	0.008
07:00 AM - 08:00 AM	0.005	0.008	0.010	0.006	0.00w	0.007	0.007
08:00 AM - 0w:00 AM	0.006	0.012	0.011	0.006	0.00w	0.013	0.010
0w:00 AM - 10:00 AM	0.00w	0.016	0.013	0.007	0.007	0.015	0.010
10:00 AM - 11:00 AM	0.010	0.016	0.016	0.011	0.006	0.015	0.010
11:00 AM - 12:00 PM	0.008	0.011	0.017	0.013	0.005	0.014	0.00w
Average	0.008	0.010	0.011	0.00w	0.00w	0.012	0.011
1hr - Ma9imum	0.015	0.01w	0.017	0.018	0.015	0.024	0.016
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 200w(B.E. 2552).
Reference Method : US EPAMethod Part 50 App. F (Chemiluminescence)

Approved by

Orawan R.
Orax an Rakyong
Scientist (3)

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23123994
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 2815645-1

Sample Description Air Quality
Location สำนักงานนิคมอุตสาหกรรมตับบลิวเอชเอละวันออก(มาบตาพุด)(A1)(GPS 47P 0730907, 1405264)
Parameter Sulfur Dioxide (mg/m3)
Measurement Date Nov 01, 2023 - Nov 08, 2023
Measurement by Nantawat Sarin

Time	23123994-1 Nov 01, 2023	23123994-2 Nov 02, 2023	23123994-3 Nov 03, 2023	23123994-4 Nov 04, 2023	23123994-5 Nov 05, 2023	23123994-6 Nov 06, 2023	23123994-7 Nov 07, 2023
10:00 AM - 11:00 AM	0.0026	0.0031	0.0026	0.0084	0.0084	0.0058	0.0076
11:00 AM - 12:00 PM	0.0026	0.0034	0.0026	0.0065	0.0076	0.0031	0.0073
12:00 PM - 01:00 PM	0.0003	0.0031	0.0026	0.0042	0.0034	0.0071	0.0026
01:00 PM - 02:00 PM	0.0024	0.0031	0.0026	0.0029	0.0039	0.0071	0.0029
02:00 PM - 03:00 PM	0.0026	0.0029	0.0026	0.0029	0.0060	0.0068	0.0026
03:00 PM - 04:00 PM	0.0026	0.0029	0.0029	0.0029	0.0060	0.0081	0.0065
04:00 PM - 05:00 PM	0.0026	0.0029	0.0026	0.0052	0.0060	0.0081	0.0058
05:00 PM - 06:00 PM	0.0029	0.0029	0.0026	0.0052	0.0063	0.0076	0.0060
06:00 PM - 07:00 PM	0.0029	0.0029	0.0024	0.0076	0.0076	0.0079	0.0068
07:00 PM - 08:00 PM	0.0029	0.0029	0.0026	0.0073	0.0084	0.0084	0.0071
08:00 PM - 09:00 PM	0.0029	0.0029	0.0026	0.0073	0.0086	0.0084	0.0076
09:00 PM - 10:00 PM	0.0034	0.0052	0.0026	0.0081	0.0086	0.0086	0.0079
10:00 PM - 11:00 PM	0.0042	0.0037	0.0029	0.0081	0.0086	0.0089	0.0079
11:00 PM - 12:00 AM	0.0039	0.0031	0.0029	0.0084	0.0092	0.0089	0.0081
12:00 AM - 01:00 AM	0.0050	0.0031	0.0029	0.0081	0.0092	0.0084	0.0089
01:00 AM - 02:00 AM	0.0055	0.0029	0.0037	0.0084	0.0092	0.0084	0.0081
02:00 AM - 03:00 AM	0.0097	0.0029	0.0073	0.0079	0.0089	0.0084	0.0079
03:00 AM - 04:00 AM	0.0045	0.0029	0.0084	0.0081	0.0076	0.0086	0.0081
04:00 AM - 05:00 AM	0.0034	0.0026	0.0068	0.0079	0.0034	0.0084	0.0081
05:00 AM - 06:00 AM	0.0034	0.0026	0.0029	0.0029	0.0047	0.0084	0.0081
06:00 AM - 07:00 AM	0.0034	0.0024	0.0026	0.0081	0.0092	0.0084	0.0081
07:00 AM - 08:00 AM	0.0037	0.0024	0.0029	0.0089	0.0089	0.0031	0.0081
08:00 AM - 09:00 AM	0.0034	0.0024	0.0026	0.0086	0.0089	0.0031	0.0084
09:00 AM - 10:00 AM	0.0031	0.0026	0.0076	0.0084	0.0086	0.0055	0.0084
Average (24 hrs)	0.0035	0.0030	0.0035	0.0068	0.0074	0.0073	0.0070
1hr - Maximum	0.0097	0.0052	0.0084	0.0089	0.0092	0.0089	0.0089
Standard 24 hrs - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3

Standard : Notification of the National Environment Board No. 10, 1995 (B.E. 2538), No. 24, 2004 (B.E. 2547).
Reference Method : US EPA Method Part 53 and 58

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23123994
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 2835523-1

Sample Description Air Quality
Location วัดหนองแฟบ(A2) (GPS 47P 0729828, 1403318)
Parameter Sulfur Dioxide (mg/m3)
Measurement Date Nov 01, 2023 - Nov 08, 2023
Measurement by Nantawat Sarin

Time	23123994-8 Nov 01, 2023	23123994-9 Nov 02, 2023	23123994-10 Nov 03, 2023	23123994-11 Nov 04, 2023	23123994-12 Nov 05, 2023	23123994-13 Nov 06, 2023	23123994-14 Nov 07, 2023
11:00 AM - 12:00 PM	0.0008	0.0024	0.0024	0.0018	0.0024	0.0024	0.0039
12:00 PM - 01:00 PM	0.0010	0.0029	0.0024	0.0021	0.0034	0.0024	0.0024
01:00 PM - 02:00 PM	<0.0002	0.0024	0.0029	0.0013	0.0073	0.0018	0.0026
02:00 PM - 03:00 PM	0.0024	0.0016	0.0034	0.0018	0.0024	0.0018	0.0031
03:00 PM - 04:00 PM	0.0003	0.0008	0.0029	0.0021	0.0016	0.0013	0.0042
04:00 PM - 05:00 PM	<0.0002	0.0018	0.0149	0.0018	0.0021	0.0018	0.0029
05:00 PM - 06:00 PM	0.0016	0.0021	0.0105	0.0021	0.0021	0.0016	0.0031
06:00 PM - 07:00 PM	0.0031	0.0063	0.0052	0.0018	0.0024	0.0018	0.0037
07:00 PM - 08:00 PM	0.0026	0.0063	0.0042	0.0013	0.0029	0.0021	0.0039
08:00 PM - 09:00 PM	0.0024	0.0037	0.0029	0.0018	0.0024	0.0024	0.0045
09:00 PM - 10:00 PM	0.0024	0.0047	0.0029	0.0018	0.0026	0.0026	0.0031
10:00 PM - 11:00 PM	0.0018	0.0024	0.0034	0.0026	0.0026	0.0024	0.0026
11:00 PM - 12:00 AM	0.0018	0.0024	0.0031	0.0031	0.0026	0.0024	0.0024
12:00 AM - 01:00 AM	0.0024	0.0021	0.0031	0.0026	0.0026	0.0029	0.0026
01:00 AM - 02:00 AM	0.0026	0.0016	0.0031	0.0024	0.0026	0.0026	0.0029
02:00 AM - 03:00 AM	0.0029	0.0021	0.0026	0.0024	0.0026	0.0026	0.0029
03:00 AM - 04:00 AM	0.0026	0.0021	0.0029	0.0021	0.0029	0.0026	0.0029
04:00 AM - 05:00 AM	0.0026	0.0024	0.0029	0.0021	0.0026	0.0026	0.0026
05:00 AM - 06:00 AM	0.0026	0.0021	0.0029	0.0018	0.0026	0.0029	0.0026
06:00 AM - 07:00 AM	0.0016	0.0021	0.0029	0.0021	0.0029	0.0029	0.0024
07:00 AM - 08:00 AM	0.0013	0.0018	0.0026	0.0021	0.0026	0.0026	0.0021
08:00 AM - 09:00 AM	0.0016	0.0016	0.0024	0.0021	0.0029	0.0029	0.0021
09:00 AM - 10:00 AM	0.0013	0.0018	0.0024	0.0021	0.0029	0.0026	0.0018
10:00 AM - 11:00 AM	0.0018	0.0024	0.0016	0.0021	0.0031	0.0029	0.0021
Average (24 hrs)	0.0020	0.0026	0.0038	0.0021	0.0028	0.0024	0.0029
1hr - Maximum	0.0031	0.0063	0.0149	0.0031	0.0073	0.0029	0.0045
Standard 24 hrs - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3

Standard : Notification of the National Environment Board No. 10, 1995 (B.E. 2538), No. 24, 2004 (B.E. 2547).
Reference Method : US EPA Method Part 53 and 58

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23123994
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 2835525-1

Sample Description Air Quality
Location วัดมาบชลูด(A3) (GPS 47P 0730826, 1407360)
Parameter Sulfur Dio9ide (mg/m3)
Measurement Date Nov 01, 2023 - Nov 08, 2023
Measurement by Nantax at Sarin

Time	23123ww4-15 Nov 01, 2023	23123ww4-16 Nov 02, 2023	23123ww4-17 Nov 03, 2023	23123ww4-18 Nov 04, 2023	23123ww4-1w Nov 05, 2023	23123ww4-20 Nov 06, 2023	23123ww4-21 Nov 07, 2023
12:00 PM - 01:00 PM	0.0021	0.0021	0.0042	0.0018	0.0026	0.0047	0.0031
01:00 PM - 02:00 PM	0.0021	0.0031	0.0026	0.0021	0.0026	0.007w	0.0031
02:00 PM - 03:00 PM	0.0024	0.002w	0.0026	0.0021	0.0024	0.0045	0.0031
03:00 PM - 04:00 PM	0.0037	0.002w	0.0018	0.0024	0.002w	0.0031	0.0026
04:00 PM - 05:00 PM	0.002w	0.0026	0.0024	0.0026	0.0026	0.002w	0.0024
05:00 PM - 06:00 PM	0.0031	0.0026	0.0024	0.0024	0.0026	0.0024	0.0034
06:00 PM - 07:00 PM	0.0026	0.003w	0.0026	0.002w	0.0026	0.0024	0.0026
07:00 PM - 08:00 PM	0.0021	0.0042	0.0021	0.0024	0.0021	0.0031	0.002w
08:00 PM - 0w:00 PM	0.0021	0.0026	0.0018	0.0021	0.0024	0.002w	0.002w
0w:00 PM - 10:00 PM	0.0026	0.0026	0.0024	0.0018	0.0024	0.002w	0.002w
10:00 PM - 11:00 PM	0.0024	0.0024	0.0024	0.0021	0.0021	0.0026	0.0026
11:00 PM - 12:00 AM	0.0024	0.0026	0.0021	0.0021	0.0021	0.0024	0.002w
12:00 AM - 01:00 AM	0.0026	0.0024	0.0024	0.0018	0.0021	0.0024	0.0034
01:00 AM - 02:00 AM	0.0024	0.0021	0.0021	0.0018	0.0024	0.0024	0.002w
02:00 AM - 03:00 AM	0.0026	0.0021	0.0024	0.0024	0.0026	0.0026	0.0031
03:00 AM - 04:00 AM	0.0024	0.0024	0.0021	0.0024	0.0024	0.0034	0.002w
04:00 AM - 05:00 AM	0.0024	0.0026	0.0024	0.0024	0.002w	0.0047	0.0034
05:00 AM - 06:00 AM	0.0034	0.0026	0.0024	0.0021	0.002w	0.003w	0.0042
06:00 AM - 07:00 AM	0.002w	0.002w	0.0018	0.0021	0.0026	0.0031	0.0045
07:00 AM - 08:00 AM	0.0024	0.002w	0.0018	0.0018	0.0024	0.002w	0.003w
08:00 AM - 0w:00 AM	0.0026	0.0024	0.0021	0.0024	0.0021	0.002w	0.0042
0w:00 AM - 10:00 AM	0.0031	0.0026	0.0021	0.0026	0.0024	0.002w	0.0034
10:00 AM - 11:00 AM	0.002w	0.0042	0.0021	0.0024	0.0026	0.0034	0.0013
11:00 AM - 12:00 PM	0.0021	0.0037	0.0021	0.0050	0.0026	0.0034	0.0008
Average (24 hrs)	0.0026	0.0028	0.0023	0.0023	0.0025	0.0033	0.0030
1hr - Ma9imum	0.0037	0.0042	0.0042	0.0050	0.002w	0.007w	0.0045
Standard 24 hrs - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3

Standard : Notification of the National Environment Board No. 10, 1ww5 (B.E. 2538), No. 24, 2004 (B.E. 2547).
Reference Method : US EPA Method Part 53 and 58

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124032
Date Received :Nov 08, 2023
Date Reported :Nov 16, 2023
Report Number :2815648-1

Sample Number 23124032-1 to 7
Parameter Wind Speed / Wind Direction
Location สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออก(มาบตาพุด)(A1)(GPS 47P 0730907, 1405264)
Sampling Date Nov 01 - Nov 08, 2023
Sampling by Nantawat Sarin

Time	Nov 01 - Nov 02, 2023			Nov 02 - Nov 03, 2023			Nov 03 - Nov 04, 2023			Nov 04 - Nov 05, 2023			Nov 05 - Nov 06, 2023			Nov 06 - Nov 07, 2023			Nov 07 - Nov 08, 2023		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
10:00 AM - 11:00 AM	0.5	40.0	NE	0.0	-	-	0.0	-	-	0.9	336.0	NNW	0.8	0.0	N	0.9	328.0	NNW	0.6	314.0	NW
11:00 AM - 12:00 PM	1.0	50.0	NE	3.8	29.0	NNE	1.4	110.0	ESE	0.9	263.0	W	1.9	42.0	NE	1.0	288.0	WNW	1.2	320.0	NW
12:00 PM - 01:00 PM	1.3	55.0	NE	0.0	-	-	0.0	-	-	1.1	243.0	WSW	1.6	215.0	SW	0.7	285.0	WNW	0.1	-	-
01:00 PM - 02:00 PM	0.0	-	-	0.9	19.0	NNE	0.6	347.0	NNW	1.3	264.0	W	0.7	273.0	W	3.1	272.0	W	0.3	214.0	SW
02:00 PM - 03:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	1.1	32.0	NNE	1.4	249.0	WSW	1.8	274.0	W	1.7	311.0	NW
03:00 PM - 04:00 PM	0.0	-	-	0.0	-	-	1.3	267.0	W	0.0	-	-	0.8	278.0	W	1.3	232.0	SW	0.3	323.0	NW
04:00 PM - 05:00 PM	0.0	-	-	1.4	269.0	W	1.5	248.0	WSW	0.5	280.0	W	1.4	304.0	NW	1.1	54.0	NE	2.4	28.0	NNE
05:00 PM - 06:00 PM	0.5	297.0	WNW	0.0	-	-	0.6	253.0	WSW	2.5	32.0	NNE	2.9	35.0	NE	0.8	304.0	NW	1.0	71.0	ENE
06:00 PM - 07:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	1.3	9.0	N	2.0	35.0	NE	0.3	323.0	NW	1.4	17.0	NNE
07:00 PM - 08:00 PM	0.5	331.0	NNW	0.3	321.0	NW	0.0	-	-	0.4	30.0	NNE	0.5	48.0	NE	0.9	14.0	NNE	1.9	4.0	N
08:00 PM - 09:00 PM	0.0	-	-	0.0	-	-	0.3	306.0	NW	0.0	-	-	1.5	37.0	NE	0.8	28.0	NNE	1.2	31.0	NNE
09:00 PM - 10:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	1.3	49.0	NE	1.2	36.0	NE	1.9	34.0	NE
10:00 PM - 11:00 PM	0.6	340.0	NNW	0.0	-	-	0.4	358.0	N	0.9	26.0	NNE	1.2	53.0	NE	0.0	-	-	1.0	50.0	NE
11:00 PM - 12:00 AM	0.0	-	-	0.4	351.0	N	0.0	-	-	1.0	42.0	NE	0.9	37.0	NE	0.0	-	-	1.3	11.0	N
12:00 AM - 01:00 AM	0.0	-	-	0.3	27.0	NNE	0.0	-	-	1.1	31.0	NNE	0.7	56.0	NE	0.7	43.0	NE	0.9	22.0	NNE
01:00 AM - 02:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.9	29.0	NNE	0.9	15.0	NNE	2.3	53.0	NE	0.7	28.0	NNE
02:00 AM - 03:00 AM	1.1	60.0	ENE	0.0	-	-	0.0	-	-	0.0	-	-	0.9	40.0	NE	1.3	24.0	NNE	1.2	41.0	NE
03:00 AM - 04:00 AM	1.7	34.0	NE	0.0	-	-	2.2	26.0	NNE	0.9	33.0	NNE	1.5	37.0	NE	1.0	27.0	NNE	1.1	3.0	N
04:00 AM - 05:00 AM	0.0	-	-	0.0	-	-	1.1	39.0	NE	0.0	-	-	1.1	7.0	N	1.4	28.0	NNE	0.5	52.0	NE
05:00 AM - 06:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	2.1	28.0	NNE	0.0	-	-	0.0	-	-	0.8	0.0	N
06:00 AM - 07:00 AM	0.3	79.0	E	0.0	-	-	0.0	-	-	1.9	31.0	NNE	0.8	16.0	NNE	0.0	-	-	1.0	16.0	NNE
07:00 AM - 08:00 AM	0.0	-	-	0.3	48.0	NE	1.4	38.0	NE	1.2	16.0	NNE	0.9	28.0	NNE	1.1	46.0	NE	1.5	34.0	NE
08:00 AM - 09:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.9	24.0	NNE	0.9	51.0	NE	0.8	29.0	NNE	1.4	41.0	NE
09:00 AM - 10:00 AM	0.3	359.0	N	0.4	41.0	NE	1.1	21.0	NNE	0.1	-	-	1.8	49.0	NE	1.4	11.0	N	1.0	38.0	NE

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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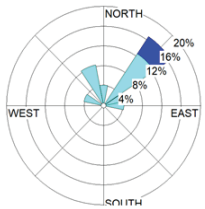
Analysis / Test Report

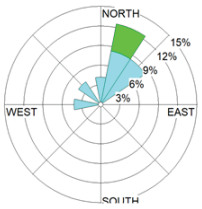
Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124032
Date Received :Nov 08, 2023
Date Reported :Nov 16, 2023
Report Number :2815648-1

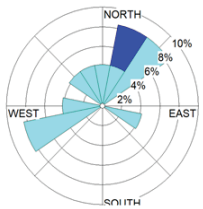
Wind Rose



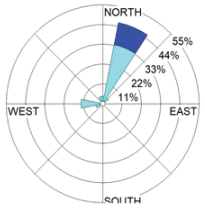
Date : Nov 01-02, 2023



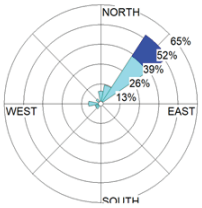
Date : Nov 02-03, 2023



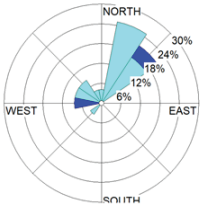
Date : Nov 03-04, 2023



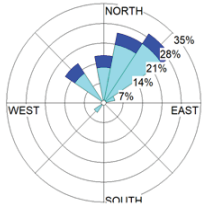
Date : Nov 04-05, 2023



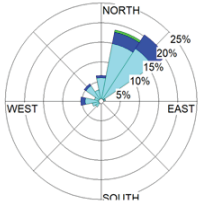
Date : Nov 05-06, 2023



Date : Nov 06-07, 2023



Date : Nov 07-08, 2023



Date : Nov 01-08, 2023

	WS(m/s)	%
	≥ 10.0	0.00
	8.0-10.0	0.00
	5.5-8.0	0.00
	3.3-5.5	0.60
	1.7-3.3	9.52
	0.3-1.7	57.14
	Calms	32.74

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2373119
Date Received : Jul 04, 2023
Date Reported : Jul 11, 2023
Report Number : 2697006-1

Sample Number	2373119-1
Sampled Date	Jul 03, 2023
Sample Description	Air Quality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออก(มาบตาพุด)(A1) (GPS 47P 0730907, 1405264)
Date Analysis Commenced	Jul 05, 2023
Condition of Sample	Drawn into one 6-L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,1,1-Trichloroethane	03/07/23 - 04/07/23	ug/m3	0.90	2.73	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,1,2,2-Tetrachloroethane	03/07/23 - 04/07/23	ug/m3	0.10	0.34	Not Detected	83	Based on US EPA Compendium Method, TO-15	PCD	Rayong
1,1,2-Trichloro-1,2,2-Trifluoroethane	03/07/23 - 04/07/23	ug/m3	1.00	3.83	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,1,2-Trichloroethane	03/07/23 - 04/07/23	ug/m3	0.90	2.73	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,1-Dichloroethane	03/07/23 - 04/07/23	ug/m3	0.70	2.02	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,1-Dichloroethene	03/07/23 - 04/07/23	ug/m3	0.70	1.98	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,2,3-Trimethylbenzene	03/07/23 - 04/07/23	ug/m3	0.80	2.46	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,2,4-Trichlorobenzene	03/07/23 - 04/07/23	ug/m3	1.20	3.71	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,2,4-Trimethylbenzene	03/07/23 - 04/07/23	ug/m3	0.80	2.46	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,2-Dibromoethane	03/07/23 - 04/07/23	ug/m3	0.10	0.38	Not Detected	370	Based on US EPA Compendium Method, TO-15	PCD	Rayong
1,2-Dichlorobenzene	03/07/23 - 04/07/23	ug/m3	0.20	0.60	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong

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Dej Changchon
Senior Manager

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2373119
Date Received : Jul 04, 2023
Date Reported : Jul 11, 2023
Report Number : 2697006-1

Sample Number	2373119-1
Sampled Date	Jul 03, 2023
Sample Description	Air Quality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออก(มาบตาพุด)(A1) (GPS 47P 0730907, 1405264)
Date Analysis Commenced	Jul 05, 2023
Condition of Sample	Drawn into one 6-L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,2-Dichloroethane	03/07/23 - 04/07/23	ug/m3	0.07	0.20	<0.20	48	Based on US EPA Compendium Method, TO-15	PCD	Rayong
1,2-Dichloropropane	03/07/23 - 04/07/23	ug/m3	0.08	0.23	Not Detected	82	Based on US EPA Compendium Method, TO-15	PCD	Rayong
1,2-Dichlorotetrafluoroethane	03/07/23 - 04/07/23	ug/m3	1.20	3.50	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,3,5-Trimethylbenzene	03/07/23 - 04/07/23	ug/m3	0.80	2.46	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,3-Butadiene	03/07/23 - 04/07/23	ug/m3	0.04	0.11	<0.11	5.3	Based on US EPA Compendium Method, TO-15	PCD	Rayong
1,3-Dichlorobenzene	03/07/23 - 04/07/23	ug/m3	0.20	0.60	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,4-Dichlorobenzene	03/07/23 - 04/07/23	ug/m3	0.20	0.60	Not Detected	1100	Based on US EPA Compendium Method, TO-15	PCD	Rayong
1,4-Dioxane	03/07/23 - 04/07/23	ug/m3	0.10	0.36	Not Detected	860	Based on US EPA Compendium Method, TO-15	PCD	Rayong
1-Butanol	03/07/23 - 04/07/23	ug/m3	0.50	1.52	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1-Propanol	03/07/23 - 04/07/23	ug/m3	0.40	1.23	<1.23	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
2-Hexanone	03/07/23 - 04/07/23	ug/m3	0.70	2.05	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong

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Senior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2373119
Date Received : Jul 04, 2023
Date Reported : Jul 11, 2023
Report Number : 2697006-1

Sample Number	2373119-1
Sampled Date	Jul 03, 2023
Sample Description	Air Quality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออก(มาบตาพุด)(A1) (GPS 47P 0730907, 1405264)
Date Analysis Commenced	Jul 05, 2023
Condition of Sample	Drawn into one 6-L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
2-Pentanone	03/07/23 - 04/07/23	ug/m3	0.60	1.76	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
2-Propanol	03/07/23 - 04/07/23	ug/m3	0.40	1.23	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
3-Hexanone	03/07/23 - 04/07/23	ug/m3	0.70	2.05	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
3-Pentanone	03/07/23 - 04/07/23	ug/m3	0.60	1.76	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Acetaldehyde	03/07/23 - 04/07/23	ug/m3	0.05	0.18	2.20	860	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Acetone	03/07/23 - 04/07/23	ug/m3	0.08	0.24	7.84	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Acetonitrile	03/07/23 - 04/07/23	ug/m3	0.30	0.84	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Acrolein	03/07/23 - 04/07/23	ug/m3	0.08	0.23	Not Detected	0.55	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Acrylonitrile	03/07/23 - 04/07/23	ug/m3	0.07	0.22	Not Detected	10	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Benzene	03/07/23 - 04/07/23	ug/m3	0.05	0.16	0.45	7.6	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Benzyl Chloride	03/07/23 - 04/07/23	ug/m3	0.17	0.52	Not Detected	12	Based on US EPA Compendium Method, TO-15	PCD	Rayong

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Senior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2373119
Date Received : Jul 04, 2023
Date Reported : Jul 11, 2023
Report Number : 2697006-1

Sample Number	2373119-1
Sampled Date	Jul 03, 2023
Sample Description	Air Quality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออก(มาบตาพุด)(A1) (GPS 47P 0730907, 1405264)
Date Analysis Commenced	Jul 05, 2023
Condition of Sample	Drawn into one 6-L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Bromodichloromethane	03/07/23 - 04/07/23	ug/m3	1.00	3.35	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Bromoform	03/07/23 - 04/07/23	ug/m3	1.00	5.17	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Bromomethane	03/07/23 - 04/07/23	ug/m3	0.06	0.19	1.48	190	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Butanal	03/07/23 - 04/07/23	ug/m3	0.49	1.47	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Carbon Disulfide	03/07/23 - 04/07/23	ug/m3	0.05	0.16	0.50	100	Based on US EPA Compendium Method, TO-15	NEB	Rayong
Carbon Tetrachloride	03/07/23 - 04/07/23	ug/m3	0.10	0.31	<0.31	150	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Chlorobenzene	03/07/23 - 04/07/23	ug/m3	0.80	2.30	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Chlorodifluoromethane (HCFC-22)	03/07/23 - 04/07/23	ug/m3	0.60	1.77	<1.77	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Chloroethane	03/07/23 - 04/07/23	ug/m3	0.40	1.32	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Chloroform	03/07/23 - 04/07/23	ug/m3	0.08	0.24	<0.24	57	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Chloromethane	03/07/23 - 04/07/23	ug/m3	0.30	1.03	1.03	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong

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Senior Manager

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Analysis / Test Report

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18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2373119
Date Received : Jul 04, 2023
Date Reported : Jul 11, 2023
Report Number : 2697006-1

Sample Number	2373119-1
Sampled Date	Jul 03, 2023
Sample Description	Air Quality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออก(มาบตาพุด)(A1) (GPS 47P 0730907, 1405264)
Date Analysis Commenced	Jul 05, 2023
Condition of Sample	Drawn into one 6-L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
cis-1,2-Dichloroethene	03/07/23 - 04/07/23	ug/m3	0.70	1.98	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
cis-1,3-Dichloropropene	03/07/23 - 04/07/23	ug/m3	0.80	2.27	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Cyclohexane	03/07/23 - 04/07/23	ug/m3	0.60	1.72	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Cyclopentane	03/07/23 - 04/07/23	ug/m3	0.50	1.43	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Dichlorodifluoromethane (CFC-112)	03/07/23 - 04/07/23	ug/m3	0.80	2.47	2.67	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Dichloromethane	03/07/23 - 04/07/23	ug/m3	0.06	0.17	<0.17	210	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Ethanol	03/07/23 - 04/07/23	ug/m3	0.30	0.94	1.96	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Ethyl Benzene	03/07/23 - 04/07/23	ug/m3	0.70	2.17	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Hexanal	03/07/23 - 04/07/23	ug/m3	0.60	2.05	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Hexane	03/07/23 - 04/07/23	ug/m3	0.60	1.76	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Isobutene	03/07/23 - 04/07/23	ug/m3	0.40	1.15	<1.15	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong

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Senior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2373119
Date Received : Jul 04, 2023
Date Reported : Jul 11, 2023
Report Number : 2697006-1

Sample Number	2373119-1
Sampled Date	Jul 03, 2023
Sample Description	Air Quality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออก(มาบตาพุด)(A1) (GPS 47P 0730907, 1405264)
Date Analysis Commenced	Jul 05, 2023
Condition of Sample	Drawn into one 6-L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Isoprene	03/07/23 - 04/07/23	ug/m3	0.50	1.39	<1.39	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
m,p-Xylene	03/07/23 - 04/07/23	ug/m3	1.50	4.34	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Methacrolein	03/07/23 - 04/07/23	ug/m3	0.50	1.43	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Methanol	03/07/23 - 04/07/23	ug/m3	0.20	0.66	15.12	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Methyl Ethyl Ketone	03/07/23 - 04/07/23	ug/m3	0.50	1.47	<1.47	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Methyl Iodide	03/07/23 - 04/07/23	ug/m3	0.90	2.90	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Methyl Isobutyl Ketone	03/07/23 - 04/07/23	ug/m3	0.70	2.05	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Methyl tert butyl ether	03/07/23 - 04/07/23	ug/m3	0.60	1.80	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Methyl Vinyl Ketone	03/07/23 - 04/07/23	ug/m3	0.50	1.43	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
o-Xylene	03/07/23 - 04/07/23	ug/m3	0.70	2.17	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Pentanal	03/07/23 - 04/07/23	ug/m3	0.50	1.76	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong

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Analysis / Test Report

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18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2373119
Date Received : Jul 04, 2023
Date Reported : Jul 11, 2023
Report Number : 2697006-1

Sample Number	2373119-1
Sampled Date	Jul 03, 2023
Sample Description	Air Quality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออก(มาบตาพุด)(A1) (GPS 47P 0730907, 1405264)
Date Analysis Commenced	Jul 05, 2023
Condition of Sample	Drawn into one 6-L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Pentane	03/07/23 - 04/07/23	ug/m3	0.50	1.48	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Propanal	03/07/23 - 04/07/23	ug/m3	0.50	1.19	<1.19	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Propene (Propylene)	03/07/23 - 04/07/23	ug/m3	0.30	0.86	1.93	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Styrene	03/07/23 - 04/07/23	ug/m3	0.70	2.13	<2.13	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Tetrachloroethylene	03/07/23 - 04/07/23	ug/m3	0.11	0.34	Not Detected	400	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Toluene	03/07/23 - 04/07/23	ug/m3	0.60	1.88	<1.88	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
trans-1,2-Dichloroethene	03/07/23 - 04/07/23	ug/m3	0.70	1.98	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
trans-1,3-Dichloropropene	03/07/23 - 04/07/23	ug/m3	0.80	2.27	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Trichloroethylene	03/07/23 - 04/07/23	ug/m3	0.09	0.27	Not Detected	130	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Trichlorofluoromethane (F-11)	03/07/23 - 04/07/23	ug/m3	0.90	2.81	<2.81	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Vinyl Acetate	03/07/23 - 04/07/23	ug/m3	0.60	1.76	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong

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Dej Changchon
Senior Manager

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Analysis / Test Report

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18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2373119
Date Received : Jul 04, 2023
Date Reported : Jul 11, 2023
Report Number : 2697006-1

Sample Number	2373119-1
Sampled Date	Jul 03, 2023
Sample Description	Air Quality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออก(มาบตาพุด)(A1) (GPS 47P 0730907, 1405264)
Date Analysis Commenced	Jul 05, 2023
Condition of Sample	Drawn into one 6-L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Vinyl Chloride	03/07/23 - 04/07/23	ug/m3	0.04	0.13	Not Detected	20	Based on US EPA Compendium Method, TO-15	PCD	Rayong

Guideline :
NEB : Notification of National Environment Board, B.E. 2560 (2017)
PCD : Notification of the Pollution Control Department, which was published in the Royal Government Gazette Vol. 126 Special Part 13 D dated January 27, B.E. 2552 (2009).
Sampled By : Nantawat Sarin

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by
Dej Changchon
Senior Manager

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P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2373119
Date Received : Jul 04, 2023
Date Reported : Jul 11, 2023
Report Number : 2697006-1

Sample Number	2373119-2
Sampled Date	Jul 03, 2023
Sample Description	Air Quality
Location	วัดหนองแฟบ(A2) (GPS 47P 0729828, 1403318)
Date Analysis Commenced	Jul 05, 2023
Condition of Sample	Drawn into one 6-L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,1,1-Trichloroethane	03/07/23 - 04/07/23	ug/m3	0.90	2.73	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,1,2,2-Tetrachloroethane	03/07/23 - 04/07/23	ug/m3	0.10	0.34	Not Detected	83	Based on US EPA Compendium Method, TO-15	PCD	Rayong
1,1,2-Trichloro-1,2,2-Trifluoroethane	03/07/23 - 04/07/23	ug/m3	1.00	3.83	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,1,2-Trichloroethane	03/07/23 - 04/07/23	ug/m3	0.90	2.73	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,1-Dichloroethane	03/07/23 - 04/07/23	ug/m3	0.70	2.02	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,1-Dichloroethene	03/07/23 - 04/07/23	ug/m3	0.70	1.98	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,2,3-Trimethylbenzene	03/07/23 - 04/07/23	ug/m3	0.80	2.46	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,2,4-Trichlorobenzene	03/07/23 - 04/07/23	ug/m3	1.20	3.71	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,2,4-Trimethylbenzene	03/07/23 - 04/07/23	ug/m3	0.80	2.46	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,2-Dibromoethane	03/07/23 - 04/07/23	ug/m3	0.10	0.38	Not Detected	370	Based on US EPA Compendium Method, TO-15	PCD	Rayong
1,2-Dichlorobenzene	03/07/23 - 04/07/23	ug/m3	0.20	0.60	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong

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Dej Changchon
Senior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2373119
Date Received : Jul 04, 2023
Date Reported : Jul 11, 2023
Report Number : 2697006-1

Sample Number	2373119-2
Sampled Date	Jul 03, 2023
Sample Description	Air Quality
Location	วัดหนองแฟบ(A2) (GPS 47P 0729828, 1403318)
Date Analysis Commenced	Jul 05, 2023
Condition of Sample	Drawn into one 6-L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,2-Dichloroethane	03/07/23 - 04/07/23	ug/m3	0.07	0.20	<0.20	48	Based on US EPA Compendium Method, TO-15	PCD	Rayong
1,2-Dichloropropane	03/07/23 - 04/07/23	ug/m3	0.08	0.23	Not Detected	82	Based on US EPA Compendium Method, TO-15	PCD	Rayong
1,2-Dichlorotetrafluoroethane	03/07/23 - 04/07/23	ug/m3	1.20	3.50	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,3,5-Trimethylbenzene	03/07/23 - 04/07/23	ug/m3	0.80	2.46	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,3-Butadiene	03/07/23 - 04/07/23	ug/m3	0.04	0.11	<0.11	5.3	Based on US EPA Compendium Method, TO-15	PCD	Rayong
1,3-Dichlorobenzene	03/07/23 - 04/07/23	ug/m3	0.20	0.60	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,4-Dichlorobenzene	03/07/23 - 04/07/23	ug/m3	0.20	0.60	Not Detected	1100	Based on US EPA Compendium Method, TO-15	PCD	Rayong
1,4-Dioxane	03/07/23 - 04/07/23	ug/m3	0.10	0.36	Not Detected	860	Based on US EPA Compendium Method, TO-15	PCD	Rayong
1-Butanol	03/07/23 - 04/07/23	ug/m3	0.50	1.52	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1-Propanol	03/07/23 - 04/07/23	ug/m3	0.40	1.23	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
2-Hexanone	03/07/23 - 04/07/23	ug/m3	0.70	2.05	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong

Approved by

Dej Changchon
Senior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2373119
Date Received : Jul 04, 2023
Date Reported : Jul 11, 2023
Report Number : 2697006-1

Sample Number	2373119-2
Sampled Date	Jul 03, 2023
Sample Description	Air Quality
Location	วัดหนองแฟบ(A2) (GPS 47P 0729828, 1403318)
Date Analysis Commenced	Jul 05, 2023
Condition of Sample	Drawn into one 6-L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
2-Pentanone	03/07/23 - 04/07/23	ug/m3	0.60	1.76	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
2-Propanol	03/07/23 - 04/07/23	ug/m3	0.40	1.23	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
3-Hexanone	03/07/23 - 04/07/23	ug/m3	0.70	2.05	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
3-Pentanone	03/07/23 - 04/07/23	ug/m3	0.60	1.76	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Acetaldehyde	03/07/23 - 04/07/23	ug/m3	0.05	0.18	2.06	860	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Acetone	03/07/23 - 04/07/23	ug/m3	0.08	0.24	4.89	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Acetonitrile	03/07/23 - 04/07/23	ug/m3	0.30	0.84	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Acrolein	03/07/23 - 04/07/23	ug/m3	0.08	0.23	<0.23	0.55	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Acrylonitrile	03/07/23 - 04/07/23	ug/m3	0.07	0.22	Not Detected	10	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Benzene	03/07/23 - 04/07/23	ug/m3	0.05	0.16	0.26	7.6	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Benzyl Chloride	03/07/23 - 04/07/23	ug/m3	0.17	0.52	Not Detected	12	Based on US EPA Compendium Method, TO-15	PCD	Rayong

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Dej Changchon
Senior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2373119
Date Received : Jul 04, 2023
Date Reported : Jul 11, 2023
Report Number : 2697006-1

Sample Number	2373119-2
Sampled Date	Jul 03, 2023
Sample Description	Air Quality
Location	วัดหนองแฟบ(A2) (GPS 47P 0729828, 1403318)
Date Analysis Commenced	Jul 05, 2023
Condition of Sample	Drawn into one 6-L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Bromodichloromethane	03/07/23 - 04/07/23	ug/m3	1.00	3.35	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Bromoform	03/07/23 - 04/07/23	ug/m3	1.00	5.17	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Bromomethane	03/07/23 - 04/07/23	ug/m3	0.06	0.19	<0.19	190	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Butanal	03/07/23 - 04/07/23	ug/m3	0.49	1.47	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Carbon Disulfide	03/07/23 - 04/07/23	ug/m3	0.05	0.16	Not Detected	100	Based on US EPA Compendium Method, TO-15	NEB	Rayong
Carbon Tetrachloride	03/07/23 - 04/07/23	ug/m3	0.10	0.31	<0.31	150	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Chlorobenzene	03/07/23 - 04/07/23	ug/m3	0.80	2.30	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Chlorodifluoromethane (HCFC-22)	03/07/23 - 04/07/23	ug/m3	0.60	1.77	<1.77	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Chloroethane	03/07/23 - 04/07/23	ug/m3	0.40	1.32	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Chloroform	03/07/23 - 04/07/23	ug/m3	0.08	0.24	<0.24	57	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Chloromethane	03/07/23 - 04/07/23	ug/m3	0.30	1.03	1.07	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong

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Senior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2373119
Date Received : Jul 04, 2023
Date Reported : Jul 11, 2023
Report Number : 2697006-1

Sample Number	2373119-2
Sampled Date	Jul 03, 2023
Sample Description	Air Quality
Location	วัดหนองแฟบ(A2) (GPS 47P 0729828, 1403318)
Date Analysis Commenced	Jul 05, 2023
Condition of Sample	Drawn into one 6-L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
cis-1,2-Dichloroethene	03/07/23 - 04/07/23	ug/m3	0.70	1.98	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
cis-1,3-Dichloropropene	03/07/23 - 04/07/23	ug/m3	0.80	2.27	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Cyclohexane	03/07/23 - 04/07/23	ug/m3	0.60	1.72	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Cyclopentane	03/07/23 - 04/07/23	ug/m3	0.50	1.43	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Dichlorodifluoromethane (CFC-112)	03/07/23 - 04/07/23	ug/m3	0.80	2.47	2.57	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Dichloromethane	03/07/23 - 04/07/23	ug/m3	0.06	0.17	<0.17	210	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Ethanol	03/07/23 - 04/07/23	ug/m3	0.30	0.94	7.35	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Ethyl Benzene	03/07/23 - 04/07/23	ug/m3	0.70	2.17	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Hexanal	03/07/23 - 04/07/23	ug/m3	0.60	2.05	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Hexane	03/07/23 - 04/07/23	ug/m3	0.60	1.76	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Isobutene	03/07/23 - 04/07/23	ug/m3	0.40	1.15	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong

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Senior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2373119
Date Received : Jul 04, 2023
Date Reported : Jul 11, 2023
Report Number : 2697006-1

Sample Number	2373119-2
Sampled Date	Jul 03, 2023
Sample Description	Air Quality
Location	วัดหนองแฟบ(A2) (GPS 47P 0729828, 1403318)
Date Analysis Commenced	Jul 05, 2023
Condition of Sample	Drawn into one 6-L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Isoprene	03/07/23 - 04/07/23	ug/m3	0.50	1.39	<1.39	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
m,p-Xylene	03/07/23 - 04/07/23	ug/m3	1.50	4.34	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Methacrolein	03/07/23 - 04/07/23	ug/m3	0.50	1.43	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Methanol	03/07/23 - 04/07/23	ug/m3	0.20	0.66	12.40	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Methyl Ethyl Ketone	03/07/23 - 04/07/23	ug/m3	0.50	1.47	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Methyl Iodide	03/07/23 - 04/07/23	ug/m3	0.90	2.90	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Methyl Isobutyl Ketone	03/07/23 - 04/07/23	ug/m3	0.70	2.05	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Methyl tert butyl ether	03/07/23 - 04/07/23	ug/m3	0.60	1.80	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Methyl Vinyl Ketone	03/07/23 - 04/07/23	ug/m3	0.50	1.43	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
o-Xylene	03/07/23 - 04/07/23	ug/m3	0.70	2.17	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Pentanal	03/07/23 - 04/07/23	ug/m3	0.50	1.76	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong

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Senior Manager

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Analysis / Test Report

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18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2373119
Date Received : Jul 04, 2023
Date Reported : Jul 11, 2023
Report Number : 2697006-1

Sample Number	2373119-2
Sampled Date	Jul 03, 2023
Sample Description	Air Quality
Location	วัดหนองแฟบ(A2) (GPS 47P 0729828, 1403318)
Date Analysis Commenced	Jul 05, 2023
Condition of Sample	Drawn into one 6-L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Pentane	03/07/23 - 04/07/23	ug/m3	0.50	1.48	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Propanal	03/07/23 - 04/07/23	ug/m3	0.50	1.19	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Propene (Propylene)	03/07/23 - 04/07/23	ug/m3	0.30	0.86	<0.86	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Styrene	03/07/23 - 04/07/23	ug/m3	0.70	2.13	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Tetrachloroethylene	03/07/23 - 04/07/23	ug/m3	0.11	0.34	Not Detected	400	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Toluene	03/07/23 - 04/07/23	ug/m3	0.60	1.88	<1.88	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
trans-1,2-Dichloroethene	03/07/23 - 04/07/23	ug/m3	0.70	1.98	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
trans-1,3-Dichloropropene	03/07/23 - 04/07/23	ug/m3	0.80	2.27	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Trichloroethylene	03/07/23 - 04/07/23	ug/m3	0.09	0.27	Not Detected	130	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Trichlorofluoromethane (F-11)	03/07/23 - 04/07/23	ug/m3	0.90	2.81	<2.81	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Vinyl Acetate	03/07/23 - 04/07/23	ug/m3	0.60	1.76	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong

Approved by

Dej Changchon
Senior Manager

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Analysis / Test Report

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18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2373119
Date Received : Jul 04, 2023
Date Reported : Jul 11, 2023
Report Number : 2697006-1

Sample Number	2373119-2
Sampled Date	Jul 03, 2023
Sample Description	Air Quality
Location	วัดหนองแฟบ(A2) (GPS 47P 0729828, 1403318)
Date Analysis Commenced	Jul 05, 2023
Condition of Sample	Drawn into one 6-L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Vinyl Chloride	03/07/23 - 04/07/23	ug/m3	0.04	0.13	Not Detected	20	Based on US EPA Compendium Method, TO-15	PCD	Rayong

Guideline :
NEB : Notification of National Environment Board, B.E. 2560 (2017)
PCD : Notification of the Pollution Control Department, which was published in the Royal Government Gazette Vol. 126 Special Part 13 D dated January 27, B.E. 2552 (2009).
Sampled By : Nantawat Sarin

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by
Dej Changchon
Senior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2373119
Date Received : Jul 04, 2023
Date Reported : Jul 11, 2023
Report Number : 2697006-1

Sample Number	2373119-3
Sampled Date	Jul 03, 2023
Sample Description	Air Quality
Location	วัดมาบชลูด(A3) (GPS 47P 0730826, 1407360)
Date Analysis Commenced	Jul 05, 2023
Condition of Sample	Drawn into one 6-L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,1,1-Trichloroethane	03/07/23 - 04/07/23	ug/m3	0.90	2.73	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,1,2,2-Tetrachloroethane	03/07/23 - 04/07/23	ug/m3	0.10	0.34	Not Detected	83	Based on US EPA Compendium Method, TO-15	PCD	Rayong
1,1,2-Trichloro-1,2,2-Trifluoroethane	03/07/23 - 04/07/23	ug/m3	1.00	3.83	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,1,2-Trichloroethane	03/07/23 - 04/07/23	ug/m3	0.90	2.73	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,1-Dichloroethane	03/07/23 - 04/07/23	ug/m3	0.70	2.02	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,1-Dichloroethene	03/07/23 - 04/07/23	ug/m3	0.70	1.98	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,2,3-Trimethylbenzene	03/07/23 - 04/07/23	ug/m3	0.80	2.46	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,2,4-Trichlorobenzene	03/07/23 - 04/07/23	ug/m3	1.20	3.71	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,2,4-Trimethylbenzene	03/07/23 - 04/07/23	ug/m3	0.80	2.46	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,2-Dibromoethane	03/07/23 - 04/07/23	ug/m3	0.10	0.38	Not Detected	370	Based on US EPA Compendium Method, TO-15	PCD	Rayong
1,2-Dichlorobenzene	03/07/23 - 04/07/23	ug/m3	0.20	0.60	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong

Approved by
Dej Changchon
Senior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2373119
Date Received : Jul 04, 2023
Date Reported : Jul 11, 2023
Report Number : 2697006-1

Sample Number	2373119-3
Sampled Date	Jul 03, 2023
Sample Description	Air Quality
Location	วัดมาบชลูด(A3) (GPS 47P 0730826, 1407360)
Date Analysis Commenced	Jul 05, 2023
Condition of Sample	Drawn into one 6-L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,2-Dichloroethane	03/07/23 - 04/07/23	ug/m3	0.07	0.20	<0.20	48	Based on US EPA Compendium Method, TO-15	PCD	Rayong
1,2-Dichloropropane	03/07/23 - 04/07/23	ug/m3	0.08	0.23	Not Detected	82	Based on US EPA Compendium Method, TO-15	PCD	Rayong
1,2-Dichlorotetrafluoroethane	03/07/23 - 04/07/23	ug/m3	1.20	3.50	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,3,5-Trimethylbenzene	03/07/23 - 04/07/23	ug/m3	0.80	2.46	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,3-Butadiene	03/07/23 - 04/07/23	ug/m3	0.04	0.11	Not Detected	5.3	Based on US EPA Compendium Method, TO-15	PCD	Rayong
1,3-Dichlorobenzene	03/07/23 - 04/07/23	ug/m3	0.20	0.60	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1,4-Dichlorobenzene	03/07/23 - 04/07/23	ug/m3	0.20	0.60	Not Detected	1100	Based on US EPA Compendium Method, TO-15	PCD	Rayong
1,4-Dioxane	03/07/23 - 04/07/23	ug/m3	0.10	0.36	Not Detected	860	Based on US EPA Compendium Method, TO-15	PCD	Rayong
1-Butanol	03/07/23 - 04/07/23	ug/m3	0.50	1.52	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
1-Propanol	03/07/23 - 04/07/23	ug/m3	0.40	1.23	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
2-Hexanone	03/07/23 - 04/07/23	ug/m3	0.70	2.05	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong

Approved by

Dej Changchon
Senior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2373119
Date Received : Jul 04, 2023
Date Reported : Jul 11, 2023
Report Number : 2697006-1

Sample Number	2373119-3
Sampled Date	Jul 03, 2023
Sample Description	Air Quality
Location	วัดมาบชลูด(A3) (GPS 47P 0730826, 1407360)
Date Analysis Commenced	Jul 05, 2023
Condition of Sample	Drawn into one 6-L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
2-Pentanone	03/07/23 - 04/07/23	ug/m3	0.60	1.76	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
2-Propanol	03/07/23 - 04/07/23	ug/m3	0.40	1.23	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
3-Hexanone	03/07/23 - 04/07/23	ug/m3	0.70	2.05	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
3-Pentanone	03/07/23 - 04/07/23	ug/m3	0.60	1.76	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Acetaldehyde	03/07/23 - 04/07/23	ug/m3	0.05	0.18	1.12	860	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Acetone	03/07/23 - 04/07/23	ug/m3	0.08	0.24	5.13	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Acetonitrile	03/07/23 - 04/07/23	ug/m3	0.30	0.84	<0.84	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Acrolein	03/07/23 - 04/07/23	ug/m3	0.08	0.23	Not Detected	0.55	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Acrylonitrile	03/07/23 - 04/07/23	ug/m3	0.07	0.22	1.74	10	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Benzene	03/07/23 - 04/07/23	ug/m3	0.05	0.16	0.32	7.6	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Benzyl Chloride	03/07/23 - 04/07/23	ug/m3	0.17	0.52	Not Detected	12	Based on US EPA Compendium Method, TO-15	PCD	Rayong

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Senior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2373119
Date Received : Jul 04, 2023
Date Reported : Jul 11, 2023
Report Number : 2697006-1

Sample Number	2373119-3
Sampled Date	Jul 03, 2023
Sample Description	Air Quality
Location	วัดมาบชลูด(A3) (GPS 47P 0730826, 1407360)
Date Analysis Commenced	Jul 05, 2023
Condition of Sample	Drawn into one 6-L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Bromodichloromethane	03/07/23 - 04/07/23	ug/m3	1.00	3.35	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Bromoform	03/07/23 - 04/07/23	ug/m3	1.00	5.17	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Bromomethane	03/07/23 - 04/07/23	ug/m3	0.06	0.19	0.31	190	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Butanal	03/07/23 - 04/07/23	ug/m3	0.49	1.47	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Carbon Disulfide	03/07/23 - 04/07/23	ug/m3	0.05	0.16	0.31	100	Based on US EPA Compendium Method, TO-15	NEB	Rayong
Carbon Tetrachloride	03/07/23 - 04/07/23	ug/m3	0.10	0.31	<0.31	150	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Chlorobenzene	03/07/23 - 04/07/23	ug/m3	0.80	2.30	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Chlorodifluoromethane (HCFC-22)	03/07/23 - 04/07/23	ug/m3	0.60	1.77	<1.77	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Chloroethane	03/07/23 - 04/07/23	ug/m3	0.40	1.32	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Chloroform	03/07/23 - 04/07/23	ug/m3	0.08	0.24	<0.24	57	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Chloromethane	03/07/23 - 04/07/23	ug/m3	0.30	1.03	<1.03	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong

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Senior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2373119
Date Received : Jul 04, 2023
Date Reported : Jul 11, 2023
Report Number : 2697006-1

Sample Number	2373119-3
Sampled Date	Jul 03, 2023
Sample Description	Air Quality
Location	วัดมาบชลูด(A3) (GPS 47P 0730826, 1407360)
Date Analysis Commenced	Jul 05, 2023
Condition of Sample	Drawn into one 6-L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
cis-1,2-Dichloroethene	03/07/23 - 04/07/23	ug/m3	0.70	1.98	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
cis-1,3-Dichloropropene	03/07/23 - 04/07/23	ug/m3	0.80	2.27	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Cyclohexane	03/07/23 - 04/07/23	ug/m3	0.60	1.72	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Cyclopentane	03/07/23 - 04/07/23	ug/m3	0.50	1.43	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Dichlorodifluoromethane (CFC-112)	03/07/23 - 04/07/23	ug/m3	0.80	2.47	<2.47	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Dichloromethane	03/07/23 - 04/07/23	ug/m3	0.06	0.17	<0.17	210	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Ethanol	03/07/23 - 04/07/23	ug/m3	0.30	0.94	2.22	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Ethyl Benzene	03/07/23 - 04/07/23	ug/m3	0.70	2.17	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Hexanal	03/07/23 - 04/07/23	ug/m3	0.60	2.05	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Hexane	03/07/23 - 04/07/23	ug/m3	0.60	1.76	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Isobutene	03/07/23 - 04/07/23	ug/m3	0.40	1.15	<1.15	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong

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Senior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2373119
Date Received : Jul 04, 2023
Date Reported : Jul 11, 2023
Report Number : 2697006-1

Sample Number	2373119-3
Sampled Date	Jul 03, 2023
Sample Description	Air Quality
Location	วัดมาบชลูด(A3) (GPS 47P 0730826, 1407360)
Date Analysis Commenced	Jul 05, 2023
Condition of Sample	Drawn into one 6-L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Isoprene	03/07/23 - 04/07/23	ug/m3	0.50	1.39	<1.39	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
m,p-Xylene	03/07/23 - 04/07/23	ug/m3	1.50	4.34	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Methacrolein	03/07/23 - 04/07/23	ug/m3	0.50	1.43	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Methanol	03/07/23 - 04/07/23	ug/m3	0.20	0.66	14.65	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Methyl Ethyl Ketone	03/07/23 - 04/07/23	ug/m3	0.50	1.47	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Methyl Iodide	03/07/23 - 04/07/23	ug/m3	0.90	2.90	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Methyl Isobutyl Ketone	03/07/23 - 04/07/23	ug/m3	0.70	2.05	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Methyl tert butyl ether	03/07/23 - 04/07/23	ug/m3	0.60	1.80	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Methyl Vinyl Ketone	03/07/23 - 04/07/23	ug/m3	0.50	1.43	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
o-Xylene	03/07/23 - 04/07/23	ug/m3	0.70	2.17	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Pentanal	03/07/23 - 04/07/23	ug/m3	0.50	1.76	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong

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Dej Changchon
Senior Manager

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Analysis / Test Report

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18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2373119
Date Received : Jul 04, 2023
Date Reported : Jul 11, 2023
Report Number : 2697006-1

Sample Number	2373119-3
Sampled Date	Jul 03, 2023
Sample Description	Air Quality
Location	วัดมาบชลูด(A3) (GPS 47P 0730826, 1407360)
Date Analysis Commenced	Jul 05, 2023
Condition of Sample	Drawn into one 6-L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Pentane	03/07/23 - 04/07/23	ug/m3	0.50	1.48	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Propanal	03/07/23 - 04/07/23	ug/m3	0.50	1.19	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Propene (Propylene)	03/07/23 - 04/07/23	ug/m3	0.30	0.86	<0.86	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Styrene	03/07/23 - 04/07/23	ug/m3	0.70	2.13	<2.13	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Tetrachloroethylene	03/07/23 - 04/07/23	ug/m3	0.11	0.34	Not Detected	400	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Toluene	03/07/23 - 04/07/23	ug/m3	0.60	1.88	2.19	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
trans-1,2-Dichloroethene	03/07/23 - 04/07/23	ug/m3	0.70	1.98	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
trans-1,3-Dichloropropene	03/07/23 - 04/07/23	ug/m3	0.80	2.27	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Trichloroethylene	03/07/23 - 04/07/23	ug/m3	0.09	0.27	Not Detected	130	Based on US EPA Compendium Method, TO-15	PCD	Rayong
Trichlorofluoromethane (F-11)	03/07/23 - 04/07/23	ug/m3	0.90	2.81	<2.81	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong
Vinyl Acetate	03/07/23 - 04/07/23	ug/m3	0.60	1.76	Not Detected	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong

Approved by

Dej Changchon
Senior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2373119
Date Received : Jul 04, 2023
Date Reported : Jul 11, 2023
Report Number : 2697006-1

Sample Number	2373119-3
Sampled Date	Jul 03, 2023
Sample Description	Air Quality
Location	วัดมาบชลูด(A3) (GPS 47P 0730826, 1407360)
Date Analysis Commenced	Jul 05, 2023
Condition of Sample	Drawn into one 6-L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Vinyl Chloride	03/07/23 - 04/07/23	ug/m3	0.04	0.13	Not Detected	20	Based on US EPA Compendium Method, TO-15	PCD	Rayong

Guideline :
NEB : Notification of National Environment Board, B.E. 2560 (2017)
PCD : Notification of the Pollution Control Department, which was published in the Royal Government Gazette Vol. 126 Special Part 13 D dated January 27, B.E. 2552 (2009).
Sampled By : Nantawat Sarin

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Senior Manager

Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID : 2373116
Date Received : Jul 04, 2023
Date Reported : Jul 10, 2023
Report Number : 2697016-1

Sample Number	2373116-1
Parameter	Wind Speed / Wind Direction
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออก (มาบตาพุด) (A1) (GPS 47P 0730907, 1405264)
Sampling Date	Jul 03 - Jul 04, 2023
Sampling by	Nantawat Sarin

Time	Jul 03 - Jul 04, 2023			-			-			-			-			-			-			-		
	WS (m/s)	WD (deg)		-	-		-	-		-	-		-	-		-	-		-	-		-	-	
10:00 AM - 11:00 AM	4.2	338.0	NNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM - 12:00 PM	1.7	254.0	WSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 PM - 01:00 PM	1.3	338.0	NNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 PM - 02:00 PM	1.9	3.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 PM - 03:00 PM	1.7	339.0	NNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 PM - 04:00 PM	1.4	311.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 PM - 05:00 PM	0.5	336.0	NNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 PM - 06:00 PM	1.1	359.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 PM - 07:00 PM	0.7	3.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 PM - 08:00 PM	1.1	350.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 PM - 09:00 PM	0.3	6.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 PM - 10:00 PM	0.5	348.0	NNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 PM - 11:00 PM	0.7	317.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 PM - 12:00 AM	0.7	14.0	NNE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 AM - 01:00 AM	0.6	0.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 AM - 02:00 AM	1.2	304.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 AM - 03:00 AM	0.8	352.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 AM - 04:00 AM	1.1	335.0	NNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 AM - 05:00 AM	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 AM - 06:00 AM	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 AM - 07:00 AM	1.8	313.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 AM - 08:00 AM	3.3	312.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 AM - 09:00 AM	3.1	292.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 AM - 10:00 AM	2.8	351.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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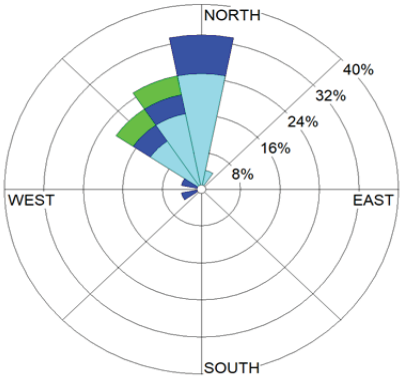
Approved by
Sarayuth Jittranont
Assistant General Manager

Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID : 2373116
Date Received : Jul 04, 2023
Date Reported : Jul 10, 2023
Report Number : 2697016-1

Wind Rose



Date : Jul 03-04, 2023

WS(m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	8.33
1.7-3.3	25.00
0.3-1.7	58.34
Calms	8.33

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Approved by

Sarayuth Jittranont
Assistant General Manager

Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID : 2373116
Date Received : Jul 04, 2023
Date Reported : Jul 10, 2023
Report Number : 2697016-1

Sample Number 2373116-2
Parameter Wind Speed / Wind Direction
Location วัดหนองแฟบ (A2) (GPS 47P 0729828, 1403318)
Sampling Date Jul 03 - Jul 04, 2023
Sampling by Nantawat Sarin

Time	Jul 03 - Jul 04, 2023			-			-			-			-			-			-		
	WS (m/s)	WD (deg)		-	-		-	-		-	-		-	-		-	-		-	-	
10:00 AM - 11:00 AM	2.8	211.0	SSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM - 12:00 PM	2.8	211.0	SSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 PM - 01:00 PM	2.9	205.0	SSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 PM - 02:00 PM	2.7	208.0	SSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 PM - 03:00 PM	2.7	207.0	SSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 PM - 04:00 PM	2.1	211.0	SSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 PM - 05:00 PM	1.9	206.0	SSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 PM - 06:00 PM	1.9	201.0	SSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 PM - 07:00 PM	1.2	223.0	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 PM - 08:00 PM	0.4	271.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 PM - 09:00 PM	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 PM - 10:00 PM	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 PM - 11:00 PM	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 PM - 12:00 AM	0.4	176.0	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 AM - 01:00 AM	1.4	170.0	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 AM - 02:00 AM	1.6	173.0	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 AM - 03:00 AM	1.3	196.0	SSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 AM - 04:00 AM	1.5	187.0	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 AM - 05:00 AM	1.2	186.0	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 AM - 06:00 AM	0.9	168.0	SSE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 AM - 07:00 AM	1.3	176.0	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 AM - 08:00 AM	1.7	187.0	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 AM - 09:00 AM	2.0	191.0	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 AM - 10:00 AM	2.2	189.0	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Sarayuth Jittranont
Assistant General Manager

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Life Sciences www.alsglobal.com
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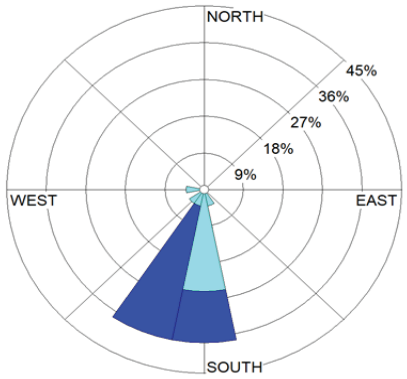
Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID : 2373116
Date Received : Jul 04, 2023
Date Reported : Jul 10, 2023
Report Number : 2697016-1

Wind Rose



Date : Jul 03-04, 2023

WS(m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	0.00
1.7-3.3	45.83
0.3-1.7	41.67
Calms	12.50

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Assistant General Manager

Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID : 2373116
Date Received : Jul 04, 2023
Date Reported : Jul 10, 2023
Report Number : 2697016-1

Sample Number 2373116-3
Parameter Wind Speed / Wind Direction
Location วัดมาบชลูด (A3) (GPS 47P 0730826, 1407360)
Sampling Date Jul 03 - Jul 04, 2023
Sampling by Nantawat Sarin

Time	Jul 03 - Jul 04, 2023			-			-			-			-			-			-		
	WS (m/s)	WD (deg)		-	-		-	-		-	-		-	-		-	-		-	-	
10:00 AM - 11:00 AM	0.6	199.0	SSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM - 12:00 PM	0.4	231.0	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 PM - 01:00 PM	0.7	313.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 PM - 02:00 PM	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 PM - 03:00 PM	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 PM - 04:00 PM	0.3	282.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 PM - 05:00 PM	0.6	320.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 PM - 06:00 PM	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 PM - 07:00 PM	0.5	296.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 PM - 08:00 PM	0.3	289.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 PM - 09:00 PM	0.7	299.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 PM - 10:00 PM	1.0	315.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 PM - 11:00 PM	0.8	307.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 PM - 12:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 AM - 01:00 AM	0.4	210.0	SSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 AM - 02:00 AM	0.6	287.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 AM - 03:00 AM	0.3	289.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 AM - 04:00 AM	0.5	294.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 AM - 05:00 AM	0.7	136.0	SE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 AM - 06:00 AM	1.2	278.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 AM - 07:00 AM	0.3	154.0	SSE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 AM - 08:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 AM - 09:00 AM	1.4	259.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 AM - 10:00 AM	0.8	315.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Sarayuth Jittranont
Assistant General Manager

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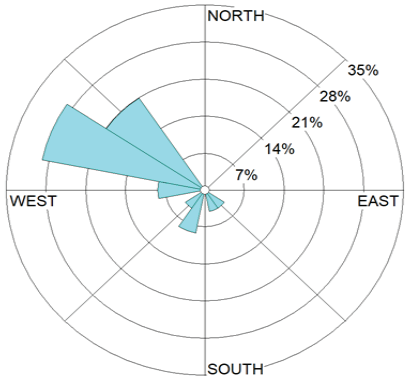
Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID : 2373116
Date Received : Jul 04, 2023
Date Reported : Jul 10, 2023
Report Number : 2697016-1

Wind Rose



Date : Jul 03-04, 2023

	WS(m/s)	%
	≥ 10.0	0.00
	8.0-10.0	0.00
	5.5-8.0	0.00
	3.3-5.5	0.00
	1.7-3.3	0.00
	0.3-1.7	79.17
	Calms	20.83

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2379766
J ate ReDeiced : Aug 04, 2023
J ate Reported : Aug 15, 2023
Report - umber : 2v105597l

Sample Number	23v9v667l
Sampled Date	Aug 03, 2023
Sample Description	Air f uality
Location	สำนักงานนิคมอุตสาหกรรมตับบลัวเอชเอตะวันออกQมาบตาพุด(QA1(Q PG 4vP 0v3090v, 1405264(
Date Analysis Commenced	Aug 08, 2023
Condition of Sample	J raS n into one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,1,17TriDhloroethane	03/08/23 704/08/23	ug/m3	0.90	2.v3	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,1,2,27TetraDhloroethane	03/08/23 704/08/23	ug/m3	0.10	0.34	- ot J eteDted	83	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
1,1,27TriDhloro71,2,27TriNuoroethane	03/08/23 704/08/23	ug/m3	1.00	3.83	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,1,27TriDhloroethane	03/08/23 704/08/23	ug/m3	0.90	2.v3	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,17J iDhloroethane	03/08/23 704/08/23	ug/m3	0.v0	2.02	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,17J iDhloroethene	03/08/23 704/08/23	ug/m3	0.v0	1.98	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,2,37TrimethylbenQene	03/08/23 704/08/23	ug/m3	0.80	2.46	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,2,47TriDhlorobenQene	03/08/23 704/08/23	ug/m3	1.20	3.v1	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,2,47TrimethylbenQene	03/08/23 704/08/23	ug/m3	0.80	2.46	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,27J ibromoethane	03/08/23 704/08/23	ug/m3	0.10	0.38	- ot J eteDted	3v0	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
1,27J iDhlorobenQene	03/08/23 704/08/23	ug/m3	0.20	0.60	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong

The aboce results are calid only Nor the analyQed/tested sampleQ(as indiDated in this report. - o part oNthis report or DertiNDate may be reproduDed in any Nrm Sithout S ritten Dnsent Nom the Laboratory. ALG Laboratory) roup QThailand(strongly reDommends that this report is not reproduDed ezDept in Nll.

Approved by

J ej ChangDhon
Genior Manager

Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2379766
J ate ReDeiced : Aug 04, 2023
J ate Reported : Aug 15, 2023
Report - umber : 2v1055971

Sample Number	23v9v6671
Sampled Date	Aug 03, 2023
Sample Description	Air f uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกQมาบตาพุด(QA1(Q PG 4vP 0v3090v, 1405264(
Date Analysis Commenced	Aug 08, 2023
Condition of Sample	J raS n into one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,27J iChloroethane	03/08/23 704/08/23	ug/m3	0.0v	0.20	x 0.20	48	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
1,27J iChloropropane	03/08/23 704/08/23	ug/m3	0.08	0.23	x 0.23	82	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
1,27J iChlorotetraNuoroethane	03/08/23 704/08/23	ug/m3	1.20	3.50	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,3,57TrimethylbenQene	03/08/23 704/08/23	ug/m3	0.80	2.46	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,37wutadiene	03/08/23 704/08/23	ug/m3	0.04	0.11	- ot J eteDted	5.3	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
1,37J iChlorobenQene	03/08/23 704/08/23	ug/m3	0.20	0.60	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,47J iChlorobenQene	03/08/23 704/08/23	ug/m3	0.20	0.60	- ot J eteDted	1100	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
1,47J iozane	03/08/23 704/08/23	ug/m3	0.10	0.36	- ot J eteDted	860	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
17wutanol	03/08/23 704/08/23	ug/m3	0.50	1.52	x 1.52	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
17Propanol	03/08/23 704/08/23	ug/m3	0.40	1.23	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
27Hezanone	03/08/23 704/08/23	ug/m3	0.v0	2.05	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong

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Genior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2379766
J ate ReDeiced : Aug 04, 2023
J ate Reported : Aug 15, 2023
Report - umber : 2v1055971

Sample Number	23v9v6671
Sampled Date	Aug 03, 2023
Sample Description	Air f uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกQมาบตาพุด(QA1(Q PG 4vP 0v3090v, 1405264(
Date Analysis Commenced	Aug 08, 2023
Condition of Sample	J raS n into one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
27Pentanone	03/08/23 704/08/23	ug/m3	0.60	1.v6	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
27Propanol	03/08/23 704/08/23	ug/m3	0.40	1.23	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
37Hezanone	03/08/23 704/08/23	ug/m3	0.v0	2.05	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
37Pentanone	03/08/23 704/08/23	ug/m3	0.60	1.v6	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
ADetaldehyde	03/08/23 704/08/23	ug/m3	0.05	0.18	1.98	860	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
ADetone	03/08/23 704/08/23	ug/m3	0.08	0.24	19.43	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
ADetonitrile	03/08/23 704/08/23	ug/m3	0.30	0.84	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
ADrolein	03/08/23 704/08/23	ug/m3	0.08	0.23	x 0.23	0.55	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
ADrylonitrile	03/08/23 704/08/23	ug/m3	0.0v	0.22	- ot J eteDted	10	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
wenQene	03/08/23 704/08/23	ug/m3	0.05	0.16	0.38	v.6	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
wenQyl Chloride	03/08/23 704/08/23	ug/m3	0.1v	0.52	- ot J eteDted	12	wased on BG EPA Compendium Method, TU715	PCJ	Rayong

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2379766
J ate ReDeiced : Aug 04, 2023
J ate Reported : Aug 15, 2023
Report - umber : 2v1055971

Sample Number	23v9v6671
Sampled Date	Aug 03, 2023
Sample Description	Air f uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกQมาบตาพุด(QA1(Q PG 4vP 0v3090v, 1405264(
Date Analysis Commenced	Aug 08, 2023
Condition of Sample	J raS n into one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
wromodiChloromethane	03/08/23 704/08/23	ug/m3	1.00	3.35	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
wromoNorm	03/08/23 704/08/23	ug/m3	1.00	5.1v	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
wromomethane	03/08/23 704/08/23	ug/m3	0.06	0.19	0.23	190	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
wutanal	03/08/23 704/08/23	ug/m3	0.49	1.4v	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Carbon J isulNide	03/08/23 704/08/23	ug/m3	0.05	0.16	- ot J eteDted	100	wased on BG EPA Compendium Method, TU715	- Ew	Rayong
Carbon TetraChloride	03/08/23 704/08/23	ug/m3	0.10	0.31	x 0.31	150	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
ChlorobenQene	03/08/23 704/08/23	ug/m3	0.80	2.30	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
ChlorodiNuoromethane QHC<C722(	03/08/23 704/08/23	ug/m3	0.60	1.vv	x 1.vv	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Chloroethane	03/08/23 704/08/23	ug/m3	0.40	1.32	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
ChloroNorm	03/08/23 704/08/23	ug/m3	0.08	0.24	x 0.24	5v	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
Chloromethane	03/08/23 704/08/23	ug/m3	0.30	1.03	1.40	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong

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21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2379766
J ate ReDeiced : Aug 04, 2023
J ate Reported : Aug 15, 2023
Report - umber : 2v1055971

Sample Number	23v9v6671
Sampled Date	Aug 03, 2023
Sample Description	Air f uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกQมาบตาพุด(QA1(Q PG 4vP 0v3090v, 1405264(
Date Analysis Commenced	Aug 08, 2023
Condition of Sample	J raS n into one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Ds71,27J iChloroethene	03/08/23 704/08/23	ug/m3	0.v0	1.98	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Ds71,37J iChloropropene	03/08/23 704/08/23	ug/m3	0.80	2.2v	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
CyDlohezane	03/08/23 704/08/23	ug/m3	0.60	1.v2	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
CyDlopentane	03/08/23 704/08/23	ug/m3	0.50	1.43	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
J iChlorodiNuoromethane QC<C7112(	03/08/23 704/08/23	ug/m3	0.80	2.4v	2.4v	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
J iChloromethane	03/08/23 704/08/23	ug/m3	0.06	0.1v	x 0.1v	210	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
Ethanol	03/08/23 704/08/23	ug/m3	0.30	0.94	1.51	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Ethyl wenQene	03/08/23 704/08/23	ug/m3	0.v0	2.1v	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Hezanal	03/08/23 704/08/23	ug/m3	0.60	2.05	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Hezane	03/08/23 704/08/23	ug/m3	0.60	1.v6	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Isobutene	03/08/23 704/08/23	ug/m3	0.40	1.15	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong

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18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2379766
J ate ReDeiced : Aug 04, 2023
J ate Reported : Aug 15, 2023
Report - umber : 2v1055971

Sample Number	23v9v6671
Sampled Date	Aug 03, 2023
Sample Description	Air f uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกQมาบตาพุด(QA1(Q PG 4vP 0v3090v, 1405264(
Date Analysis Commenced	Aug 08, 2023
Condition of Sample	J raS n into one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Isoprene	03/08/23 704/08/23	ug/m3	0.50	1.39	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
m,p7Fylene	03/08/23 704/08/23	ug/m3	1.50	4.34	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
MethaDrolein	03/08/23 704/08/23	ug/m3	0.50	1.43	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Methanol	03/08/23 704/08/23	ug/m3	0.20	0.66	12.29	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Methyl Ethyl Xetone	03/08/23 704/08/23	ug/m3	0.50	1.4v	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Methyl Iodide	03/08/23 704/08/23	ug/m3	0.90	2.90	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Methyl Isobutyl Xetone	03/08/23 704/08/23	ug/m3	0.v0	2.05	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Methyl tert butyl ether	03/08/23 704/08/23	ug/m3	0.60	1.80	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Methyl Kinyl Xetone	03/08/23 704/08/23	ug/m3	0.50	1.43	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
o7Fylene	03/08/23 704/08/23	ug/m3	0.v0	2.1v	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Pentanal	03/08/23 704/08/23	ug/m3	0.50	1.v6	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong

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Analysis / Test Report

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18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2379766
J ate ReDeiced : Aug 04, 2023
J ate Reported : Aug 15, 2023
Report - umber : 2v1055971

Sample Number	23v9v6671
Sampled Date	Aug 03, 2023
Sample Description	Air f uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกQมาบตาพุด(QA1(Q PG 4vP 0v3090v, 1405264(
Date Analysis Commenced	Aug 08, 2023
Condition of Sample	J raS n into one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Pentane	03/08/23 704/08/23	ug/m3	0.50	1.48	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Propanal	03/08/23 704/08/23	ug/m3	0.50	1.19	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Propene QPropylene(	03/08/23 704/08/23	ug/m3	0.30	0.86	2.89	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Gtyrene	03/08/23 704/08/23	ug/m3	0.v0	2.13	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
TetraDhloroethylene	03/08/23 704/08/23	ug/m3	0.11	0.34	- ot J eteDted	400	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
Toluene	03/08/23 704/08/23	ug/m3	0.60	1.88	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
trans71,27J iDhloroethene	03/08/23 704/08/23	ug/m3	0.v0	1.98	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
trans71,37J iDhloropropene	03/08/23 704/08/23	ug/m3	0.80	2.2v	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
TriDhloroethylene	03/08/23 704/08/23	ug/m3	0.09	0.2v	- ot J eteDted	130	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
TriDhloroNuoromethane Q-711(	03/08/23 704/08/23	ug/m3	0.90	2.81	x 2.81	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Kinyl ADetate	03/08/23 704/08/23	ug/m3	0.60	1.v6	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong

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21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2379766
J ate ReDeiced : Aug 04, 2023
J ate Reported : Aug 15, 2023
Report - umber : 2v1055971

Sample Number	23v9v6671
Sampled Date	Aug 03, 2023
Sample Description	Air f uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกQมาบตาพุด(QA1(Q PG 4vP 0v3090v, 1405264(
Date Analysis Commenced	Aug 08, 2023
Condition of Sample	J raS n into one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Kinyl Chloride	03/08/23 704/08/23	ug/m3	0.04	0.13	- ot J eteDted	20	wased on BG EPA Compendium Method, TU715	PCJ	Rayong

Guideline :
- Ew : - otiNDation oN- ational Encironment woard, w.E. 2560 Q201v(
PCJ : - otiNDation oNthe Pollution Control J epartment, S hiDh S as published in the Royal) ocernment) aQette Kol. 126 GpeDal Part 13 J dated Vanuary 2v, w.E. 2552 Q2009(.

Sampled By : Adisak Talesoon

Remark :
- LUJ : Limit oNJ eteDtion
- "x" : LoS er than LUf QLimit oNf uantitation(/ LUR QLimit oNReporting(

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Genior Manager

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Analysis / Test Report

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18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2379766
J ate ReDeiced : Aug 04, 2023
J ate Reported : Aug 15, 2023
Report - umber : 2v1055971

Sample Number	23v9v6672
Sampled Date	Aug 03, 2023
Sample Description	Air f uality
Location	วัดหนองแฟบQA2(Q PG 4vP 0v29828, 1403318(
Date Analysis Commenced	Aug 08, 2023
Condition of Sample	J raS n into one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,1,17TriDhloroethane	03/08/23 704/08/23	ug/m3	0.90	2.v3	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,1,2,27TetraDhloroethane	03/08/23 704/08/23	ug/m3	0.10	0.34	- ot J eteDted	83	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
1,1,27TriDhloro71,2,27TriNu oroethane	03/08/23 704/08/23	ug/m3	1.00	3.83	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,1,27TriDhloroethane	03/08/23 704/08/23	ug/m3	0.90	2.v3	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,17J iDhloroethane	03/08/23 704/08/23	ug/m3	0.v0	2.02	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,17J iDhloroethene	03/08/23 704/08/23	ug/m3	0.v0	1.98	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,2,37TrimethylbenQene	03/08/23 704/08/23	ug/m3	0.80	2.46	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,2,47TriDhlorobenQene	03/08/23 704/08/23	ug/m3	1.20	3.v1	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,2,47TrimethylbenQene	03/08/23 704/08/23	ug/m3	0.80	2.46	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,27J ibromoethane	03/08/23 704/08/23	ug/m3	0.10	0.38	- ot J eteDted	3v0	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
1,27J iDhlorobenQene	03/08/23 704/08/23	ug/m3	0.20	0.60	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong

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P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2379766
J ate ReDeiced : Aug 04, 2023
J ate Reported : Aug 15, 2023
Report - umber : 2v1055971

Sample Number	23v9v6672
Sampled Date	Aug 03, 2023
Sample Description	Air f uality
Location	วัดหนองแฟบQA2(Q PG 4vP 0v29828, 1403318(
Date Analysis Commenced	Aug 08, 2023
Condition of Sample	J raS n into one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,27J iChloroethane	03/08/23 704/08/23	ug/m3	0.0v	0.20	x 0.20	48	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
1,27J iChloropropane	03/08/23 704/08/23	ug/m3	0.08	0.23	- ot J eteDted	82	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
1,27J iChlorotetraNuoroethane	03/08/23 704/08/23	ug/m3	1.20	3.50	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,3,57TrimethylbenQene	03/08/23 704/08/23	ug/m3	0.80	2.46	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,37wutadiene	03/08/23 704/08/23	ug/m3	0.04	0.11	- ot J eteDted	5.3	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
1,37J iChlorobenQene	03/08/23 704/08/23	ug/m3	0.20	0.60	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,47J iChlorobenQene	03/08/23 704/08/23	ug/m3	0.20	0.60	- ot J eteDted	1100	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
1,47J iozane	03/08/23 704/08/23	ug/m3	0.10	0.36	- ot J eteDted	860	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
17wutanol	03/08/23 704/08/23	ug/m3	0.50	1.52	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
17Propanol	03/08/23 704/08/23	ug/m3	0.40	1.23	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
27Hezanone	03/08/23 704/08/23	ug/m3	0.v0	2.05	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong

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Genior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2379766
J ate ReDeiced : Aug 04, 2023
J ate Reported : Aug 15, 2023
Report - umber : 2v1055971

Sample Number	23v9v6672
Sampled Date	Aug 03, 2023
Sample Description	Air f uality
Location	วัดหนองแฟบQA2(Q PG 4vP 0v29828, 1403318(
Date Analysis Commenced	Aug 08, 2023
Condition of Sample	J raS n into one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
27Pentanone	03/08/23 704/08/23	ug/m3	0.60	1.v6	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
27Propanol	03/08/23 704/08/23	ug/m3	0.40	1.23	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
37Hezanone	03/08/23 704/08/23	ug/m3	0.v0	2.05	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
37Pentanone	03/08/23 704/08/23	ug/m3	0.60	1.v6	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
ADetaldehyde	03/08/23 704/08/23	ug/m3	0.05	0.18	1.15	860	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
ADetone	03/08/23 704/08/23	ug/m3	0.08	0.24	3.18	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
ADetonitrile	03/08/23 704/08/23	ug/m3	0.30	0.84	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
ADrolein	03/08/23 704/08/23	ug/m3	0.08	0.23	x 0.23	0.55	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
ADrylonitrile	03/08/23 704/08/23	ug/m3	0.0v	0.22	- ot J eteDted	10	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
wenQene	03/08/23 704/08/23	ug/m3	0.05	0.16	x 0.16	v.6	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
wenQyl Chloride	03/08/23 704/08/23	ug/m3	0.1v	0.52	- ot J eteDted	12	wased on BG EPA Compendium Method, TU715	PCJ	Rayong

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Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2379766
J ate ReDeiced : Aug 04, 2023
J ate Reported : Aug 15, 2023
Report - umber : 2v1055971

Sample Number	23v9v6672
Sampled Date	Aug 03, 2023
Sample Description	Air f uality
Location	รัดหนองแฟบQA2(Q PG 4vP 0v29828, 1403318(
Date Analysis Commenced	Aug 08, 2023
Condition of Sample	J raS n into one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
wromodiDhloromethane	03/08/23 704/08/23	ug/m3	1.00	3.35	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
wromoNorm	03/08/23 704/08/23	ug/m3	1.00	5.1v	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
wromomethane	03/08/23 704/08/23	ug/m3	0.06	0.19	- ot J eteDted	190	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
wutanal	03/08/23 704/08/23	ug/m3	0.49	1.4v	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Carbon J isulNide	03/08/23 704/08/23	ug/m3	0.05	0.16	- ot J eteDted	100	wased on BG EPA Compendium Method, TU715	- Ew	Rayong
Carbon TetraDhloride	03/08/23 704/08/23	ug/m3	0.10	0.31	x 0.31	150	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
ChlorobenQene	03/08/23 704/08/23	ug/m3	0.80	2.30	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
ChlorodiNuoromethane QHC<C722(	03/08/23 704/08/23	ug/m3	0.60	1.vv	x 1.vv	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Chloroethane	03/08/23 704/08/23	ug/m3	0.40	1.32	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
ChloroNorm	03/08/23 704/08/23	ug/m3	0.08	0.24	x 0.24	5v	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
Chloromethane	03/08/23 704/08/23	ug/m3	0.30	1.03	1.20	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong

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18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2379766
J ate ReDeiced : Aug 04, 2023
J ate Reported : Aug 15, 2023
Report - umber : 2v1055971

Sample Number	23v9v6672
Sampled Date	Aug 03, 2023
Sample Description	Air f uality
Location	รัดหนองแฟบQA2(Q PG 4vP 0v29828, 1403318(
Date Analysis Commenced	Aug 08, 2023
Condition of Sample	J raS n into one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Ds71,27J iDhloroethene	03/08/23 704/08/23	ug/m3	0.v0	1.98	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Ds71,37J iDhloropropene	03/08/23 704/08/23	ug/m3	0.80	2.2v	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
CyDlohezane	03/08/23 704/08/23	ug/m3	0.60	1.v2	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
CyDlopentane	03/08/23 704/08/23	ug/m3	0.50	1.43	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
J iDhlorodiNuoromethane QC<C7112(	03/08/23 704/08/23	ug/m3	0.80	2.4v	x 2.4v	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
J iDhloromethane	03/08/23 704/08/23	ug/m3	0.06	0.1v	x 0.1v	210	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
Ethanol	03/08/23 704/08/23	ug/m3	0.30	0.94	1.43	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Ethyl wenQene	03/08/23 704/08/23	ug/m3	0.v0	2.1v	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Hezanal	03/08/23 704/08/23	ug/m3	0.60	2.05	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Hezane	03/08/23 704/08/23	ug/m3	0.60	1.v6	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Isobutene	03/08/23 704/08/23	ug/m3	0.40	1.15	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong

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18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2379766
J ate ReDeiced : Aug 04, 2023
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Sample Number	23v9v6672
Sampled Date	Aug 03, 2023
Sample Description	Air f uality
Location	รัดหนองแฟบQA2(Q PG 4vP 0v29828, 1403318(
Date Analysis Commenced	Aug 08, 2023
Condition of Sample	J raS n into one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Isoprene	03/08/23 704/08/23	ug/m3	0.50	1.39	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
m,p7Fylene	03/08/23 704/08/23	ug/m3	1.50	4.34	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
MethaDrolein	03/08/23 704/08/23	ug/m3	0.50	1.43	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Methanol	03/08/23 704/08/23	ug/m3	0.20	0.66	6.39	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Methyl Ethyl Xetone	03/08/23 704/08/23	ug/m3	0.50	1.4v	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Methyl Iodide	03/08/23 704/08/23	ug/m3	0.90	2.90	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Methyl Isobutyl Xetone	03/08/23 704/08/23	ug/m3	0.v0	2.05	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Methyl tert butyl ether	03/08/23 704/08/23	ug/m3	0.60	1.80	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Methyl Kinyl Xetone	03/08/23 704/08/23	ug/m3	0.50	1.43	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
o7Fylene	03/08/23 704/08/23	ug/m3	0.v0	2.1v	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Pentanal	03/08/23 704/08/23	ug/m3	0.50	1.v6	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong

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21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2379766
J ate ReDeiced : Aug 04, 2023
J ate Reported : Aug 15, 2023
Report - umber : 2v1055971

Sample Number	23v9v6672
Sampled Date	Aug 03, 2023
Sample Description	Air f uality
Location	รัดหนองแฟบQA2(Q PG 4vP 0v29828, 1403318(
Date Analysis Commenced	Aug 08, 2023
Condition of Sample	J raS n into one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Pentane	03/08/23 704/08/23	ug/m3	0.50	1.48	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Propanal	03/08/23 704/08/23	ug/m3	0.50	1.19	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Propene QPropylene(	03/08/23 704/08/23	ug/m3	0.30	0.86	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Gtyrene	03/08/23 704/08/23	ug/m3	0.v0	2.13	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
TetraDhloroethylene	03/08/23 704/08/23	ug/m3	0.11	0.34	- ot J eteDted	400	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
Toluene	03/08/23 704/08/23	ug/m3	0.60	1.88	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
trans71,27J iDhloroethene	03/08/23 704/08/23	ug/m3	0.v0	1.98	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
trans71,37J iDhloropropene	03/08/23 704/08/23	ug/m3	0.80	2.2v	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
TriDhloroethylene	03/08/23 704/08/23	ug/m3	0.09	0.2v	- ot J eteDted	130	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
TriDhloroNuoromethane Q-711(	03/08/23 704/08/23	ug/m3	0.90	2.81	x 2.81	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Kinyl ADetate	03/08/23 704/08/23	ug/m3	0.60	1.v6	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong

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Sample Description	Air f uality
Location	วัดหนองแฟบQA2(Q PG 4vP 0v29828, 1403318(
Date Analysis Commenced	Aug 08, 2023
Condition of Sample	J raS n into one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Kinyl Chloride	03/08/23 704/08/23	ug/m3	0.04	0.13	- ot J eteDted	20	wased on BG EPA Compendium Method, TU715	PCJ	Rayong

Guideline :
- Ew : - otiNDation oN- ational Encironment woard, w.E. 2560 Q201v(
PCJ : - otiNDation oNthe Pollution Control J epartment, S hiDh S as published in the Royal) ocernment) aOette Kol. 126 GpeDal Part 13 J dated Vanuary 2v, w.E. 2552 Q2009(.

Sampled By : Adisak Talesoon

Remark :
- LUJ : Limit oNJ eteDtion
- "x" : LoS er than LUf QLimit oNf uantitation(/ LUR QLimit oNReporting(

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P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2379766
J ate ReDeiced : Aug 04, 2023
J ate Reported : Aug 15, 2023
Report - umber : 2v1055971

Sample Number	23v9v6673
Sampled Date	Aug 03, 2023
Sample Description	Air f uality
Location	วัดมาบชลูดQA3(Q PG 4vP 0v30826, 140v360(
Date Analysis Commenced	Aug 08, 2023
Condition of Sample	J raS n into one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,1,17TriDhloroethane	03/08/23 704/08/23	ug/m3	0.90	2.v3	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,1,2,27TetraDhloroethane	03/08/23 704/08/23	ug/m3	0.10	0.34	- ot J eteDted	83	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
1,1,27TriDhloro71,2,27TriNu oroethane	03/08/23 704/08/23	ug/m3	1.00	3.83	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,1,27TriDhloroethane	03/08/23 704/08/23	ug/m3	0.90	2.v3	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,17J iDhloroethane	03/08/23 704/08/23	ug/m3	0.v0	2.02	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,17J iDhloroethene	03/08/23 704/08/23	ug/m3	0.v0	1.98	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,2,37TrimethylbenQene	03/08/23 704/08/23	ug/m3	0.80	2.46	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,2,47TriDhlorobenQene	03/08/23 704/08/23	ug/m3	1.20	3.v1	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,2,47TrimethylbenQene	03/08/23 704/08/23	ug/m3	0.80	2.46	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,27J ibromoethane	03/08/23 704/08/23	ug/m3	0.10	0.38	- ot J eteDted	3v0	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
1,27J iDhlorobenQene	03/08/23 704/08/23	ug/m3	0.20	0.60	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong

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Genior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2379766
J ate ReDeiced : Aug 04, 2023
J ate Reported : Aug 15, 2023
Report - umber : 2v1055971

Sample Number	23v9v6673
Sampled Date	Aug 03, 2023
Sample Description	Air f uality
Location	วัดมาบชลูดQA3(Q PG 4vP 0v30826, 140v360(
Date Analysis Commenced	Aug 08, 2023
Condition of Sample	J raS n into one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,27J iDhloroethane	03/08/23 704/08/23	ug/m3	0.0v	0.20	- ot J eteDted	48	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
1,27J iDhloropropane	03/08/23 704/08/23	ug/m3	0.08	0.23	- ot J eteDted	82	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
1,27J iDhlorotetraNuoroethane	03/08/23 704/08/23	ug/m3	1.20	3.50	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,3,57TrimethylbenQene	03/08/23 704/08/23	ug/m3	0.80	2.46	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,37wutadiene	03/08/23 704/08/23	ug/m3	0.04	0.11	- ot J eteDted	5.3	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
1,37J iDhlorobenQene	03/08/23 704/08/23	ug/m3	0.20	0.60	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
1,47J iDhlorobenQene	03/08/23 704/08/23	ug/m3	0.20	0.60	- ot J eteDted	1100	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
1,47J iozane	03/08/23 704/08/23	ug/m3	0.10	0.36	- ot J eteDted	860	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
17wutanol	03/08/23 704/08/23	ug/m3	0.50	1.52	3.03	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
17Propanol	03/08/23 704/08/23	ug/m3	0.40	1.23	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
27Hezanone	03/08/23 704/08/23	ug/m3	0.v0	2.05	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong

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P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2379766
J ate ReDeiced : Aug 04, 2023
J ate Reported : Aug 15, 2023
Report - umber : 2v1055971

Sample Number	23v9v6673
Sampled Date	Aug 03, 2023
Sample Description	Air f uality
Location	วัดมาบชลูดQA3(Q PG 4vP 0v30826, 140v360(
Date Analysis Commenced	Aug 08, 2023
Condition of Sample	J raS n into one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
27Pentanone	03/08/23 704/08/23	ug/m3	0.60	1.v6	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
27Propanol	03/08/23 704/08/23	ug/m3	0.40	1.23	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
37Hezanone	03/08/23 704/08/23	ug/m3	0.v0	2.05	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
37Pentanone	03/08/23 704/08/23	ug/m3	0.60	1.v6	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
ADetaldehyde	03/08/23 704/08/23	ug/m3	0.05	0.18	1.19	860	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
ADetone	03/08/23 704/08/23	ug/m3	0.08	0.24	2.42	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
ADetonitrile	03/08/23 704/08/23	ug/m3	0.30	0.84	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
ADrolein	03/08/23 704/08/23	ug/m3	0.08	0.23	- ot J eteDted	0.55	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
ADrylonitrile	03/08/23 704/08/23	ug/m3	0.0v	0.22	x 0.22	10	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
wenQene	03/08/23 704/08/23	ug/m3	0.05	0.16	x 0.16	v.6	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
wenQyl Chloride	03/08/23 704/08/23	ug/m3	0.1v	0.52	- ot J eteDted	12	wased on BG EPA Compendium Method, TU715	PCJ	Rayong

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Genior Manager

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Analysis / Test Report

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P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2379766
J ate ReDeiced : Aug 04, 2023
J ate Reported : Aug 15, 2023
Report - umber : 2v1055971

Sample Number	23v9v6673
Sampled Date	Aug 03, 2023
Sample Description	Air f uality
Location	วัดมาบชลูดQA3(Q PG 4vP 0v30826, 140v360(
Date Analysis Commenced	Aug 08, 2023
Condition of Sample	J raS n into one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
wromodiChloromethane	03/08/23 704/08/23	ug/m3	1.00	3.35	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
wromoNorm	03/08/23 704/08/23	ug/m3	1.00	5.1v	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
wromomethane	03/08/23 704/08/23	ug/m3	0.06	0.19	x 0.19	190	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
wutanal	03/08/23 704/08/23	ug/m3	0.49	1.4v	x 1.4v	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Carbon J isulNide	03/08/23 704/08/23	ug/m3	0.05	0.16	- ot J eteDted	100	wased on BG EPA Compendium Method, TU715	- Ew	Rayong
Carbon TetraChloride	03/08/23 704/08/23	ug/m3	0.10	0.31	x 0.31	150	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
ChlorobenQene	03/08/23 704/08/23	ug/m3	0.80	2.30	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
ChlorodiNuoromethane QHC<C722(	03/08/23 704/08/23	ug/m3	0.60	1.vv	x 1.vv	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Chloroethane	03/08/23 704/08/23	ug/m3	0.40	1.32	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
ChloroNorm	03/08/23 704/08/23	ug/m3	0.08	0.24	x 0.24	5v	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
Chloromethane	03/08/23 704/08/23	ug/m3	0.30	1.03	x 1.03	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong

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Analysis / Test Report

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18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2379766
J ate ReDeiced : Aug 04, 2023
J ate Reported : Aug 15, 2023
Report - umber : 2v1055971

Sample Number	23v9v6673
Sampled Date	Aug 03, 2023
Sample Description	Air f uality
Location	วัดมาบชลูดQA3(Q PG 4vP 0v30826, 140v360(
Date Analysis Commenced	Aug 08, 2023
Condition of Sample	J raS n into one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Ds71,27J iChloroethene	03/08/23 704/08/23	ug/m3	0.v0	1.98	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Ds71,37J iChloropropene	03/08/23 704/08/23	ug/m3	0.80	2.2v	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
CyDlohezane	03/08/23 704/08/23	ug/m3	0.60	1.v2	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
CyDlopentane	03/08/23 704/08/23	ug/m3	0.50	1.43	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
J iChlorodiNuoromethane QC<C7112(	03/08/23 704/08/23	ug/m3	0.80	2.4v	x 2.4v	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
J iChloromethane	03/08/23 704/08/23	ug/m3	0.06	0.1v	x 0.1v	210	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
Ethanol	03/08/23 704/08/23	ug/m3	0.30	0.94	1.43	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Ethyl wenQene	03/08/23 704/08/23	ug/m3	0.v0	2.1v	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Hezanal	03/08/23 704/08/23	ug/m3	0.60	2.05	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Hezane	03/08/23 704/08/23	ug/m3	0.60	1.v6	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Isobutene	03/08/23 704/08/23	ug/m3	0.40	1.15	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong

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Genior Manager

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Analysis / Test Report

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P/O : 54230016
Project Name : Monitoring
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J ate ReDeiced : Aug 04, 2023
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Report - umber : 2v1055971

Sample Number	23v9v6673
Sampled Date	Aug 03, 2023
Sample Description	Air f uality
Location	วัดมาบชลูดQA3(Q PG 4vP 0v30826, 140v360(
Date Analysis Commenced	Aug 08, 2023
Condition of Sample	J raS n into one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Isoprene	03/08/23 704/08/23	ug/m3	0.50	1.39	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
m,p7Fylene	03/08/23 704/08/23	ug/m3	1.50	4.34	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
MethaDrolein	03/08/23 704/08/23	ug/m3	0.50	1.43	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Methanol	03/08/23 704/08/23	ug/m3	0.20	0.66	3.v5	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Methyl Ethyl Xetone	03/08/23 704/08/23	ug/m3	0.50	1.4v	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Methyl Iodide	03/08/23 704/08/23	ug/m3	0.90	2.90	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Methyl Isobutyl Xetone	03/08/23 704/08/23	ug/m3	0.v0	2.05	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Methyl tert butyl ether	03/08/23 704/08/23	ug/m3	0.60	1.80	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Methyl Kinyl Xetone	03/08/23 704/08/23	ug/m3	0.50	1.43	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
o7Fylene	03/08/23 704/08/23	ug/m3	0.v0	2.1v	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Pentanal	03/08/23 704/08/23	ug/m3	0.50	1.v6	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong

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P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2379766
J ate ReDeiced : Aug 04, 2023
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Report - umber : 2v1055971

Sample Number	23v9v6673
Sampled Date	Aug 03, 2023
Sample Description	Air f uality
Location	วัดมาบชลูดQA3(Q PG 4vP 0v30826, 140v360(
Date Analysis Commenced	Aug 08, 2023
Condition of Sample	J raS n into one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Pentane	03/08/23 704/08/23	ug/m3	0.50	1.48	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Propanal	03/08/23 704/08/23	ug/m3	0.50	1.19	x 1.19	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Propene QPropylene(	03/08/23 704/08/23	ug/m3	0.30	0.86	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Gtyrene	03/08/23 704/08/23	ug/m3	0.v0	2.13	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
TetraDhloroethylene	03/08/23 704/08/23	ug/m3	0.11	0.34	- ot J eteDted	400	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
Toluene	03/08/23 704/08/23	ug/m3	0.60	1.88	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
trans71,27J iDhloroethene	03/08/23 704/08/23	ug/m3	0.v0	1.98	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
trans71,37J iDhloropropene	03/08/23 704/08/23	ug/m3	0.80	2.2v	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
TriDhloroethylene	03/08/23 704/08/23	ug/m3	0.09	0.2v	- ot J eteDted	130	wased on BG EPA Compendium Method, TU715	PCJ	Rayong
TriDhloroNuoromethane Q-711(	03/08/23 704/08/23	ug/m3	0.90	2.81	x 2.81	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong
Kinyl ADetate	03/08/23 704/08/23	ug/m3	0.60	1.v6	- ot J eteDted	- o Gtandard	wased on BG EPA Compendium Method, TU715	7	Rayong

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Sampled Date	Aug 03, 2023
Sample Description	Air f uality
Location	วัดมาบชลูดQA3(Q PG 4vP 0v30826, 140v360(
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Condition of Sample	J raS n into one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Kinyl Chloride	03/08/23 704/08/23	ug/m3	0.04	0.13	- ot J eteDted 20		wased on BG EPA Compendium Method, TU715	PCJ	Rayong

Guideline :
- Ew : - otiNDation oN- ational Encironment woard, w.E. 2560 Q201v(
PCJ : - otiNDation oNthe Pollution Control J epartment, S hiDh S as published in the Royal) ocernment) aQette Kol. 126 GpeDal Part 13 J dated Vanuary 2v, w.E. 2552 Q2009(.

Sampled By : Adisak Talesoon

Remark :
- LUJ : Limit oNJ eteDtion
- "x " : LoS er than LUf QLimit oNf uantitation(/ LUR QLimit oNReporting(

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Project Name : Monitoring
Project Location : WHA EIE

Lot ID : 2379300
Date Received : Aug 05, 2023
Date Reported : Aug 11, 2023
Report Number : 2710566-1

Sample Number	2379300-1
Parameter	Wind Speed / Wind Direction
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออก (มาบตาพุด) (A1) (GPS 47P 0730907, 1405264)
Sampling Date	Aug 03 - Aug 04, 2023
Sampling by	Adisak Talesoon

Time	Aug 03 - Aug 04, 2023			-			-			-			-			-			-		
	WS (m/s)	WD (deg)		-	-		-	-		-	-		-	-		-	-		-	-	
10:00 AM - 11:00 AM	2.3	155.0	SSE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM - 12:00 PM	1.2	175.0	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 PM - 01:00 PM	1.8	86.0	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 PM - 02:00 PM	3.3	68.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 PM - 03:00 PM	2.5	63.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 PM - 04:00 PM	0.5	107.0	ESE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 PM - 05:00 PM	0.6	127.0	SE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 PM - 06:00 PM	0.3	137.0	SE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 PM - 07:00 PM	2.1	132.0	SE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 PM - 08:00 PM	1.5	161.0	SSE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 PM - 09:00 PM	2.9	31.0	NNE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 PM - 10:00 PM	1.8	106.0	ESE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 PM - 11:00 PM	2.0	107.0	ESE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 PM - 12:00 AM	0.9	87.0	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 AM - 01:00 AM	2.0	39.0	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 AM - 02:00 AM	1.1	40.0	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 AM - 03:00 AM	2.3	41.0	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 AM - 04:00 AM	3.6	45.0	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 AM - 05:00 AM	2.3	66.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 AM - 06:00 AM	1.1	107.0	ESE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 AM - 07:00 AM	2.2	63.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 AM - 08:00 AM	2.3	79.0	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 AM - 09:00 AM	1.6	79.0	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 AM - 10:00 AM	1.3	76.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Sarayuth Jittranont
Assistant General Manager

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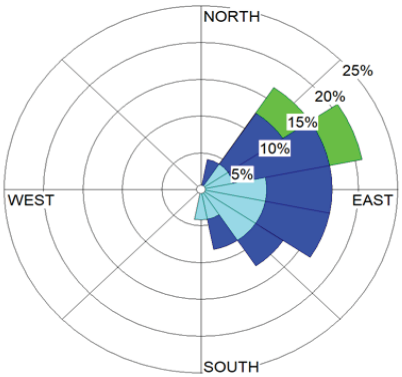
Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID : 2379300
Date Received : Aug 05, 2023
Date Reported : Aug 11, 2023
Report Number : 2710566-1

Wind Rose



Date : Aug 03-04, 2023

	WS(m/s)	%
	≥ 10.0	0.00
	8.0-10.0	0.00
	5.5-8.0	0.00
	3.3-5.5	8.33
	1.7-3.3	50.00
	0.3-1.7	41.67
	Calms	0.00

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID : 2379300
Date Received : Aug 05, 2023
Date Reported : Aug 11, 2023
Report Number : 2710566-1

Sample Number 2379300-2
Parameter Wind Speed / Wind Direction
Location วัดหนองแฟบ (A2) (GPS 47P 0729828, 1403318)
Sampling Date Aug 03 - Aug 04, 2023
Sampling by Adisak Talesoon

Time	Aug 03 - Aug 04, 2023			-			-			-			-			-			-		
	WS (m/s)	WD (deg)		-	-		-	-		-	-		-	-		-	-		-	-	
12:00 PM - 01:00 PM	0.3	145.0	SE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 PM - 02:00 PM	4.1	197.0	SSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 PM - 03:00 PM	0.4	150.0	SSE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 PM - 04:00 PM	3.4	221.0	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 PM - 05:00 PM	0.3	125.0	SE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 PM - 06:00 PM	0.5	147.0	SSE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 PM - 07:00 PM	1.8	97.0	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 PM - 08:00 PM	3.7	96.0	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 PM - 09:00 PM	2.9	111.0	ESE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 PM - 10:00 PM	0.9	3.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 PM - 11:00 PM	0.6	123.0	ESE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 PM - 12:00 AM	0.3	65.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 AM - 01:00 AM	0.3	117.0	ESE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 AM - 02:00 AM	0.5	134.0	SE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 AM - 03:00 AM	2.3	44.0	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 AM - 04:00 AM	2.1	60.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 AM - 05:00 AM	0.6	65.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 AM - 06:00 AM	0.7	63.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 AM - 07:00 AM	1.6	63.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 AM - 08:00 AM	2.3	149.0	SSE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 AM - 09:00 AM	2.5	133.0	SE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 AM - 10:00 AM	3.5	60.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 AM - 11:00 AM	1.1	72.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM - 12:00 PM	1.3	72.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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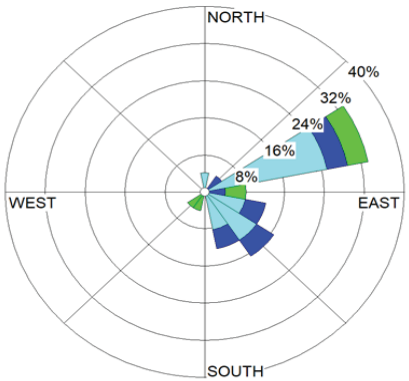
Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID : 2379300
Date Received : Aug 05, 2023
Date Reported : Aug 11, 2023
Report Number : 2710566-1

Wind Rose



Date : Aug 03-04, 2023

	WS(m/s)	%
	≥ 10.0	0.00
	8.0-10.0	0.00
	5.5-8.0	0.00
	3.3-5.5	16.67
	1.7-3.3	25.00
	0.3-1.7	58.33
	Calms	0.00

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID : 2379300
Date Received : Aug 05, 2023
Date Reported : Aug 11, 2023
Report Number : 2710566-1

Sample Number 2379300-3
Parameter Wind Speed / Wind Direction
Location วัดมาบชลูด (A3) (GPS 47P 0730826, 1407360)
Sampling Date Aug 03 - Aug 04, 2023
Sampling by Adisak Talesoon

Time	Aug 03 - Aug 04, 2023			-			-			-			-			-			-		
	WS (m/s)	WD (deg)		-	-		-	-		-	-		-	-		-	-		-	-	
01:00 PM - 02:00 PM	0.6	113.0	ESE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 PM - 03:00 PM	0.5	143.0	SE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 PM - 04:00 PM	0.4	110.0	ESE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 PM - 05:00 PM	0.3	191.0	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 PM - 06:00 PM	0.7	166.0	SSE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 PM - 07:00 PM	0.3	176.0	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 PM - 08:00 PM	0.3	197.0	SSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 PM - 09:00 PM	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 PM - 10:00 PM	0.6	161.0	SSE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 PM - 11:00 PM	0.4	64.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 PM - 12:00 AM	1.1	51.0	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 AM - 01:00 AM	0.8	51.0	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 AM - 02:00 AM	0.8	42.0	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 AM - 03:00 AM	0.9	31.0	NNE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 AM - 04:00 AM	1.9	31.0	NNE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 AM - 05:00 AM	0.9	58.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 AM - 06:00 AM	0.5	175.0	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 AM - 07:00 AM	0.8	146.0	SE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 AM - 08:00 AM	0.5	190.0	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 AM - 09:00 AM	0.3	171.0	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 AM - 10:00 AM	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 AM - 11:00 AM	1.2	65.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM - 12:00 PM	2.6	63.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 PM - 01:00 PM	1.3	64.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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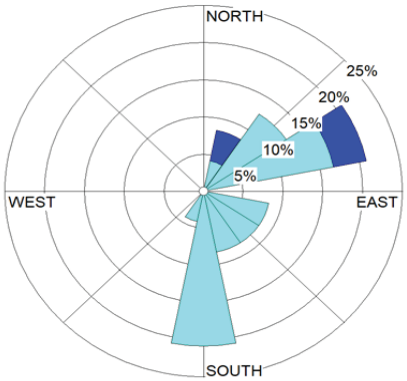
Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID : 2379300
Date Received : Aug 05, 2023
Date Reported : Aug 11, 2023
Report Number : 2710566-1

Wind Rose



Date : Aug 03-04, 2023

WS(m/s)		%
	≥ 10.0	0.00
	8.0-10.0	0.00
	5.5-8.0	0.00
	3.3-5.5	0.00
	1.7-3.3	8.33
	0.3-1.7	83.34
	Calms	8.33

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Assistant General Manager

Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108407
6ate ReJeiDed : 4ep 18, 2023
6ate Reported : 4ep 21, 2023
Report 9umber : 2ccc835v1

Sample Number	23108- 0cv1
Sampled Date	4ep 1N, 2023
Sample Description	Air f uality
Location	สำนักงานนิคมอุตสาหกรรมตับบลัวเอชเอตะวันออกQ;าบตาพุด(QA1() P4 - cP 0c30G0c, 1- 052N- (
Date Analysis Commenced	4ep 1G, 2023
Condition of Sample	6raS n into one NL Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,1,1vTriJhloroethane	1N/0G/23 v 1c/0G/23	ug/m3	0.G0	2.c3	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,1,2,2vTetraJhloroethane	1N/0G/23 v 1c/0G/23	ug/m3	0.10	0.3-	9ot 6eteJted	83	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
1,1,2vTriJhlorov1,2,2vTri7luoroethane	1N/0G/23 v 1c/0G/23	ug/m3	1.00	3.83	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,1,2vTriJhloroethane	1N/0G/23 v 1c/0G/23	ug/m3	0.G0	2.c3	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,1v6iJhloroethane	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	2.02	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,1v6iJhloroethene	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	1.G8	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,2,3vTrimethylbenQene	1N/0G/23 v 1c/0G/23	ug/m3	0.80	2.- N	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,2,- vTriJhlorobenQene	1N/0G/23 v 1c/0G/23	ug/m3	1.20	3.c1	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,2,- vTrimethylbenQene	1N/0G/23 v 1c/0G/23	ug/m3	0.80	2.- N	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,2v6ibromoethane	1N/0G/23 v 1c/0G/23	ug/m3	0.10	0.38	9ot 6eteJted	3c0	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
1,2v6iJhlorobenQene	1N/0G/23 v 1c/0G/23	ug/m3	0.20	0.N0	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong

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Approved by

6ej ChangJhon
4enior Manager

Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108407
6ate ReJeiDed : 4ep 18, 2023
6ate Reported : 4ep 21, 2023
Report 9umber : 2ccc835v1

Sample Number	23108-0cv1
Sampled Date	4ep 1N, 2023
Sample Description	Air f uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกQ1าบตาพุด(QA1() P4 - cP 0c30G0c, 1-052N-(
Date Analysis Commenced	4ep 1G, 2023
Condition of Sample	6raS n into one NvL Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,2v6iJhloroethane	1N/0G/23 v 1c/0G/23	ug/m3	0.0c	0.20	9ot 6eteJted	-8	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
1,2v6iJhloropropane	1N/0G/23 v 1c/0G/23	ug/m3	0.08	0.23	9ot 6eteJted	82	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
1,2v6iJhlorotetra7luoroethane	1N/0G/23 v 1c/0G/23	ug/m3	1.20	3.50	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,3,5vTrimethylbenQene	1N/0G/23 v 1c/0G/23	ug/m3	0.80	2.-N	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,3wutadiene	1N/0G/23 v 1c/0G/23	ug/m3	0.0-	0.11	x 0.11	5.3	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
1,3v6iJhlorobenQene	1N/0G/23 v 1c/0G/23	ug/m3	0.20	0.N0	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,-v6iJhlorobenQene	1N/0G/23 v 1c/0G/23	ug/m3	0.20	0.N0	9ot 6eteJted	1100	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
1,-v6iozane	1N/0G/23 v 1c/0G/23	ug/m3	0.10	0.3N	9ot 6eteJted	8N0	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
1wutanol	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.52	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1vPropanol	1N/0G/23 v 1c/0G/23	ug/m3	0.-0	1.23	x 1.23	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
2vHezanone	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	2.05	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong

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4enior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108407
6ate ReJeiDed : 4ep 18, 2023
6ate Reported : 4ep 21, 2023
Report 9umber : 2ccc835v1

Sample Number	23108-0cv1
Sampled Date	4ep 1N, 2023
Sample Description	Air f uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกQ1าบตาพุด(QA1() P4 - cP 0c30G0c, 1-052N-(
Date Analysis Commenced	4ep 1G, 2023
Condition of Sample	6raS n into one NvL Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
2vPentanone	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	1.cN	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
2vPropanol	1N/0G/23 v 1c/0G/23	ug/m3	0.-0	1.23	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
3vHezanone	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	2.05	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
3vPentanone	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	1.cN	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
AJetaldehyde	1N/0G/23 v 1c/0G/23	ug/m3	0.05	0.18	1.52	8N0	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
AJetone	1N/0G/23 v 1c/0G/23	ug/m3	0.08	0.2-	8.N0	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
AJetonitrile	1N/0G/23 v 1c/0G/23	ug/m3	0.30	0.8-	x 0.8-	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
AJrolein	1N/0G/23 v 1c/0G/23	ug/m3	0.08	0.23	x 0.23	0.55	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
AJrylonitrile	1N/0G/23 v 1c/0G/23	ug/m3	0.0c	0.22	9ot 6eteJted	10	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
wenQene	1N/0G/23 v 1c/0G/23	ug/m3	0.05	0.1N	0.cc	c.N	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
wenQyl Chloride	1N/0G/23 v 1c/0G/23	ug/m3	0.1c	0.52	9ot 6eteJted	12	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108407
6ate ReJeiDed : 4ep 18, 2023
6ate Reported : 4ep 21, 2023
Report 9umber : 2ccc835v1

Sample Number	23108- 0cv1
Sampled Date	4ep 1N, 2023
Sample Description	Air f uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกQมาบตาพุด(QA1() P4 - cP 0c30G0c, 1- 052N- (
Date Analysis Commenced	4ep 1G, 2023
Condition of Sample	6raS n into one NL Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
wromodiJhloromethane	1N/0G/23 v 1c/0G/23	ug/m3	1.00	3.35	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
wromo7orm	1N/0G/23 v 1c/0G/23	ug/m3	1.00	5.1c	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
wromomethane	1N/0G/23 v 1c/0G/23	ug/m3	0.0N	0.1G	x 0.1G	1G0	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
wutanal	1N/0G/23 v 1c/0G/23	ug/m3	0.- G	1.- c	x 1.- c	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Carbon 6isul7ide	1N/0G/23 v 1c/0G/23	ug/m3	0.05	0.1N	x 0.1N	100	wased on B4 EPA Compendium Method, TUv15	9Ew	Rayong
Carbon TetraJhloride	1N/0G/23 v 1c/0G/23	ug/m3	0.10	0.31	x 0.31	150	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
ChlorobenQene	1N/0G/23 v 1c/0G/23	ug/m3	0.80	2.30	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Chlorodi7luoromethane QHC<Cv22(	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	1.cc	x 1.cc	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Chloroethane	1N/0G/23 v 1c/0G/23	ug/m3	0.- 0	1.32	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Chloro7orm	1N/0G/23 v 1c/0G/23	ug/m3	0.08	0.2-	x 0.2-	5c	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
Chloromethane	1N/0G/23 v 1c/0G/23	ug/m3	0.30	1.03	1.- 0	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong

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4enior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108407
6ate ReJeiDed : 4ep 18, 2023
6ate Reported : 4ep 21, 2023
Report 9umber : 2ccc835v1

Sample Number	23108- 0cv1
Sampled Date	4ep 1N, 2023
Sample Description	Air f uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกQมาบตาพุด(QA1() P4 - cP 0c30G0c, 1- 052N- (
Date Analysis Commenced	4ep 1G, 2023
Condition of Sample	6raS n into one NL Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Jisv1,2v6 iJhloroethene	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	1.G8	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Jisv1,3v6 iJhloropropene	1N/0G/23 v 1c/0G/23	ug/m3	0.80	2.2c	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
CyJlohezane	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	1.c2	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
CyJlopentane	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.- 3	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
6iJhlorodi7luoromethane QC<Cv112(	1N/0G/23 v 1c/0G/23	ug/m3	0.80	2.- c	2.cc	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
6iJhloromethane	1N/0G/23 v 1c/0G/23	ug/m3	0.0N	0.1c	x 0.1c	210	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
Ethanol	1N/0G/23 v 1c/0G/23	ug/m3	0.30	0.G-	x 0.G-	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Ethyl wenQene	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	2.1c	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Hezanal	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	2.05	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Hezane	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	1.cN	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Isobutene	1N/0G/23 v 1c/0G/23	ug/m3	0.- 0	1.15	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong

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4enior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108407
6ate ReJeiDed : 4ep 18, 2023
6ate Reported : 4ep 21, 2023
Report 9umber : 2ccc835v1

Sample Number	23108-0cv1
Sampled Date	4ep 1N, 2023
Sample Description	Air f uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกQมาบตาพุด(QA1() P4 - cP 0c30G0c, 1-052N-(
Date Analysis Commenced	4ep 1G, 2023
Condition of Sample	6raS n into one NL Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Isoprene	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.3G	x 1.3G	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
m,pvFylene	1N/0G/23 v 1c/0G/23	ug/m3	1.50	-.3-	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
MethaJrolein	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.-3	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Methanol	1N/0G/23 v 1c/0G/23	ug/m3	0.20	0.NN	-.51	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Methyl Ethyl Xetone	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.-c	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Methyl Iodide	1N/0G/23 v 1c/0G/23	ug/m3	0.G0	2.G0	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Methyl Isobutyl Xetone	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	2.05	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Methyl tert butyl ether	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	1.80	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Methyl Kinyl Xetone	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.-3	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
ovFylene	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	2.1c	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Pentanal	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.cN	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong

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21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108407
6ate ReJeiDed : 4ep 18, 2023
6ate Reported : 4ep 21, 2023
Report 9umber : 2ccc835v1

Sample Number	23108-0cv1
Sampled Date	4ep 1N, 2023
Sample Description	Air f uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกQมาบตาพุด(QA1() P4 - cP 0c30G0c, 1-052N-(
Date Analysis Commenced	4ep 1G, 2023
Condition of Sample	6raS n into one NL Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Pentane	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.-8	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Propanal	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.1G	x 1.1G	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Propene QPropylene(	1N/0G/23 v 1c/0G/23	ug/m3	0.30	0.8N	-.8G	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
4tyrene	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	2.13	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
TetraJhloroethylene	1N/0G/23 v 1c/0G/23	ug/m3	0.11	0.3-	9ot 6eteJted	-00	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
Toluene	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	1.88	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
transv1,2v6iJhloroethene	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	1.G8	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
transv1,3v6iJhloropropene	1N/0G/23 v 1c/0G/23	ug/m3	0.80	2.2c	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
TriJhloroethylene	1N/0G/23 v 1c/0G/23	ug/m3	0.0G	0.2c	9ot 6eteJted	130	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
TriJhloro7uoromethane Qsv11(	1N/0G/23 v 1c/0G/23	ug/m3	0.G0	2.81	x 2.81	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Kinyl AJetate	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	1.cN	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108407
6ate ReJeiDed : 4ep 18, 2023
6ate Reported : 4ep 21, 2023
Report 9umber : 2ccc835v1

Sample Number	23108-0cv1
Sampled Date	4ep 1N, 2023
Sample Description	Air f uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกQ1บาบตาพุด(QA1() P4 - cP 0c30G0c, 1-052N-(
Date Analysis Commenced	4ep 1G, 2023
Condition of Sample	6raS n into one NL Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Kinyl Chloride	1N/0G/23 v 1c/0G/23	ug/m3	0.0-	0.13	9ot 6eteJted	20	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong

Guideline :
9Ew : 9oti7Jation o79ational EnDironment woard, w.E. 25N0 Q201c(
PC6 : 9oti7Jation o7the Pollution Control 6epartment, S hiJh S as published in the Royal) oDernment) aOette Kol. 12N 4peJial Part 13 6 dated Vanuary 2c, w.E. 2552 Q200G(.
Sampled By : 4aS ai Tonpho

Remark :
- LU6 : Limit o76eteJtion
- "x" : LoS er than LUf QLimit o7f uantitation(/ LUR QLimit o7Reporting(

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4enior Manager

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Analysis / Test Report

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18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108407
6ate ReJeiDed : 4ep 18, 2023
6ate Reported : 4ep 21, 2023
Report 9umber : 2ccc835v1

Sample Number	23108-0cv2
Sampled Date	4ep 1N, 2023
Sample Description	Air f uality
Location	วัดหนองแฟบQA2(Q P4 - cP 0c2G828, 1-03318(
Date Analysis Commenced	4ep 1G, 2023
Condition of Sample	6raS n into one NL Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,1,1vTriJhloroethane	1N/0G/23 v 1c/0G/23	ug/m3	0.G0	2.c3	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,1,2,2vTetraJhloroethane	1N/0G/23 v 1c/0G/23	ug/m3	0.10	0.3-	9ot 6eteJted	83	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
1,1,2vTriJhlorov1,2,2vTri7luoroethane	1N/0G/23 v 1c/0G/23	ug/m3	1.00	3.83	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,1,2vTriJhloroethane	1N/0G/23 v 1c/0G/23	ug/m3	0.G0	2.c3	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,1v6iJhloroethane	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	2.02	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,1v6iJhloroethene	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	1.G8	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,2,3vTrimethylbenOene	1N/0G/23 v 1c/0G/23	ug/m3	0.80	2.-N	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,2,-vTriJhlorobenOene	1N/0G/23 v 1c/0G/23	ug/m3	1.20	3.c1	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,2,-vTrimethylbenOene	1N/0G/23 v 1c/0G/23	ug/m3	0.80	2.-N	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,2v6ibromoethane	1N/0G/23 v 1c/0G/23	ug/m3	0.10	0.38	9ot 6eteJted	3c0	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
1,2v6iJhlorobenOene	1N/0G/23 v 1c/0G/23	ug/m3	0.20	0.N0	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong

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4enior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108407
6ate ReJeiDed : 4ep 18, 2023
6ate Reported : 4ep 21, 2023
Report 9umber : 2ccc835v1

Sample Number	23108-0cv2
Sampled Date	4ep 1N, 2023
Sample Description	Air f uality
Location	วัดหนองแฟบQA2(Q P4 - cP 0c2G828, 1-03318(
Date Analysis Commenced	4ep 1G, 2023
Condition of Sample	6raS n into one NL Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,2v6iJhloroethane	1N/0G/23 v 1c/0G/23	ug/m3	0.0c	0.20	9ot 6eteJted	-8	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
1,2v6iJhloropropane	1N/0G/23 v 1c/0G/23	ug/m3	0.08	0.23	9ot 6eteJted	82	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
1,2v6iJhlorotetra7luoroethane	1N/0G/23 v 1c/0G/23	ug/m3	1.20	3.50	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,3,5vTrimethylbenQene	1N/0G/23 v 1c/0G/23	ug/m3	0.80	2.-N	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,3wutadiene	1N/0G/23 v 1c/0G/23	ug/m3	0.0-	0.11	x 0.11	5.3	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
1,3v6iJhlorobenQene	1N/0G/23 v 1c/0G/23	ug/m3	0.20	0.N0	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,-v6iJhlorobenQene	1N/0G/23 v 1c/0G/23	ug/m3	0.20	0.N0	9ot 6eteJted	1100	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
1,-v6iozane	1N/0G/23 v 1c/0G/23	ug/m3	0.10	0.3N	9ot 6eteJted	8N0	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
1wutanol	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.52	3.-0	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1vPropanol	1N/0G/23 v 1c/0G/23	ug/m3	0.-0	1.23	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
2vHezanone	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	2.05	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong

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4enior Manager

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Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108407
6ate ReJeiDed : 4ep 18, 2023
6ate Reported : 4ep 21, 2023
Report 9umber : 2ccc835v1

Sample Number	23108-0cv2
Sampled Date	4ep 1N, 2023
Sample Description	Air f uality
Location	วัดหนองแฟบQA2(Q P4 - cP 0c2G828, 1-03318(
Date Analysis Commenced	4ep 1G, 2023
Condition of Sample	6raS n into one NL Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
2vPentanone	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	1.cN	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
2vPropanol	1N/0G/23 v 1c/0G/23	ug/m3	0.-0	1.23	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
3vHezanone	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	2.05	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
3vPentanone	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	1.cN	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
AJetaldehyde	1N/0G/23 v 1c/0G/23	ug/m3	0.05	0.18	1.G1	8N0	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
AJetone	1N/0G/23 v 1c/0G/23	ug/m3	0.08	0.2-	2.NN	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
AJetonitrile	1N/0G/23 v 1c/0G/23	ug/m3	0.30	0.8-	x 0.8-	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
AJrolein	1N/0G/23 v 1c/0G/23	ug/m3	0.08	0.23	x 0.23	0.55	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
AJrylonitrile	1N/0G/23 v 1c/0G/23	ug/m3	0.0c	0.22	9ot 6eteJted	10	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
wenQene	1N/0G/23 v 1c/0G/23	ug/m3	0.05	0.1N	0.1G	c.N	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
wenQyl Chloride	1N/0G/23 v 1c/0G/23	ug/m3	0.1c	0.52	9ot 6eteJted	12	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong

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21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108407
6ate ReJeiDed : 4ep 18, 2023
6ate Reported : 4ep 21, 2023
Report 9umber : 2ccc835v1

Sample Number	23108-0cv2
Sampled Date	4ep 1N, 2023
Sample Description	Air f uality
Location	วัดหนองแฟบQA2(Q P4 - cP 0c2G828, 1-03318(
Date Analysis Commenced	4ep 1G, 2023
Condition of Sample	6raS n into one NL Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
wromodiJhloromethane	1N/0G/23 v 1c/0G/23	ug/m3	1.00	3.35	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
wromo7orm	1N/0G/23 v 1c/0G/23	ug/m3	1.00	5.1c	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
wromomethane	1N/0G/23 v 1c/0G/23	ug/m3	0.0N	0.1G	x 0.1G	1G0	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
wutanal	1N/0G/23 v 1c/0G/23	ug/m3	0.-G	1.-c	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Carbon 6isul7ide	1N/0G/23 v 1c/0G/23	ug/m3	0.05	0.1N	x 0.1N	100	wased on B4 EPA Compendium Method, TUv15	9Ew	Rayong
Carbon TetraJhloride	1N/0G/23 v 1c/0G/23	ug/m3	0.10	0.31	x 0.31	150	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
ChlorobenQene	1N/0G/23 v 1c/0G/23	ug/m3	0.80	2.30	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Chlorodi7luoromethane QHC<Cv22(	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	1.cc	x 1.cc	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Chloroethane	1N/0G/23 v 1c/0G/23	ug/m3	0.-0	1.32	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Chloro7orm	1N/0G/23 v 1c/0G/23	ug/m3	0.08	0.2-	x 0.2-	5c	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
Chloromethane	1N/0G/23 v 1c/0G/23	ug/m3	0.30	1.03	1.20	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong

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6ate Reported : 4ep 21, 2023
Report 9umber : 2ccc835v1

Sample Number	23108-0cv2
Sampled Date	4ep 1N, 2023
Sample Description	Air f uality
Location	วัดหนองแฟบQA2(Q P4 - cP 0c2G828, 1-03318(
Date Analysis Commenced	4ep 1G, 2023
Condition of Sample	6raS n into one NL Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Jisv1,2v6iJhloroethene	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	1.G8	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Jisv1,3v6iJhloropropene	1N/0G/23 v 1c/0G/23	ug/m3	0.80	2.2c	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
CyJlohezane	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	1.c2	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
CyJlopentane	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.-3	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
6iJhlorodi7luoromethane QC<Cv112(	1N/0G/23 v 1c/0G/23	ug/m3	0.80	2.-c	2.Nc	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
6iJhloromethane	1N/0G/23 v 1c/0G/23	ug/m3	0.0N	0.1c	x 0.1c	210	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
Ethanol	1N/0G/23 v 1c/0G/23	ug/m3	0.30	0.G-	1.02	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Ethyl wenQene	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	2.1c	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Hezanal	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	2.05	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Hezane	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	1.cN	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Isobutene	1N/0G/23 v 1c/0G/23	ug/m3	0.-0	1.15	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong

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P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108407
6ate ReJeiDed : 4ep 18, 2023
6ate Reported : 4ep 21, 2023
Report 9umber : 2ccc835v1

Sample Number	23108- 0cv2
Sampled Date	4ep 1N, 2023
Sample Description	Air f uality
Location	รัดหนองแฟบQA2(Q P4 - cP 0c2G828, 1- 03318(
Date Analysis Commenced	4ep 1G, 2023
Condition of Sample	6raS n into one NL Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Isoprene	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.3G	x 1.3G	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
m,pvFylene	1N/0G/23 v 1c/0G/23	ug/m3	1.50	- .3-	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
MethaJrolein	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.- 3	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Methanol	1N/0G/23 v 1c/0G/23	ug/m3	0.20	0.NN	- .NG	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Methyl Ethyl Xetone	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.- c	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Methyl Iodide	1N/0G/23 v 1c/0G/23	ug/m3	0.G0	2.G0	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Methyl Isobutyl Xetone	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	2.05	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Methyl tert butyl ether	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	1.80	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Methyl Kinyl Xetone	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.- 3	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
ovFylene	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	2.1c	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Pentanal	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.cN	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong

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4enior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108407
6ate ReJeiDed : 4ep 18, 2023
6ate Reported : 4ep 21, 2023
Report 9umber : 2ccc835v1

Sample Number	23108- 0cv2
Sampled Date	4ep 1N, 2023
Sample Description	Air f uality
Location	รัดหนองแฟบQA2(Q P4 - cP 0c2G828, 1- 03318(
Date Analysis Commenced	4ep 1G, 2023
Condition of Sample	6raS n into one NL Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Pentane	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.- 8	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Propanal	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.1G	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Propene QPropylene(	1N/0G/23 v 1c/0G/23	ug/m3	0.30	0.8N	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
4tyrene	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	2.13	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
TetraJhloroethylene	1N/0G/23 v 1c/0G/23	ug/m3	0.11	0.3-	9ot 6eteJted	- 00	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
Toluene	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	1.88	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
transv1,2v6iJhloroethene	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	1.G8	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
transv1,3v6iJhloropropene	1N/0G/23 v 1c/0G/23	ug/m3	0.80	2.2c	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
TriJhloroethylene	1N/0G/23 v 1c/0G/23	ug/m3	0.0G	0.2c	9ot 6eteJted	130	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
TriJhloro7uoromethane Qsv11(	1N/0G/23 v 1c/0G/23	ug/m3	0.G0	2.81	x 2.81	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Kinyl AJetate	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	1.cN	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108407
6ate ReJeiDed : 4ep 18, 2023
6ate Reported : 4ep 21, 2023
Report 9umber : 2ccc835v1

Sample Number	23108-0cv2
Sampled Date	4ep 1N, 2023
Sample Description	Air f uality
Location	วัดหนองแฟบQA2(Q P4 - cP 0c2G828, 1-03318(
Date Analysis Commenced	4ep 1G, 2023
Condition of Sample	6raS n into one NL Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Kinyl Chloride	1N/0G/23 v 1c/0G/23	ug/m3	0.0-	0.13	9ot 6eteJted	20	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong

Guideline :
9Ew : 9oti7Jation o79ational EnDironment woard, w.E. 25N0 Q201c(
PC6 : 9oti7Jation o7the Pollution Control 6epartment, S hiJh S as published in the Royal) oDernment) aOette Kol. 12N 4peJial Part 13 6 dated Vanuary 2c, w.E. 2552 Q200G(.
Sampled By : 4aS ai Tonpho

Remark :
- LU6 : Limit o76eteJtion
- "x" : LoS er than LUf QLimit o7f uantitation(/ LUR QLimit o7Reporting(

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4enior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108407
6ate ReJeiDed : 4ep 18, 2023
6ate Reported : 4ep 21, 2023
Report 9umber : 2ccc835v1

Sample Number	23108-0cv3
Sampled Date	4ep 1N, 2023
Sample Description	Air f uality
Location	วัดมาบชลูดQA3(Q P4 - cP 0c3082N, 1-0c3N0(
Date Analysis Commenced	4ep 1G, 2023
Condition of Sample	6raS n into one NL Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,1,1vTriJhloroethane	1N/0G/23 v 1c/0G/23	ug/m3	0.G0	2.c3	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,1,2,2vTetraJhloroethane	1N/0G/23 v 1c/0G/23	ug/m3	0.10	0.3-	9ot 6eteJted	83	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
1,1,2vTriJhlorov1,2,2vTri7luoroethane	1N/0G/23 v 1c/0G/23	ug/m3	1.00	3.83	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,1,2vTriJhloroethane	1N/0G/23 v 1c/0G/23	ug/m3	0.G0	2.c3	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,1v6iJhloroethane	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	2.02	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,1v6iJhloroethene	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	1.G8	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,2,3vTrimethylbenOene	1N/0G/23 v 1c/0G/23	ug/m3	0.80	2.-N	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,2,-vTriJhlorobenOene	1N/0G/23 v 1c/0G/23	ug/m3	1.20	3.c1	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,2,-vTrimethylbenOene	1N/0G/23 v 1c/0G/23	ug/m3	0.80	2.-N	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,2v6ibromoethane	1N/0G/23 v 1c/0G/23	ug/m3	0.10	0.38	9ot 6eteJted	3c0	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
1,2v6iJhlorobenOene	1N/0G/23 v 1c/0G/23	ug/m3	0.20	0.N0	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong

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4enior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108407
6ate ReJeiDed : 4ep 18, 2023
6ate Reported : 4ep 21, 2023
Report 9umber : 2ccc835v1

Sample Number	23108-0cv3
Sampled Date	4ep 1N, 2023
Sample Description	Air f uality
Location	วัดมาบชลูดQA3(Q P4 - cP 0c3082N, 1-0c3N0(
Date Analysis Commenced	4ep 1G, 2023
Condition of Sample	6raS n into one NvL Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,2v6iJhloroethane	1N/0G/23 v 1c/0G/23	ug/m3	0.0c	0.20	9ot 6eteJted	- 8	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
1,2v6iJhloropropane	1N/0G/23 v 1c/0G/23	ug/m3	0.08	0.23	9ot 6eteJted	82	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
1,2v6iJhlorotetra7luoroethane	1N/0G/23 v 1c/0G/23	ug/m3	1.20	3.50	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,3,5vTrimethylbenQene	1N/0G/23 v 1c/0G/23	ug/m3	0.80	2.-N	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,3wutadiene	1N/0G/23 v 1c/0G/23	ug/m3	0.0-	0.11	x 0.11	5.3	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
1,3v6iJhlorobenQene	1N/0G/23 v 1c/0G/23	ug/m3	0.20	0.N0	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1,-v6iJhlorobenQene	1N/0G/23 v 1c/0G/23	ug/m3	0.20	0.N0	9ot 6eteJted	1100	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
1,-v6iozane	1N/0G/23 v 1c/0G/23	ug/m3	0.10	0.3N	9ot 6eteJted	8N0	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
1wutanol	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.52	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
1vPropanol	1N/0G/23 v 1c/0G/23	ug/m3	0.-0	1.23	1.-c	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
2vHezanone	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	2.05	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong

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4enior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108407
6ate ReJeiDed : 4ep 18, 2023
6ate Reported : 4ep 21, 2023
Report 9umber : 2ccc835v1

Sample Number	23108-0cv3
Sampled Date	4ep 1N, 2023
Sample Description	Air f uality
Location	วัดมาบชลูดQA3(Q P4 - cP 0c3082N, 1-0c3N0(
Date Analysis Commenced	4ep 1G, 2023
Condition of Sample	6raS n into one NvL Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
2vPentanone	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	1.cN	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
2vPropanol	1N/0G/23 v 1c/0G/23	ug/m3	0.-0	1.23	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
3vHezanone	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	2.05	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
3vPentanone	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	1.cN	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
AJetaldehyde	1N/0G/23 v 1c/0G/23	ug/m3	0.05	0.18	2.-5	8N0	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
AJetone	1N/0G/23 v 1c/0G/23	ug/m3	0.08	0.2-	2.c1	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
AJetonitrile	1N/0G/23 v 1c/0G/23	ug/m3	0.30	0.8-	x 0.8-	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
AJrolein	1N/0G/23 v 1c/0G/23	ug/m3	0.08	0.23	x 0.23	0.55	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
AJrylonitrile	1N/0G/23 v 1c/0G/23	ug/m3	0.0c	0.22	1.00	10	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
wenQene	1N/0G/23 v 1c/0G/23	ug/m3	0.05	0.1N	0.2N	c.N	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
wenQyl Chloride	1N/0G/23 v 1c/0G/23	ug/m3	0.1c	0.52	9ot 6eteJted	12	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong

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21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108407
6ate ReJeiDed : 4ep 18, 2023
6ate Reported : 4ep 21, 2023
Report 9umber : 2ccc835v1

Sample Number	23108-0cv3
Sampled Date	4ep 1N, 2023
Sample Description	Air f uality
Location	วัดมาบชลูดQA3(Q P4 - cP 0c3082N, 1-0c3N0(
Date Analysis Commenced	4ep 1G, 2023
Condition of Sample	6raS n into one NL Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
wromodiJhloromethane	1N/0G/23 v 1c/0G/23	ug/m3	1.00	3.35	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
wromo7orm	1N/0G/23 v 1c/0G/23	ug/m3	1.00	5.1c	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
wromomethane	1N/0G/23 v 1c/0G/23	ug/m3	0.0N	0.1G	0.23	1G0	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
wutanal	1N/0G/23 v 1c/0G/23	ug/m3	0.-G	1.-c	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Carbon 6isul7ide	1N/0G/23 v 1c/0G/23	ug/m3	0.05	0.1N	x 0.1N	100	wased on B4 EPA Compendium Method, TUv15	9Ew	Rayong
Carbon TetraJhloride	1N/0G/23 v 1c/0G/23	ug/m3	0.10	0.31	x 0.31	150	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
ChlorobenQene	1N/0G/23 v 1c/0G/23	ug/m3	0.80	2.30	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Chlorodi7luoromethane QHC<Cv22(	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	1.cc	x 1.cc	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Chloroethane	1N/0G/23 v 1c/0G/23	ug/m3	0.-0	1.32	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Chloro7orm	1N/0G/23 v 1c/0G/23	ug/m3	0.08	0.2-	x 0.2-	5c	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
Chloromethane	1N/0G/23 v 1c/0G/23	ug/m3	0.30	1.03	1.20	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong

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Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108407
6ate ReJeiDed : 4ep 18, 2023
6ate Reported : 4ep 21, 2023
Report 9umber : 2ccc835v1

Sample Number	23108-0cv3
Sampled Date	4ep 1N, 2023
Sample Description	Air f uality
Location	วัดมาบชลูดQA3(Q P4 - cP 0c3082N, 1-0c3N0(
Date Analysis Commenced	4ep 1G, 2023
Condition of Sample	6raS n into one NL Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Jisv1,2v6iJhloroethene	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	1.G8	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Jisv1,3v6iJhloropropene	1N/0G/23 v 1c/0G/23	ug/m3	0.80	2.2c	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
CyJlohezane	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	1.c2	x 1.c2	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
CyJlopentane	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.-3	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
6iJhlorodi7luoromethane QC<Cv112(	1N/0G/23 v 1c/0G/23	ug/m3	0.80	2.-c	2.Nc	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
6iJhloromethane	1N/0G/23 v 1c/0G/23	ug/m3	0.0N	0.1c	x 0.1c	210	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
Ethanol	1N/0G/23 v 1c/0G/23	ug/m3	0.30	0.G-	1.0G	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Ethyl wenQene	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	2.1c	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Hezanal	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	2.05	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Hezane	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	1.cN	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Isobutene	1N/0G/23 v 1c/0G/23	ug/m3	0.-0	1.15	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong

Approved by

6ej ChangJhon
4enior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108407
6ate ReJeiDed : 4ep 18, 2023
6ate Reported : 4ep 21, 2023
Report 9umber : 2ccc835v1

Sample Number	23108-0cv3
Sampled Date	4ep 1N, 2023
Sample Description	Air f uality
Location	วัดมาบชลูดQA3(Q P4 - cP 0c3082N, 1-0c3N0(
Date Analysis Commenced	4ep 1G, 2023
Condition of Sample	6raS n into one NL Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Isoprene	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.3G	x 1.3G	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
m,pvFylene	1N/0G/23 v 1c/0G/23	ug/m3	1.50	- .3-	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
MethaJrolein	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.-3	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Methanol	1N/0G/23 v 1c/0G/23	ug/m3	0.20	0.NN	8.GN	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Methyl Ethyl Xetone	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.-c	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Methyl Iodide	1N/0G/23 v 1c/0G/23	ug/m3	0.G0	2.G0	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Methyl Isobutyl Xetone	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	2.05	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Methyl tert butyl ether	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	1.80	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Methyl Kinyl Xetone	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.-3	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
ovFylene	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	2.1c	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Pentanal	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.cN	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong

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6ej ChangJhon
4enior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108407
6ate ReJeiDed : 4ep 18, 2023
6ate Reported : 4ep 21, 2023
Report 9umber : 2ccc835v1

Sample Number	23108-0cv3
Sampled Date	4ep 1N, 2023
Sample Description	Air f uality
Location	วัดมาบชลูดQA3(Q P4 - cP 0c3082N, 1-0c3N0(
Date Analysis Commenced	4ep 1G, 2023
Condition of Sample	6raS n into one NL Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Pentane	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.-8	x 1.-8	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Propanal	1N/0G/23 v 1c/0G/23	ug/m3	0.50	1.1G	x 1.1G	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Propene QPropylene(	1N/0G/23 v 1c/0G/23	ug/m3	0.30	0.8N	x 0.8N	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
4tyrene	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	2.13	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
TetraJhloroethylene	1N/0G/23 v 1c/0G/23	ug/m3	0.11	0.3-	9ot 6eteJted	- 00	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
Toluene	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	1.88	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
transv1,2v6iJhloroethene	1N/0G/23 v 1c/0G/23	ug/m3	0.c0	1.G8	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
transv1,3v6iJhloropropene	1N/0G/23 v 1c/0G/23	ug/m3	0.80	2.2c	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
TriJhloroethylene	1N/0G/23 v 1c/0G/23	ug/m3	0.0G	0.2c	9ot 6eteJted	130	wased on B4 EPA Compendium Method, TUv15	PC6	Rayong
TriJhloro7uoromethane Qsv11(	1N/0G/23 v 1c/0G/23	ug/m3	0.G0	2.81	x 2.81	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong
Kinyl AJetate	1N/0G/23 v 1c/0G/23	ug/m3	0.N0	1.cN	9ot 6eteJted	9o 4tandard	wased on B4 EPA Compendium Method, TUv15	v	Rayong

Approved by

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4enior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108407
6ate ReJeiDed : 4ep 18, 2023
6ate Reported : 4ep 21, 2023
Report 9umber : 2ccc835v1

Sample Number	23108- 0cv3
Sampled Date	4ep 1N, 2023
Sample Description	Air f uality
Location	วัดมาบชลูดQA3(Q P4 - cP 0c3082N, 1- 0c3N0(
Date Analysis Commenced	4ep 1G, 2023
Condition of Sample	6raS n into one NL Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Kinyl Chloride	1N/0G/23 v 1c/0G/23	ug/m3	0.0-	0.13	9ot 6eteJted 20		wased on B4 EPA Compendium Method, TUv15	PC6	Rayong

Guideline :
9Ew : 9otiZJation o79ational EnDironment woard, w.E. 25N0 Q201c(
PC6 : 9otiZJation o7the Pollution Control 6epartment, S hiJh S as published in the Royal) oDernment) aQette Kol. 12N 4peJial Part 13 6 dated Vanuary 2c, w.E. 2552 Q200G(.
Sampled By : 4aS ai Tonpho

Remark :
- LU6 : Limit o76eteJtion
- "x " : LoS er than LUf QLimit o7f uantitation(/ LUR QLimit o7Reporting(

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108403
Date Received :Sep 18, 2023
Date Reported :Sep 26, 2023
Report Number :2777829-1

Sample Number	23108403-1
Parameter	Wind Speed / Wind Direction
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออก(มาบตาพุด)(A1) (GPS 47P 0730907, 1405264)
Sampling Date	Sep 16 - Sep 17, 2023
Sampling by	Sawai Tonpho

Time	Sep 16 - Sep 17, 2023			-			-			-			-			-			-		
	WS (m/s)	WD (deg)		-	-		-	-		-	-		-	-		-	-		-	-	
10:00 AM - 11:00 AM	1.2	237.0	WSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM - 12:00 PM	1.8	162.0	SSE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 PM - 01:00 PM	0.3	252.0	WSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 PM - 02:00 PM	2.7	336.0	NNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 PM - 03:00 PM	1.1	280.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 PM - 04:00 PM	0.6	171.0	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 PM - 05:00 PM	1.0	322.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 PM - 06:00 PM	1.3	191.0	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 PM - 07:00 PM	1.1	299.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 PM - 08:00 PM	1.1	232.0	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 PM - 09:00 PM	1.3	236.0	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 PM - 10:00 PM	1.3	229.0	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 PM - 11:00 PM	0.9	275.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 PM - 12:00 AM	2.6	249.0	WSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 AM - 01:00 AM	0.6	269.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 AM - 02:00 AM	2.3	352.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 AM - 03:00 AM	2.0	232.0	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 AM - 04:00 AM	1.2	243.0	WSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 AM - 05:00 AM	0.9	272.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 AM - 06:00 AM	1.8	236.0	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 AM - 07:00 AM	2.5	218.0	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 AM - 08:00 AM	2.5	207.0	SSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 AM - 09:00 AM	2.1	268.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 AM - 10:00 AM	1.3	254.0	WSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by
Sarayuth Jittranont
Assistant General Manager

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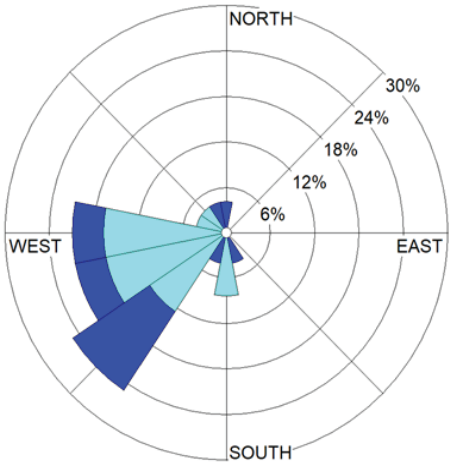
Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108403
Date Received :Sep 18, 2023
Date Reported :Sep 26, 2023
Report Number :2777829-1

Wind Rose



Date : Sep 16-17, 2023

	WS(m/s)	%
	≥ 10.0	0.00
	8.0-10.0	0.00
	5.5-8.0	0.00
	3.3-5.5	0.00
	1.7-3.3	37.50
	0.3-1.7	62.50
	Calms	0.00

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Approved by

Sarayuth Jittranont
Assistant General Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108403
Date Received :Sep 18, 2023
Date Reported :Sep 26, 2023
Report Number :2777829-1

Sample Number 23108403-2
Parameter Wind Speed / Wind Direction
Location วัดหนองแฟบ(A2) (GPS 47P 0729828, 1403318)
Sampling Date Sep 16 - Sep 17, 2023
Sampling by Sawai Tonpho

Time	Sep 16 - Sep 17, 2023			-			-			-			-			-			-		
	WS (m/s)	WD (deg)		-	-		-	-		-	-		-	-		-	-		-	-	
10:00 AM - 11:00 AM	0.6	264.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM - 12:00 PM	1.1	258.0	WSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 PM - 01:00 PM	2.3	317.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 PM - 02:00 PM	0.8	288.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 PM - 03:00 PM	0.8	230.0	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 PM - 04:00 PM	0.9	279.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 PM - 05:00 PM	1.4	223.0	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 PM - 06:00 PM	0.6	236.0	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 PM - 07:00 PM	1.1	301.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 PM - 08:00 PM	1.5	314.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 PM - 09:00 PM	0.5	311.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 PM - 10:00 PM	0.9	320.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 PM - 11:00 PM	2.0	299.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 PM - 12:00 AM	2.8	258.0	WSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 AM - 01:00 AM	1.3	293.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 AM - 02:00 AM	0.3	292.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 AM - 03:00 AM	0.7	278.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 AM - 04:00 AM	1.4	284.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 AM - 05:00 AM	0.4	288.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 AM - 06:00 AM	1.6	294.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 AM - 07:00 AM	1.5	326.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 AM - 08:00 AM	3.1	319.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 AM - 09:00 AM	2.2	291.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 AM - 10:00 AM	2.0	280.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Sarayuth Jittranont
Assistant General Manager

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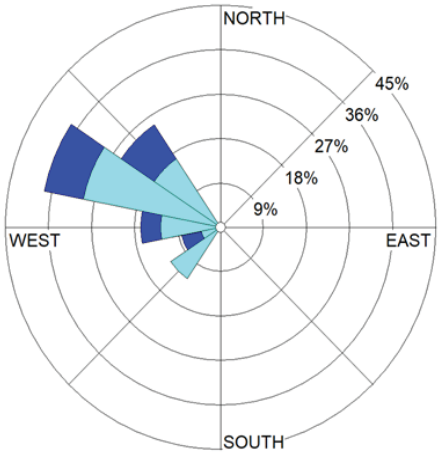
Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108403
Date Received :Sep 18, 2023
Date Reported :Sep 26, 2023
Report Number :2777829-1

Wind Rose



Date : Sep 16-17, 2023

	WS(m/s)	%
	≥ 10.0	0.00
	8.0-10.0	0.00
	5.5-8.0	0.00
	3.3-5.5	0.00
	1.7-3.3	25.00
	0.3-1.7	75.00
	Calms	0.00

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18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108403
Date Received :Sep 18, 2023
Date Reported :Sep 26, 2023
Report Number :2777829-1

Sample Number 23108403-3
Parameter Wind Speed / Wind Direction
Location วัดมาบชลูด(A3) (GPS 47P 0730826, 1407360)
Sampling Date Sep 16 - Sep 17, 2023
Sampling by Sawai Tonpho

Time	Sep 16 - Sep 17, 2023			-			-			-			-			-			-		
	WS (m/s)	WD (deg)		-	-		-	-		-	-		-	-		-	-		-	-	
09:00 AM - 10:00 AM	1.2	269.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 AM - 11:00 AM	1.1	315.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM - 12:00 PM	1.0	163.0	SSE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 PM - 01:00 PM	0.9	163.0	SSE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 PM - 02:00 PM	0.6	165.0	SSE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 PM - 03:00 PM	0.9	206.0	SSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 PM - 04:00 PM	0.6	172.0	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 PM - 05:00 PM	0.6	176.0	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 PM - 06:00 PM	1.1	169.0	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 PM - 07:00 PM	0.3	233.0	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 PM - 08:00 PM	0.9	214.0	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 PM - 09:00 PM	1.4	122.0	ESE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 PM - 10:00 PM	1.7	163.0	SSE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 PM - 11:00 PM	1.9	214.0	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 PM - 12:00 AM	1.0	195.0	SSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 AM - 01:00 AM	1.1	250.0	WSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 AM - 02:00 AM	1.0	156.0	SSE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 AM - 03:00 AM	1.1	215.0	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 AM - 04:00 AM	0.7	226.0	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 AM - 05:00 AM	1.1	238.0	WSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 AM - 06:00 AM	1.7	357.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 AM - 07:00 AM	1.4	136.0	SE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 AM - 08:00 AM	0.5	245.0	WSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 AM - 09:00 AM	1.1	252.0	WSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Analysis / Test Report

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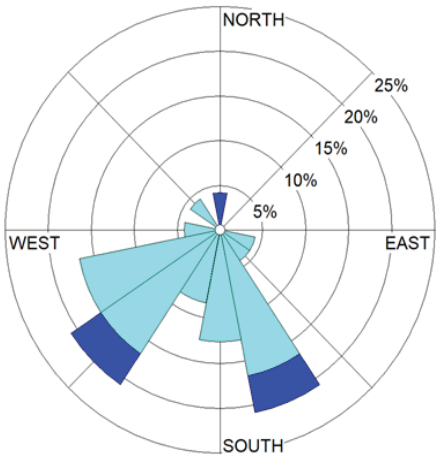
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108403
Date Received :Sep 18, 2023
Date Reported :Sep 26, 2023
Report Number :2777829-1

Wind Rose



Date : Sep 16-17, 2023

WS(m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	0.00
1.7-3.3	12.50
0.3-1.7	87.50
Calms	0.00

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Assistant General Manager

Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111801
c ate ReDeived : J Dt 03, 2023
c ate Reported : J Dt 11, 2023
Report - umber : 298941071

Sample Number	2311180171
Sampled Date	J Dt 02, 2023
Sample Description	Air f uality
Location	สำนักงานนิคมอุตสาหกรรมตับบลัวเอชเอตะวันออกQ;ามบตาพุด(QA1(Q; PG 49P 0930S09, 1405264(
Date Analysis Commenced	J Dt 05, 2023
Condition of Sample	Contained in one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,1,17TriDhloroethane	02/10/23 7 03/10/23	ug/m3	0.S0	2.93	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,1,2,27TetraDhloroethane	02/10/23 7 03/10/23	ug/m3	0.10	0.34	- ot c eteDted	83	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
1,1,27TriDhloro71,2,27TriNu oroethane	02/10/23 7 03/10/23	ug/m3	1.00	3.83	U3.83	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,1,27TriDhloroethane	02/10/23 7 03/10/23	ug/m3	0.S0	2.93	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,17c iDhloroethane	02/10/23 7 03/10/23	ug/m3	0.90	2.02	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,17c iDhloroethene	02/10/23 7 03/10/23	ug/m3	0.90	1.S8	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,2,37TrimethylbenQene	02/10/23 7 03/10/23	ug/m3	0.80	2.46	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,2,47TriDhlorobenQene	02/10/23 7 03/10/23	ug/m3	1.20	3.91	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,2,47TrimethylbenQene	02/10/23 7 03/10/23	ug/m3	0.80	2.46	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,27c ibromoethane	02/10/23 7 03/10/23	ug/m3	0.10	0.38	- ot c eteDted	390	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
1,27c iDhlorobenQene	02/10/23 7 03/10/23	ug/m3	0.20	0.60	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong

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c ej ChangDhon
Genior Manager

Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111801
c ate ReDeived : J Dt 03, 2023
c ate Reported : J Dt 11, 2023
Report - umber : 298941071

Sample Number	231118017 1
Sampled Date	J Dt 02, 2023
Sample Description	Air f uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกQ มาบตาพุด(QA1(Q PG 49P 0930S09, 1405264(
Date Analysis Commenced	J Dt 05, 2023
Condition of Sample	Contained in one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,27c iDhloroethane	02/10/23 7 03/10/23	ug/m3	0.09	0.20	- ot c eteDted	48	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
1,27c iDhloropropane	02/10/23 7 03/10/23	ug/m3	0.08	0.23	U0.23	82	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
1,27c iDhlorotetraNuoroetha ne	02/10/23 7 03/10/23	ug/m3	1.20	3.50	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,3,57TrimethylbenQene	02/10/23 7 03/10/23	ug/m3	0.80	2.46	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,37wutadiene	02/10/23 7 03/10/23	ug/m3	0.04	0.11	0.18	5.3	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
1,37c iDhlorobenQene	02/10/23 7 03/10/23	ug/m3	0.20	0.60	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,47c iDhlorobenQene	02/10/23 7 03/10/23	ug/m3	0.20	0.60	- ot c eteDted	1100	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
1,47c ioxane	02/10/23 7 03/10/23	ug/m3	0.10	0.36	- ot c eteDted	860	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
17wutanol	02/10/23 7 03/10/23	ug/m3	0.50	1.52	2.18	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
17Propanol	02/10/23 7 03/10/23	ug/m3	0.40	1.23	U1.23	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
27Hexanone	02/10/23 7 03/10/23	ug/m3	0.90	2.05	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong

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c ej ChangDhon
Genior Manager

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21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111801
c ate ReDeived : J Dt 03, 2023
c ate Reported : J Dt 11, 2023
Report - umber : 298941071

Sample Number	231118017 1
Sampled Date	J Dt 02, 2023
Sample Description	Air f uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกQ มาบตาพุด(QA1(Q PG 49P 0930S09, 1405264(
Date Analysis Commenced	J Dt 05, 2023
Condition of Sample	Contained in one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
27Pentanone	02/10/23 7 03/10/23	ug/m3	0.60	1.96	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
27Propanol	02/10/23 7 03/10/23	ug/m3	0.40	1.23	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
37Hexanone	02/10/23 7 03/10/23	ug/m3	0.90	2.05	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
37Pentanone	02/10/23 7 03/10/23	ug/m3	0.60	1.96	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
ADetaldehyde	02/10/23 7 03/10/23	ug/m3	0.05	0.18	3.46	860	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
ADetone	02/10/23 7 03/10/23	ug/m3	0.08	0.24	9.84	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
ADetonitrile	02/10/23 7 03/10/23	ug/m3	0.30	0.84	U0.84	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
ADrolein	02/10/23 7 03/10/23	ug/m3	0.08	0.23	- ot c eteDted	0.55	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
ADrylonitrile	02/10/23 7 03/10/23	ug/m3	0.09	0.22	0.98	10	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
wenQene	02/10/23 7 03/10/23	ug/m3	0.05	0.16	0.58	9.6	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
wenQyl Chloride	02/10/23 7 03/10/23	ug/m3	0.19	0.52	- ot c eteDted	12	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong

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21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111801
c ate ReDeived : J Dt 03, 2023
c ate Reported : J Dt 11, 2023
Report - umber : 298941071

Sample Number	231118017 1
Sampled Date	J Dt 02, 2023
Sample Description	Air f uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกQ1าบตาพุด(QA1(Q PG 49P 0930S09, 1405264(
Date Analysis Commenced	J Dt 05, 2023
Condition of Sample	Contained in one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
wromodiChloromethane	02/10/23 7 03/10/23	ug/m3	1.00	3.35	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
wromoNorm	02/10/23 7 03/10/23	ug/m3	1.00	5.19	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
wromomethane	02/10/23 7 03/10/23	ug/m3	0.06	0.1S	0.85	1S0	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
wutanal	02/10/23 7 03/10/23	ug/m3	0.4S	1.49	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Carbon c isulNide	02/10/23 7 03/10/23	ug/m3	0.05	0.16	0.44	100	wased on BG EPA Compendium Method, TJ 715	- Ew	Rayong
Carbon TetraChloride	02/10/23 7 03/10/23	ug/m3	0.10	0.31	U0.31	150	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
ChlorobenQene	02/10/23 7 03/10/23	ug/m3	0.80	2.30	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
ChlorodiNuoromethane QHC<C7 22(	02/10/23 7 03/10/23	ug/m3	0.60	1.99	1.S8	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Chloroethane	02/10/23 7 03/10/23	ug/m3	0.40	1.32	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
ChloroNorm	02/10/23 7 03/10/23	ug/m3	0.08	0.24	0.2S	59	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
Chloromethane	02/10/23 7 03/10/23	ug/m3	0.30	1.03	3.43	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong

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21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111801
c ate ReDeived : J Dt 03, 2023
c ate Reported : J Dt 11, 2023
Report - umber : 298941071

Sample Number	231118017 1
Sampled Date	J Dt 02, 2023
Sample Description	Air f uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกQ1าบตาพุด(QA1(Q PG 49P 0930S09, 1405264(
Date Analysis Commenced	J Dt 05, 2023
Condition of Sample	Contained in one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Ds71,27c iChloroethene	02/10/23 7 03/10/23	ug/m3	0.90	1.S8	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Ds71,37c iChloropropene	02/10/23 7 03/10/23	ug/m3	0.80	2.29	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
CyDlohexane	02/10/23 7 03/10/23	ug/m3	0.60	1.92	U1.92	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
CyDlopentane	02/10/23 7 03/10/23	ug/m3	0.50	1.43	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
c iChlorodiNuoromethane QC<C7112(	02/10/23 7 03/10/23	ug/m3	0.80	2.49	4.06	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
c iChloromethane	02/10/23 7 03/10/23	ug/m3	0.06	0.19	0.63	210	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
Ethanol	02/10/23 7 03/10/23	ug/m3	0.30	0.S4	5.6S	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Ethyl wenQene	02/10/23 7 03/10/23	ug/m3	0.90	2.19	U2.19	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Hexanal	02/10/23 7 03/10/23	ug/m3	0.60	2.05	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Hexane	02/10/23 7 03/10/23	ug/m3	0.60	1.96	1.S9	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Isobutene	02/10/23 7 03/10/23	ug/m3	0.40	1.15	U1.15	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong

Approved by

c ej ChangDhon
Genior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111801
c ate ReDeived : J Dt 03, 2023
c ate Reported : J Dt 11, 2023
Report - umber : 298941071

Sample Number	231118017l
Sampled Date	J Dt 02, 2023
Sample Description	Air f uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกQมาบตาพุด(QA1(Q PG 49P 0930S09, 1405264(
Date Analysis Commenced	J Dt 05, 2023
Condition of Sample	Contained in one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Isoprene	02/10/23 703/10/23	ug/m3	0.50	1.3S	U1.3S	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
m,p7Fylene	02/10/23 703/10/23	ug/m3	1.50	4.34	U4.34	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
MethaDrolein	02/10/23 703/10/23	ug/m3	0.50	1.43	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Methanol	02/10/23 703/10/23	ug/m3	0.20	0.66	9.S1	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Methyl Ethyl Xetone	02/10/23 703/10/23	ug/m3	0.50	1.49	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Methyl Iodide	02/10/23 703/10/23	ug/m3	0.S0	2.S0	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Methyl Isobutyl Xetone	02/10/23 703/10/23	ug/m3	0.90	2.05	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Methyl tert butyl ether	02/10/23 703/10/23	ug/m3	0.60	1.80	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Methyl Kinyl Xetone	02/10/23 703/10/23	ug/m3	0.50	1.43	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
o7Fylene	02/10/23 703/10/23	ug/m3	0.90	2.19	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Pentanal	02/10/23 703/10/23	ug/m3	0.50	1.96	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111801
c ate ReDeived : J Dt 03, 2023
c ate Reported : J Dt 11, 2023
Report - umber : 298941071

Sample Number	231118017l
Sampled Date	J Dt 02, 2023
Sample Description	Air f uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกQมาบตาพุด(QA1(Q PG 49P 0930S09, 1405264(
Date Analysis Commenced	J Dt 05, 2023
Condition of Sample	Contained in one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Pentane	02/10/23 703/10/23	ug/m3	0.50	1.48	U1.48	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Propanal	02/10/23 703/10/23	ug/m3	0.50	1.1S	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Propene QPropylene(	02/10/23 703/10/23	ug/m3	0.30	0.86	1.55	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Gtyrene	02/10/23 703/10/23	ug/m3	0.90	2.13	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
TetraDhloroethylene	02/10/23 703/10/23	ug/m3	0.11	0.34	U0.34	400	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
Toluene	02/10/23 703/10/23	ug/m3	0.60	1.88	2.11	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
trans71,27c iDhloroethene	02/10/23 703/10/23	ug/m3	0.90	1.S8	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
trans71,37c iDhloropropene	02/10/23 703/10/23	ug/m3	0.80	2.29	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
TriDhloroethylene	02/10/23 703/10/23	ug/m3	0.0S	0.29	0.54	130	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
TriDhloroNuoromethane Q-711(	02/10/23 703/10/23	ug/m3	0.S0	2.81	U2.81	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Kinyl ADetate	02/10/23 703/10/23	ug/m3	0.60	1.96	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkhraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111801
c ate ReDeived : J Dt 03, 2023
c ate Reported : J Dt 11, 2023
Report - umber : 298941071

Sample Number	231118017 1
Sampled Date	J Dt 02, 2023
Sample Description	Air f uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกQมาบตาพุด(QA1(Q PG 49P 0930S09, 1405264(
Date Analysis Commenced	J Dt 05, 2023
Condition of Sample	Contained in one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Kinyl Chloride	02/10/23 7 03/10/23	ug/m3	0.04	0.13	0.15	20	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong

Guideline :
- Ew : - otiNDation oN- ational Environment woard, w.E. 2560 Q2019(
PCc : - otiNDation oNthe Pollution Control c epartment, z hiDh z as published in the Royal) overnment) aQette Kol. 126 GpeDal Part 13 c dated Vanuary 29, w.E. 2552 Q200S(.

Sampled By : Gaz ai Tonpho

Remark :
- LJ c : Limit oNc eteDtion
- "U" : Loz er than LJ f QLimit oNf uantitation(/ LJ R QLimit oNReporting(

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Client : WHA Eastern Industrial Estate Co., Ltd.
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21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111801
c ate ReDeived : J Dt 03, 2023
c ate Reported : J Dt 11, 2023
Report - umber : 298941071

Sample Number	231118017 2
Sampled Date	J Dt 02, 2023
Sample Description	Air f uality
Location	วัดหนองแฟบQA2(Q PG 49P 092S828, 1403318(
Date Analysis Commenced	J Dt 05, 2023
Condition of Sample	Contained in one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,1,17TriDhloroethane	02/10/23 7 03/10/23	ug/m3	0.S0	2.93	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,1,2,27TetraDhloroethane	02/10/23 7 03/10/23	ug/m3	0.10	0.34	- ot c eteDted	83	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
1,1,27TriDhloro71,2,27TriNu oroethane	02/10/23 7 03/10/23	ug/m3	1.00	3.83	U3.83	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,1,27TriDhloroethane	02/10/23 7 03/10/23	ug/m3	0.S0	2.93	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,17c iDhloroethane	02/10/23 7 03/10/23	ug/m3	0.90	2.02	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,17c iDhloroethene	02/10/23 7 03/10/23	ug/m3	0.90	1.S8	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,2,37TrimethylbenQene	02/10/23 7 03/10/23	ug/m3	0.80	2.46	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,2,47TriDhlorobenQene	02/10/23 7 03/10/23	ug/m3	1.20	3.91	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,2,47TrimethylbenQene	02/10/23 7 03/10/23	ug/m3	0.80	2.46	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,27c ibromoethane	02/10/23 7 03/10/23	ug/m3	0.10	0.38	- ot c eteDted	390	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
1,27c iDhlorobenQene	02/10/23 7 03/10/23	ug/m3	0.20	0.60	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong

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Genior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111801
c ate ReDeived : J Dt 03, 2023
c ate Reported : J Dt 11, 2023
Report - umber : 298941071

Sample Number	231118017 2
Sampled Date	J Dt 02, 2023
Sample Description	Air f uality
Location	วัดหนองแฟบQA2(Q PG 49P 092S828, 1403318(
Date Analysis Commenced	J Dt 05, 2023
Condition of Sample	Contained in one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,27c iChloroethane	02/10/23 7 03/10/23	ug/m3	0.09	0.20	U0.20	48	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
1,27c iChloropropane	02/10/23 7 03/10/23	ug/m3	0.08	0.23	- ot c eteDted	82	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
1,27c iChlorotetraNuoroethane	02/10/23 7 03/10/23	ug/m3	1.20	3.50	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,3,57TrimethylbenQene	02/10/23 7 03/10/23	ug/m3	0.80	2.46	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,37wutadiene	02/10/23 7 03/10/23	ug/m3	0.04	0.11	0.18	5.3	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
1,37c iChlorobenQene	02/10/23 7 03/10/23	ug/m3	0.20	0.60	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,47c iChlorobenQene	02/10/23 7 03/10/23	ug/m3	0.20	0.60	- ot c eteDted	1100	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
1,47c ioxane	02/10/23 7 03/10/23	ug/m3	0.10	0.36	- ot c eteDted	860	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
17wutanol	02/10/23 7 03/10/23	ug/m3	0.50	1.52	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
17Propanol	02/10/23 7 03/10/23	ug/m3	0.40	1.23	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
27Hexanone	02/10/23 7 03/10/23	ug/m3	0.90	2.05	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong

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P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111801
c ate ReDeived : J Dt 03, 2023
c ate Reported : J Dt 11, 2023
Report - umber : 298941071

Sample Number	231118017 2
Sampled Date	J Dt 02, 2023
Sample Description	Air f uality
Location	วัดหนองแฟบQA2(Q PG 49P 092S828, 1403318(
Date Analysis Commenced	J Dt 05, 2023
Condition of Sample	Contained in one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
27Pentanone	02/10/23 7 03/10/23	ug/m3	0.60	1.96	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
27Propanol	02/10/23 7 03/10/23	ug/m3	0.40	1.23	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
37Hexanone	02/10/23 7 03/10/23	ug/m3	0.90	2.05	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
37Pentanone	02/10/23 7 03/10/23	ug/m3	0.60	1.96	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
ADetaldehyde	02/10/23 7 03/10/23	ug/m3	0.05	0.18	4.15	860	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
ADetone	02/10/23 7 03/10/23	ug/m3	0.08	0.24	5.SS	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
ADetonitrile	02/10/23 7 03/10/23	ug/m3	0.30	0.84	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
ADrolein	02/10/23 7 03/10/23	ug/m3	0.08	0.23	- ot c eteDted	0.55	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
ADrylonitrile	02/10/23 7 03/10/23	ug/m3	0.09	0.22	- ot c eteDted	10	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
wenQene	02/10/23 7 03/10/23	ug/m3	0.05	0.16	0.26	9.6	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
wenQyl Chloride	02/10/23 7 03/10/23	ug/m3	0.19	0.52	- ot c eteDted	12	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong

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Genior Manager

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P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111801
c ate ReDeived : J Dt 03, 2023
c ate Reported : J Dt 11, 2023
Report - umber : 298941071

Sample Number	231118017 2
Sampled Date	J Dt 02, 2023
Sample Description	Air f uality
Location	รัดหนองแฟบQA2(Q PG 49P 092S828, 1403318(
Date Analysis Commenced	J Dt 05, 2023
Condition of Sample	Contained in one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
wromodiChloromethane	02/10/23 7 03/10/23	ug/m3	1.00	3.35	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
wromoNorm	02/10/23 7 03/10/23	ug/m3	1.00	5.19	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
wromomethane	02/10/23 7 03/10/23	ug/m3	0.06	0.1S	0.49	1S0	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
wutanal	02/10/23 7 03/10/23	ug/m3	0.4S	1.49	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Carbon c isulNide	02/10/23 7 03/10/23	ug/m3	0.05	0.16	2.4S	100	wased on BG EPA Compendium Method, TJ 715	- Ew	Rayong
Carbon TetraChloride	02/10/23 7 03/10/23	ug/m3	0.10	0.31	U0.31	150	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
ChlorobenQene	02/10/23 7 03/10/23	ug/m3	0.80	2.30	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
ChlorodiNuoromethane QHC<C722(	02/10/23 7 03/10/23	ug/m3	0.60	1.99	U1.99	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Chloroethane	02/10/23 7 03/10/23	ug/m3	0.40	1.32	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
ChloroNorm	02/10/23 7 03/10/23	ug/m3	0.08	0.24	0.2S	59	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
Chloromethane	02/10/23 7 03/10/23	ug/m3	0.30	1.03	2.68	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong

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Genior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111801
c ate ReDeived : J Dt 03, 2023
c ate Reported : J Dt 11, 2023
Report - umber : 298941071

Sample Number	231118017 2
Sampled Date	J Dt 02, 2023
Sample Description	Air f uality
Location	รัดหนองแฟบQA2(Q PG 49P 092S828, 1403318(
Date Analysis Commenced	J Dt 05, 2023
Condition of Sample	Contained in one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Ds71,27c iDhloroethene	02/10/23 7 03/10/23	ug/m3	0.90	1.S8	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Ds71,37c iDhloropropene	02/10/23 7 03/10/23	ug/m3	0.80	2.29	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
CyDlohexane	02/10/23 7 03/10/23	ug/m3	0.60	1.92	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
CyDlopentane	02/10/23 7 03/10/23	ug/m3	0.50	1.43	U1.43	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
c iDhlorodiNuoromethane QC<C7112(	02/10/23 7 03/10/23	ug/m3	0.80	2.49	3.26	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
c iDhloromethane	02/10/23 7 03/10/23	ug/m3	0.06	0.19	0.35	210	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
Ethanol	02/10/23 7 03/10/23	ug/m3	0.30	0.S4	6.33	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Ethyl wenQene	02/10/23 7 03/10/23	ug/m3	0.90	2.19	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Hexanal	02/10/23 7 03/10/23	ug/m3	0.60	2.05	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Hexane	02/10/23 7 03/10/23	ug/m3	0.60	1.96	4.65	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Isobutene	02/10/23 7 03/10/23	ug/m3	0.40	1.15	U1.15	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong

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Genior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111801
c ate ReDeived : J Dt 03, 2023
c ate Reported : J Dt 11, 2023
Report - umber : 298941071

Sample Number	231118017 2
Sampled Date	J Dt 02, 2023
Sample Description	Air f uality
Location	รัดหนองแฟบQA2(Q PG 49P 092S828, 1403318(
Date Analysis Commenced	J Dt 05, 2023
Condition of Sample	Contained in one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Isoprene	02/10/23 7 03/10/23	ug/m3	0.50	1.3S	U1.3S	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
m,p7Fylene	02/10/23 7 03/10/23	ug/m3	1.50	4.34	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
MethaDrolein	02/10/23 7 03/10/23	ug/m3	0.50	1.43	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Methanol	02/10/23 7 03/10/23	ug/m3	0.20	0.66	6.49	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Methyl Ethyl Xetone	02/10/23 7 03/10/23	ug/m3	0.50	1.49	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Methyl Iodide	02/10/23 7 03/10/23	ug/m3	0.S0	2.S0	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Methyl Isobutyl Xetone	02/10/23 7 03/10/23	ug/m3	0.90	2.05	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Methyl tert butyl ether	02/10/23 7 03/10/23	ug/m3	0.60	1.80	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Methyl Kinyl Xetone	02/10/23 7 03/10/23	ug/m3	0.50	1.43	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
o7Fylene	02/10/23 7 03/10/23	ug/m3	0.90	2.19	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Pentanal	02/10/23 7 03/10/23	ug/m3	0.50	1.96	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong

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18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111801
c ate ReDeived : J Dt 03, 2023
c ate Reported : J Dt 11, 2023
Report - umber : 298941071

Sample Number	231118017 2
Sampled Date	J Dt 02, 2023
Sample Description	Air f uality
Location	รัดหนองแฟบQA2(Q PG 49P 092S828, 1403318(
Date Analysis Commenced	J Dt 05, 2023
Condition of Sample	Contained in one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Pentane	02/10/23 7 03/10/23	ug/m3	0.50	1.48	U1.48	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Propanal	02/10/23 7 03/10/23	ug/m3	0.50	1.1S	U1.1S	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Propene QPropylene(	02/10/23 7 03/10/23	ug/m3	0.30	0.86	1.31	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Gtyrene	02/10/23 7 03/10/23	ug/m3	0.90	2.13	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
TetraDhloroethylene	02/10/23 7 03/10/23	ug/m3	0.11	0.34	- ot c eteDted	400	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
Toluene	02/10/23 7 03/10/23	ug/m3	0.60	1.88	U1.88	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
trans71,27c iDhloroethene	02/10/23 7 03/10/23	ug/m3	0.90	1.S8	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
trans71,37c iDhloropropene	02/10/23 7 03/10/23	ug/m3	0.80	2.29	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
TriDhloroethylene	02/10/23 7 03/10/23	ug/m3	0.0S	0.29	- ot c eteDted	130	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
TriDhloroNuoromethane Q-711(	02/10/23 7 03/10/23	ug/m3	0.S0	2.81	U2.81	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Kinyl ADetate	02/10/23 7 03/10/23	ug/m3	0.60	1.96	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong

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Client : WHA Eastern Industrial Estate Co., Ltd.
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21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111801
c ate ReDeived : J Dt 03, 2023
c ate Reported : J Dt 11, 2023
Report - umber : 298941071

Sample Number	2311180172
Sampled Date	J Dt 02, 2023
Sample Description	Air f uality
Location	วัดหนองแฟบQA2(Q PG 49P 092S828, 1403318(
Date Analysis Commenced	J Dt 05, 2023
Condition of Sample	Contained in one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Kinyl Chloride	02/10/23 703/10/23	ug/m3	0.04	0.13	U0.13	20	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong

Guideline :
- Ew : - otiNDation oN- ational Environment woard, w.E. 2560 Q2019(
PCc : - otiNDation oNthe Pollution Control c epartment, z hiDh z as published in the Royal) overnment) aŒtte Kol. 126 GpeDal Part 13 c dated Vanuary 29, w.E. 2552 Q200S(.

Sampled By : Gaz ai Tonpho

Remark :
- LJ c : Limit oNc eteDtion
- "U" : Loz er than LJ f QLimit oNf uantitation(/ LJ R QLimit oNReporting(

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkhraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111801
c ate ReDeived : J Dt 03, 2023
c ate Reported : J Dt 11, 2023
Report - umber : 298941071

Sample Number	2311180173
Sampled Date	J Dt 02, 2023
Sample Description	Air f uality
Location	วัดมาบชลูดQA3(Q PG 49P 0930826, 1409360(
Date Analysis Commenced	J Dt 05, 2023
Condition of Sample	Contained in one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,1,17TriDhloroethane	02/10/23 703/10/23	ug/m3	0.S0	2.93	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,1,2,27TetraDhloroethane	02/10/23 703/10/23	ug/m3	0.10	0.34	- ot c eteDted	83	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
1,1,27TriDhloro71,2,27TriNu oroethane	02/10/23 703/10/23	ug/m3	1.00	3.83	U3.83	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,1,27TriDhloroethane	02/10/23 703/10/23	ug/m3	0.S0	2.93	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,17c iDhloroethane	02/10/23 703/10/23	ug/m3	0.90	2.02	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,17c iDhloroethene	02/10/23 703/10/23	ug/m3	0.90	1.S8	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,2,37TrimethylbenŒne	02/10/23 703/10/23	ug/m3	0.80	2.46	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,2,47TriDhlorobenŒne	02/10/23 703/10/23	ug/m3	1.20	3.91	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,2,47TrimethylbenŒne	02/10/23 703/10/23	ug/m3	0.80	2.46	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,27c ibromoethane	02/10/23 703/10/23	ug/m3	0.10	0.38	- ot c eteDted	390	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
1,27c iDhlorobenŒne	02/10/23 703/10/23	ug/m3	0.20	0.60	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111801
c ate ReDeived : J Dt 03, 2023
c ate Reported : J Dt 11, 2023
Report - umber : 298941071

Sample Number	2311180173
Sampled Date	J Dt 02, 2023
Sample Description	Air f uality
Location	วัดมาบชลูดQA3(Q PG 49P 0930826, 1409360(
Date Analysis Commenced	J Dt 05, 2023
Condition of Sample	Contained in one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,27c iDhloroethane	02/10/23 703/10/23	ug/m3	0.09	0.20	U0.20	48	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
1,27c iDhloropropane	02/10/23 703/10/23	ug/m3	0.08	0.23	U0.23	82	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
1,27c iDhlorotetraNuoroethane	02/10/23 703/10/23	ug/m3	1.20	3.50	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,3,57TrimethylbenQene	02/10/23 703/10/23	ug/m3	0.80	2.46	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,37wutadiene	02/10/23 703/10/23	ug/m3	0.04	0.11	0.22	5.3	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
1,37c iDhlorobenQene	02/10/23 703/10/23	ug/m3	0.20	0.60	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
1,47c iDhlorobenQene	02/10/23 703/10/23	ug/m3	0.20	0.60	- ot c eteDted	1100	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
1,47c ioxane	02/10/23 703/10/23	ug/m3	0.10	0.36	- ot c eteDted	860	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
17wutanol	02/10/23 703/10/23	ug/m3	0.50	1.52	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
17Propanol	02/10/23 703/10/23	ug/m3	0.40	1.23	U1.23	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
27Hexanone	02/10/23 703/10/23	ug/m3	0.90	2.05	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong

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18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111801
c ate ReDeived : J Dt 03, 2023
c ate Reported : J Dt 11, 2023
Report - umber : 298941071

Sample Number	2311180173
Sampled Date	J Dt 02, 2023
Sample Description	Air f uality
Location	วัดมาบชลูดQA3(Q PG 49P 0930826, 1409360(
Date Analysis Commenced	J Dt 05, 2023
Condition of Sample	Contained in one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
27Pentanone	02/10/23 703/10/23	ug/m3	0.60	1.96	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
27Propanol	02/10/23 703/10/23	ug/m3	0.40	1.23	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
37Hexanone	02/10/23 703/10/23	ug/m3	0.90	2.05	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
37Pentanone	02/10/23 703/10/23	ug/m3	0.60	1.96	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
ADetaldehyde	02/10/23 703/10/23	ug/m3	0.05	0.18	3.14	860	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
ADetone	02/10/23 703/10/23	ug/m3	0.08	0.24	3.S4	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
ADetonitrile	02/10/23 703/10/23	ug/m3	0.30	0.84	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
ADrolein	02/10/23 703/10/23	ug/m3	0.08	0.23	- ot c eteDted	0.55	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
ADrylonitrile	02/10/23 703/10/23	ug/m3	0.09	0.22	- ot c eteDted	10	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
wenQene	02/10/23 703/10/23	ug/m3	0.05	0.16	0.38	9.6	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
wenQyl Chloride	02/10/23 703/10/23	ug/m3	0.19	0.52	- ot c eteDted	12	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong

Approved by

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Genior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111801
c ate ReDeived : J Dt 03, 2023
c ate Reported : J Dt 11, 2023
Report - umber : 298941071

Sample Number	2311180173
Sampled Date	J Dt 02, 2023
Sample Description	Air f uality
Location	วัดมาบชลูดQA3(Q PG 49P 0930826, 1409360(
Date Analysis Commenced	J Dt 05, 2023
Condition of Sample	Contained in one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
wromodiChloromethane	02/10/23 703/10/23	ug/m3	1.00	3.35	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
wromoNorm	02/10/23 703/10/23	ug/m3	1.00	5.19	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
wromomethane	02/10/23 703/10/23	ug/m3	0.06	0.1S	0.3S	1S0	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
wutanal	02/10/23 703/10/23	ug/m3	0.4S	1.49	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Carbon c isulNide	02/10/23 703/10/23	ug/m3	0.05	0.16	U0.16	100	wased on BG EPA Compendium Method, TJ 715	- Ew	Rayong
Carbon TetraChloride	02/10/23 703/10/23	ug/m3	0.10	0.31	U0.31	150	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
ChlorobenQene	02/10/23 703/10/23	ug/m3	0.80	2.30	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
ChlorodiNuoromethane QHC<C722(	02/10/23 703/10/23	ug/m3	0.60	1.99	U1.99	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Chloroethane	02/10/23 703/10/23	ug/m3	0.40	1.32	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
ChloroNorm	02/10/23 703/10/23	ug/m3	0.08	0.24	U0.24	59	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
Chloromethane	02/10/23 703/10/23	ug/m3	0.30	1.03	2.35	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111801
c ate ReDeived : J Dt 03, 2023
c ate Reported : J Dt 11, 2023
Report - umber : 298941071

Sample Number	2311180173
Sampled Date	J Dt 02, 2023
Sample Description	Air f uality
Location	วัดมาบชลูดQA3(Q PG 49P 0930826, 1409360(
Date Analysis Commenced	J Dt 05, 2023
Condition of Sample	Contained in one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Ds71,27c iDhloroethene	02/10/23 703/10/23	ug/m3	0.90	1.S8	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Ds71,37c iDhloropropene	02/10/23 703/10/23	ug/m3	0.80	2.29	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
CyDlohexane	02/10/23 703/10/23	ug/m3	0.60	1.92	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
CyDlopentane	02/10/23 703/10/23	ug/m3	0.50	1.43	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
c iDhlorodiNuoromethane QC<C7112(	02/10/23 703/10/23	ug/m3	0.80	2.49	3.26	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
c iDhloromethane	02/10/23 703/10/23	ug/m3	0.06	0.19	0.96	210	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
Ethanol	02/10/23 703/10/23	ug/m3	0.30	0.S4	3.01	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Ethyl wenQene	02/10/23 703/10/23	ug/m3	0.90	2.19	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Hexanal	02/10/23 703/10/23	ug/m3	0.60	2.05	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Hexane	02/10/23 703/10/23	ug/m3	0.60	1.96	U1.96	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Isobutene	02/10/23 703/10/23	ug/m3	0.40	1.15	U1.15	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong

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Genior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111801
c ate ReDeived : J Dt 03, 2023
c ate Reported : J Dt 11, 2023
Report - umber : 29894107l

Sample Number	2311180173
Sampled Date	J Dt 02, 2023
Sample Description	Air f uality
Location	รัดมาบชลูดQA3(Q PG 49P 0930826, 1409360(
Date Analysis Commenced	J Dt 05, 2023
Condition of Sample	Contained in one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Isoprene	02/10/23 703/10/23	ug/m3	0.50	1.3S	U1.3S	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
m,p7Fylene	02/10/23 703/10/23	ug/m3	1.50	4.34	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
MethaDrolein	02/10/23 703/10/23	ug/m3	0.50	1.43	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Methanol	02/10/23 703/10/23	ug/m3	0.20	0.66	5.2S	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Methyl Ethyl Xetone	02/10/23 703/10/23	ug/m3	0.50	1.49	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Methyl Iodide	02/10/23 703/10/23	ug/m3	0.S0	2.S0	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Methyl Isobutyl Xetone	02/10/23 703/10/23	ug/m3	0.90	2.05	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Methyl tert butyl ether	02/10/23 703/10/23	ug/m3	0.60	1.80	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Methyl Kinyl Xetone	02/10/23 703/10/23	ug/m3	0.50	1.43	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
o7Fylene	02/10/23 703/10/23	ug/m3	0.90	2.19	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Pentanal	02/10/23 703/10/23	ug/m3	0.50	1.96	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong

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Genior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111801
c ate ReDeived : J Dt 03, 2023
c ate Reported : J Dt 11, 2023
Report - umber : 29894107l

Sample Number	2311180173
Sampled Date	J Dt 02, 2023
Sample Description	Air f uality
Location	รัดมาบชลูดQA3(Q PG 49P 0930826, 1409360(
Date Analysis Commenced	J Dt 05, 2023
Condition of Sample	Contained in one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Pentane	02/10/23 703/10/23	ug/m3	0.50	1.48	U1.48	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Propanal	02/10/23 703/10/23	ug/m3	0.50	1.1S	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Propene QPropylene(	02/10/23 703/10/23	ug/m3	0.30	0.86	1.34	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Gtyrene	02/10/23 703/10/23	ug/m3	0.90	2.13	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
TetraDhloroethylene	02/10/23 703/10/23	ug/m3	0.11	0.34	- ot c eteDted	400	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
Toluene	02/10/23 703/10/23	ug/m3	0.60	1.88	2.04	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
trans71,27c iDhloroethene	02/10/23 703/10/23	ug/m3	0.90	1.S8	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
trans71,37c iDhloropropene	02/10/23 703/10/23	ug/m3	0.80	2.29	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
TriDhloroethylene	02/10/23 703/10/23	ug/m3	0.0S	0.29	U0.29	130	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong
TriDhloroNuoromethane Q-711(	02/10/23 703/10/23	ug/m3	0.S0	2.81	U2.81	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong
Kinyl ADetate	02/10/23 703/10/23	ug/m3	0.60	1.96	- ot c eteDted	- o Gtandard	wased on BG EPA Compendium Method, TJ 715	7	Rayong

Approved by

c ej ChangDhon
Genior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111801
c ate ReDeived : J Dt 03, 2023
c ate Reported : J Dt 11, 2023
Report - umber : 298941071

Sample Number	2311180173
Sampled Date	J Dt 02, 2023
Sample Description	Air f uality
Location	วัดมาบชลูดQA3(Q PG 49P 0930826, 1409360(
Date Analysis Commenced	J Dt 05, 2023
Condition of Sample	Contained in one 67L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Kinyl Chloride	02/10/23 7 03/10/23	ug/m3	0.04	0.13	U0.13	20	wased on BG EPA Compendium Method, TJ 715	PCc	Rayong

Guideline :
- Ew : - otiNDation oN- ational Environment woard, w.E. 2560 Q2019(
PCc : - otiNDation oNthe Pollution Control c epartment, z hiDh z as published in the Royal) overnment) aQette Kol. 126 GpeDal Part 13 c dated Vanuary 29, w.E. 2552 Q200S(.

Sampled By : Gaz ai Tonpho

Remark :
- LJ c : Limit oNc eteDtion
- "U" : Loz er than LJ f QLimit oNf uantitation(/ LJ R QLimit oNReporting(

Approved by

c ej ChangDhon
Genior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111798
Date Received :Oct 03, 2023
Date Reported :Oct 09, 2023
Report Number :2787409-1

Sample Number	23111798-1
Parameter	Wind Speed / Wind Direction
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออก(มาบตาพุด)(A1) (GPS 47P 0730907, 1405264)
Sampling Date	Oct 02 - Oct 03, 2022
Sampling by	Sawai Tonpho

Time	Oct 02 - Oct 03, 2023			-			-			-			-			-			-		
	WS (m/s)	WD (deg)		-	-		-	-		-	-		-	-		-	-		-	-	
11:00 AM - 12:00 PM	1.3	278.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 PM - 01:00 PM	2.5	275.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 PM - 02:00 PM	0.8	277.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 PM - 03:00 PM	1.1	288.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 PM - 04:00 PM	1.4	249.0	WSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 PM - 05:00 PM	1.4	309.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 PM - 06:00 PM	1.3	340.0	NNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 PM - 07:00 PM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 PM - 08:00 PM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 PM - 09:00 PM	0.3	294.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 PM - 10:00 PM	1.5	255.0	WSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 PM - 11:00 PM	0.8	289.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 PM - 12:00 AM	1.3	308.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 AM - 01:00 AM	0.8	316.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 AM - 02:00 AM	0.6	282.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 AM - 03:00 AM	0.5	327.0	NNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 AM - 04:00 AM	0.6	337.0	NNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 AM - 05:00 AM	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 AM - 06:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 AM - 07:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 AM - 08:00 AM	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 AM - 09:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 AM - 10:00 AM	0.9	294.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 AM - 11:00 AM	0.6	290.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Sarayuth Jittranont
Assistant General Manager

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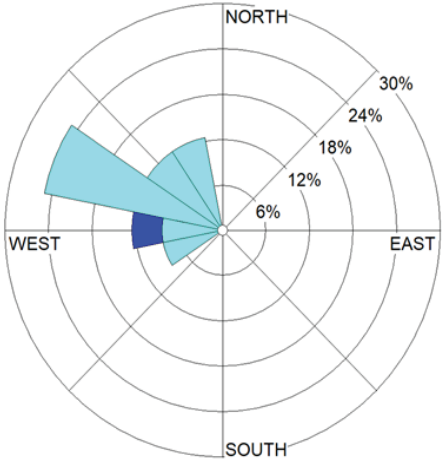
Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111798
Date Received :Oct 03, 2023
Date Reported :Oct 09, 2023
Report Number :2787409-1

Wind Rose



Date : Oct 02-03, 2023

	WS(m/s)	%
	≥ 10.0	0.00
	8.0-10.0	0.00
	5.5-8.0	0.00
	3.3-5.5	0.00
	1.7-3.3	4.17
	0.3-1.7	66.67
	Calms	29.17

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Sarayuth Jittranont
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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111798
Date Received :Oct 03, 2023
Date Reported :Oct 09, 2023
Report Number :2787409-1

Sample Number 23111798-2
Parameter Wind Speed / Wind Direction
Location วัดหนองแฟบ(A2) (GPS 47P 0729828, 1403318)
Sampling Date Oct 02 - Oct 03, 2022
Sampling by Sawai Tonpho

Time	Oct 02 - Oct 03, 2023			-			-			-			-			-			-		
	WS (m/s)	WD (deg)		-	-		-	-		-	-		-	-		-	-		-	-	
10:00 AM - 11:00 AM	0.6	279.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM - 12:00 PM	1.2	264.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 PM - 01:00 PM	0.4	269.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 PM - 02:00 PM	1.6	298.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 PM - 03:00 PM	1.1	241.0	WSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 PM - 04:00 PM	1.2	312.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 PM - 05:00 PM	0.6	351.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 PM - 06:00 PM	0.3	355.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 PM - 07:00 PM	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 PM - 08:00 PM	0.7	300.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 PM - 09:00 PM	1.1	251.0	WSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 PM - 10:00 PM	0.6	281.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 PM - 11:00 PM	1.7	312.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 PM - 12:00 AM	1.6	311.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 AM - 01:00 AM	0.9	299.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 AM - 02:00 AM	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 AM - 03:00 AM	0.4	322.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 AM - 04:00 AM	0.4	310.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 AM - 05:00 AM	0.3	41.0	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 AM - 06:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 AM - 07:00 AM	0.4	349.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 AM - 08:00 AM	0.3	299.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 AM - 09:00 AM	1.2	284.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 AM - 10:00 AM	0.8	293.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Sarayuth Jittranont
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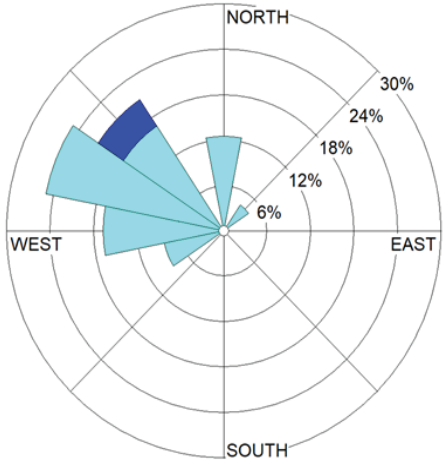
Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111798
Date Received :Oct 03, 2023
Date Reported :Oct 09, 2023
Report Number :2787409-1

Wind Rose



Date : Oct 02-03, 2023

WS(m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	0.00
1.7-3.3	4.17
0.3-1.7	83.33
Calms	12.50

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111798
Date Received :Oct 03, 2023
Date Reported :Oct 09, 2023
Report Number :2787409-1

Sample Number 23111798-3
Parameter Wind Speed / Wind Direction
Location วัดมาบชลูด(A3) (GPS 47P 0730826, 1407360)
Sampling Date Oct 02 - Oct 03, 2022
Sampling by Sawai Tonpho

Time	Oct 02 - Oct 03, 2022			-			-			-			-			-			-		
	WS (m/s)	WD (deg)		-	-		-	-		-	-		-	-		-	-		-	-	
11:00 AM - 12:00 PM	1.0	264.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 PM - 01:00 PM	0.9	251.0	WSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 PM - 02:00 PM	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 PM - 03:00 PM	1.2	311.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 PM - 04:00 PM	0.8	254.0	WSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 PM - 05:00 PM	0.5	309.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 PM - 06:00 PM	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 PM - 07:00 PM	0.3	359.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 PM - 08:00 PM	0.4	359.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 PM - 09:00 PM	0.9	294.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 PM - 10:00 PM	1.6	265.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 PM - 11:00 PM	0.3	289.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 PM - 12:00 AM	1.2	308.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 AM - 01:00 AM	1.6	309.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 AM - 02:00 AM	0.5	321.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 AM - 03:00 AM	0.4	323.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 AM - 04:00 AM	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 AM - 05:00 AM	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 AM - 06:00 AM	0.8	358.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 AM - 07:00 AM	0.7	351.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 AM - 08:00 AM	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 AM - 09:00 AM	0.3	302.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 AM - 10:00 AM	1.1	273.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 AM - 11:00 AM	0.6	299.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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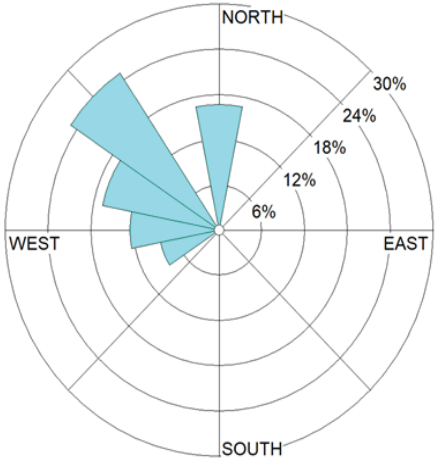
Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23111798
Date Received :Oct 03, 2023
Date Reported :Oct 09, 2023
Report Number :2787409-1

Wind Rose



Date : Oct 02-03, 2023

WS(m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	0.00
1.7-3.3	0.00
0.3-1.7	79.17
Calms	20.83

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124038
c ate ReveiDed : J oD 02, 2023
c ate Reported : J oD 06, 2023
Report J umber : 28156569 1

Sample Number	231240389 1
Sampled Date	J oD 01, 2023
Sample Description	Air - uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกNมาบตาพุดfNA1fQP(4) P 0) 30G0), 1405264f
Date Analysis Commenced	J oD 03, 2023
Condition of Sample	Contained in one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,1,19Trivhloroethane	01/11/23 9 02/11/23	ug/m3	0.G0	2.) 3	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,1,2,29Tetravhloroethane	01/11/23 9 02/11/23	ug/m3	0.10	0.34	J ot c etevted	83	Sased on w(EPA Compendium Method, TB 9 15	PCc	Rayong
1,1,29Trivhloro91,2,29Tri7luoroethane	01/11/23 9 02/11/23	ug/m3	1.00	3.83	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,1,29Trivhloroethane	01/11/23 9 02/11/23	ug/m3	0.G0	2.) 3	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,19c ivhloroethane	01/11/23 9 02/11/23	ug/m3	0.) 0	2.02	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,19c ivhloroethene	01/11/23 9 02/11/23	ug/m3	0.) 0	1.G8	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,2,39TrimethylbenUene	01/11/23 9 02/11/23	ug/m3	0.80	2.46	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,2,49TrivhlorobenUene	01/11/23 9 02/11/23	ug/m3	1.20	3.) 1	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,2,49TrimethylbenUene	01/11/23 9 02/11/23	ug/m3	0.80	2.46	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,29c ibromoethane	01/11/23 9 02/11/23	ug/m3	0.10	0.38	J ot c etevted	3) 0	Sased on w(EPA Compendium Method, TB 9 15	PCc	Rayong
1,29c ivhlorobenUene	01/11/23 9 02/11/23	ug/m3	0.20	0.60	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124038
c ate ReveiDed : J oD 02, 2023
c ate Reported : J oD 06, 2023
Report J umber : 28156569 1

Sample Number	231240389 1
Sampled Date	J oD 01, 2023
Sample Description	Air - uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกNมาบตาพุดfNA1fQP(4) P 0) 30G0) , 1405264f
Date Analysis Commenced	J oD 03, 2023
Condition of Sample	Contained in one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,29c ivhloroethane	01/11/23 9 02/11/23	ug/m3	0.0)	0.20	x 0.20	48	Sased on w(EPA Compendium Method, TB915	PCc	Rayong
1,29c ivhloropropane	01/11/23 9 02/11/23	ug/m3	0.08	0.23	x 0.23	82	Sased on w(EPA Compendium Method, TB915	PCc	Rayong
1,29c ivhlorotetra7luoroetha ne	01/11/23 9 02/11/23	ug/m3	1.20	3.50	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
1,3,59TrimethylbenUene	01/11/23 9 02/11/23	ug/m3	0.80	2.46	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
1,39Sutadiene	01/11/23 9 02/11/23	ug/m3	0.04	0.11	0.22	5.3	Sased on w(EPA Compendium Method, TB915	PCc	Rayong
1,39c ivhlorobenUene	01/11/23 9 02/11/23	ug/m3	0.20	0.60	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
1,49c ivhlorobenUene	01/11/23 9 02/11/23	ug/m3	0.20	0.60	J ot c etevted	1100	Sased on w(EPA Compendium Method, TB915	PCc	Rayong
1,49c iozane	01/11/23 9 02/11/23	ug/m3	0.10	0.36	x 0.36	860	Sased on w(EPA Compendium Method, TB915	PCc	Rayong
19Sutanol	01/11/23 9 02/11/23	ug/m3	0.50	1.52	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
19Propanol	01/11/23 9 02/11/23	ug/m3	0.40	1.23	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
29Hezanone	01/11/23 9 02/11/23	ug/m3	0.) 0	2.05	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong

Approved by

c ej Changvhon
(enior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124038
c ate ReveiDed : J oD 02, 2023
c ate Reported : J oD 06, 2023
Report J umber : 28156569 1

Sample Number	231240389 1
Sampled Date	J oD 01, 2023
Sample Description	Air - uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกNมาบตาพุดfNA1fQP(4) P 0) 30G0) , 1405264f
Date Analysis Commenced	J oD 03, 2023
Condition of Sample	Contained in one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
29Pentanone	01/11/23 9 02/11/23	ug/m3	0.60	1.) 6	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
29Propanol	01/11/23 9 02/11/23	ug/m3	0.40	1.23	x 1.23	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
39Hezanone	01/11/23 9 02/11/23	ug/m3	0.) 0	2.05	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
39Pentanone	01/11/23 9 02/11/23	ug/m3	0.60	1.) 6	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Avetaldehyde	01/11/23 9 02/11/23	ug/m3	0.05	0.18	2.60	860	Sased on w(EPA Compendium Method, TB915	PCc	Rayong
Avetone	01/11/23 9 02/11/23	ug/m3	0.08	0.24	10.G)	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Avetonitrile	01/11/23 9 02/11/23	ug/m3	0.30	0.84	x 0.84	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Avrolein	01/11/23 9 02/11/23	ug/m3	0.08	0.23	J ot c etevted	0.55	Sased on w(EPA Compendium Method, TB915	PCc	Rayong
Avrylonitrile	01/11/23 9 02/11/23	ug/m3	0.0)	0.22	0.8)	10	Sased on w(EPA Compendium Method, TB915	PCc	Rayong
SenUene	01/11/23 9 02/11/23	ug/m3	0.05	0.16	1.34	) .6	Sased on w(EPA Compendium Method, TB915	PCc	Rayong
SenUyl Chloride	01/11/23 9 02/11/23	ug/m3	0.1)	0.52	J ot c etevted	12	Sased on w(EPA Compendium Method, TB915	PCc	Rayong

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(enior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124038
c ate ReveiDed : J oD 02, 2023
c ate Reported : J oD 06, 2023
Report J umber : 28156569 1

Sample Number	231240389 1
Sampled Date	J oD 01, 2023
Sample Description	Air - uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกNมาบตาพุดfNA1fQP(4) P 0) 30G0) , 1405264f
Date Analysis Commenced	J oD 03, 2023
Condition of Sample	Contained in one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Sromodivhloromethane	01/11/23 9 02/11/23	ug/m3	1.00	3.35	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Sromo7orm	01/11/23 9 02/11/23	ug/m3	1.00	5.1)	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Sromomethane	01/11/23 9 02/11/23	ug/m3	0.06	0.1G	x 0.1G	1G0	Sased on w(EPA Compendium Method, TB 9 1 5	PCc	Rayong
Sutanal	01/11/23 9 02/11/23	ug/m3	0.4G	1.4)	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Carbon c isul7de	01/11/23 9 02/11/23	ug/m3	0.05	0.16	x 0.16	100	Sased on w(EPA Compendium Method, TB 9 1 5	J ES	Rayong
Carbon Tetravhloride	01/11/23 9 02/11/23	ug/m3	0.10	0.31	x 0.31	150	Sased on w(EPA Compendium Method, TB 9 1 5	PCc	Rayong
ChlorobenUene	01/11/23 9 02/11/23	ug/m3	0.80	2.30	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Chlorodi7luoromethane NHC<C922f	01/11/23 9 02/11/23	ug/m3	0.60	1.))	x 1.))	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Chloroethane	01/11/23 9 02/11/23	ug/m3	0.40	1.32	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Chloro7orm	01/11/23 9 02/11/23	ug/m3	0.08	0.24	0.3G	5)	Sased on w(EPA Compendium Method, TB 9 1 5	PCc	Rayong
Chloromethane	01/11/23 9 02/11/23	ug/m3	0.30	1.03	3.43	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong

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21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124038
c ate ReveiDed : J oD 02, 2023
c ate Reported : J oD 06, 2023
Report J umber : 28156569 1

Sample Number	231240389 1
Sampled Date	J oD 01, 2023
Sample Description	Air - uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกNมาบตาพุดfNA1fQP(4) P 0) 30G0) , 1405264f
Date Analysis Commenced	J oD 03, 2023
Condition of Sample	Contained in one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
vis91,29c ivhloroethene	01/11/23 9 02/11/23	ug/m3	0.) 0	1.G8	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
vis91,39c ivhloropropene	01/11/23 9 02/11/23	ug/m3	0.80	2.2)	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Cyvlohezane	01/11/23 9 02/11/23	ug/m3	0.60	1.) 2	x 1.) 2	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Cyvlopentane	01/11/23 9 02/11/23	ug/m3	0.50	1.43	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
c ivhlorodi7luoromethane NC<C91 12f	01/11/23 9 02/11/23	ug/m3	0.80	2.4)	2.5)	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
c ivhloromethane	01/11/23 9 02/11/23	ug/m3	0.06	0.1)	1.G5	210	Sased on w(EPA Compendium Method, TB 9 1 5	PCc	Rayong
Ethanol	01/11/23 9 02/11/23	ug/m3	0.30	0.G4	4.) 1	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Ethyl SenUene	01/11/23 9 02/11/23	ug/m3	0.) 0	2.1)	2.34	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Hezanal	01/11/23 9 02/11/23	ug/m3	0.60	2.05	x 2.05	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Hezane	01/11/23 9 02/11/23	ug/m3	0.60	1.) 6	x 1.) 6	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Isobutene	01/11/23 9 02/11/23	ug/m3	0.40	1.15	1.1G	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong

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21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124038
c ate ReveiDed : J oD 02, 2023
c ate Reported : J oD 06, 2023
Report J umber : 28156569 1

Sample Number	231240389 1
Sampled Date	J oD 01, 2023
Sample Description	Air - uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกNมาบตาพุดfNA1fQP(4) P 0) 30G0) , 1405264f
Date Analysis Commenced	J oD 03, 2023
Condition of Sample	Contained in one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Isoprene	01/11/23 9 02/11/23	ug/m3	0.50	1.3G	x 1.3G	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
m,p9Fylene	01/11/23 9 02/11/23	ug/m3	1.50	4.34	x 4.34	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Methavrolein	01/11/23 9 02/11/23	ug/m3	0.50	1.43	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Methanol	01/11/23 9 02/11/23	ug/m3	0.20	0.66	6.45	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Methyl Ethyl Xetone	01/11/23 9 02/11/23	ug/m3	0.50	1.4)	1.))	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Methyl Iodide	01/11/23 9 02/11/23	ug/m3	0.G0	2.G0	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Methyl Isobutyl Xetone	01/11/23 9 02/11/23	ug/m3	0.) 0	2.05	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Methyl tert butyl ether	01/11/23 9 02/11/23	ug/m3	0.60	1.80	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Methyl Kinyl Xetone	01/11/23 9 02/11/23	ug/m3	0.50	1.43	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
o9Fylene	01/11/23 9 02/11/23	ug/m3	0.) 0	2.1)	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Pentanal	01/11/23 9 02/11/23	ug/m3	0.50	1.) 6	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong

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21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124038
c ate ReveiDed : J oD 02, 2023
c ate Reported : J oD 06, 2023
Report J umber : 28156569 1

Sample Number	231240389 1
Sampled Date	J oD 01, 2023
Sample Description	Air - uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกNมาบตาพุดfNA1fQP(4) P 0) 30G0) , 1405264f
Date Analysis Commenced	J oD 03, 2023
Condition of Sample	Contained in one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Pentane	01/11/23 9 02/11/23	ug/m3	0.50	1.48	1.) 1	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Propanal	01/11/23 9 02/11/23	ug/m3	0.50	1.1G	x 1.1G	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Propene NPropylenef	01/11/23 9 02/11/23	ug/m3	0.30	0.86	5.65	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
(tyrene	01/11/23 9 02/11/23	ug/m3	0.) 0	2.13	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Tetravhloroethylene	01/11/23 9 02/11/23	ug/m3	0.11	0.34	x 0.34	400	Sased on w(EPA Compendium Method, TB 9 1 5	PCc	Rayong
Toluene	01/11/23 9 02/11/23	ug/m3	0.60	1.88	24.) 2	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
trans91,29c ivhloroethene	01/11/23 9 02/11/23	ug/m3	0.) 0	1.G8	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
trans91,39c ivhloropropene	01/11/23 9 02/11/23	ug/m3	0.80	2.2)	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Trivhloroethylene	01/11/23 9 02/11/23	ug/m3	0.0G	0.2)	J ot c etevted	130	Sased on w(EPA Compendium Method, TB 9 1 5	PCc	Rayong
Trivhloro7uoromethane N-9 1 1 1f	01/11/23 9 02/11/23	ug/m3	0.G0	2.81	x 2.81	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Kinyl Avetate	01/11/23 9 02/11/23	ug/m3	0.60	1.) 6	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124038
c ate ReveiDed : J oD 02, 2023
c ate Reported : J oD 06, 2023
Report J umber : 28156569 1

Sample Number	231240389 1
Sampled Date	J oD 01, 2023
Sample Description	Air - uality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกNมาบตาพุดfNA1fQP(4) P 0) 30G0) , 1405264f
Date Analysis Commenced	J oD 03, 2023
Condition of Sample	Contained in one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Kinyl Chloride	01/11/23 9 02/11/23	ug/m3	0.04	0.13	0.15	20	Sased on w(EPA Compendium Method, TB 9 15	PCc	Rayong

Guideline :
J ES : J oti7vation o7 J ational EnDironment Soard, S.E. 2560 N201) f
PCc : J oti7vation o7 the Pollution Control c epartment, Ohivh Oas published in the Royal QoDernment QaUette Kol. 126 (pevial Part 13 c dated Vanuary 2), S.E. 2552 N200Gf.
Sampled By : J antaOat (arin

Remark :
- LBc : Limit o7 c etevtion
- "x " : LoOer than LB- NLimit o7- uantitationf / LBR NLimit o7 Reportingf

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Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124038
c ate ReveiDed : J oD 02, 2023
c ate Reported : J oD 06, 2023
Report J umber : 28156569 1

Sample Number	231240389 2
Sampled Date	J oD 01, 2023
Sample Description	Air - uality
Location	วัดหนองแฟบNA2f NQP(4) P 0) 2G828, 1403318f
Date Analysis Commenced	J oD 03, 2023
Condition of Sample	Contained in one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,1,19Trivhloroethane	01/11/23 9 02/11/23	ug/m3	0.G0	2.) 3	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,1,2,29Tetravhloroethane	01/11/23 9 02/11/23	ug/m3	0.10	0.34	J ot c etevted	83	Sased on w(EPA Compendium Method, TB 9 15	PCc	Rayong
1,1,29Trivhloro91,2,29Tri7uoroethane	01/11/23 9 02/11/23	ug/m3	1.00	3.83	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,1,29Trivhloroethane	01/11/23 9 02/11/23	ug/m3	0.G0	2.) 3	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,19c ivhloroethane	01/11/23 9 02/11/23	ug/m3	0.) 0	2.02	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,19c ivhloroethene	01/11/23 9 02/11/23	ug/m3	0.) 0	1.G8	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,2,39TrimethylbenUene	01/11/23 9 02/11/23	ug/m3	0.80	2.46	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,2,49TrivhlorobenUene	01/11/23 9 02/11/23	ug/m3	1.20	3.) 1	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,2,49TrimethylbenUene	01/11/23 9 02/11/23	ug/m3	0.80	2.46	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,29c ibromoethane	01/11/23 9 02/11/23	ug/m3	0.10	0.38	J ot c etevted	3) 0	Sased on w(EPA Compendium Method, TB 9 15	PCc	Rayong
1,29c ivhlorobenUene	01/11/23 9 02/11/23	ug/m3	0.20	0.60	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong

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Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124038
c ate ReveiDed : J oD 02, 2023
c ate Reported : J oD 06, 2023
Report J umber : 28156569 1

Sample Number 231240389 2
Sampled Date J oD 01, 2023
Sample Description Air - uality
Location วัดหนองแฟบNA2f NQP(4) P 0) 2G828, 1403318f
Date Analysis Commenced J oD 03, 2023
Condition of Sample Contained in one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,29c ivhloroethane	01/11/23 9 02/11/23	ug/m3	0.0)	0.20	x 0.20	48	Sased on w(EPA Compendium Method, TB915	PCc	Rayong
1,29c ivhloropropane	01/11/23 9 02/11/23	ug/m3	0.08	0.23	x 0.23	82	Sased on w(EPA Compendium Method, TB915	PCc	Rayong
1,29c ivhlorotetra7uoroetha ne	01/11/23 9 02/11/23	ug/m3	1.20	3.50	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
1,3,59TrimethylbenUene	01/11/23 9 02/11/23	ug/m3	0.80	2.46	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
1,39Sutadiene	01/11/23 9 02/11/23	ug/m3	0.04	0.11	0.22	5.3	Sased on w(EPA Compendium Method, TB915	PCc	Rayong
1,39c ivhlorobenUene	01/11/23 9 02/11/23	ug/m3	0.20	0.60	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
1,49c ivhlorobenUene	01/11/23 9 02/11/23	ug/m3	0.20	0.60	J ot c etevted	1100	Sased on w(EPA Compendium Method, TB915	PCc	Rayong
1,49c iozane	01/11/23 9 02/11/23	ug/m3	0.10	0.36	J ot c etevted	860	Sased on w(EPA Compendium Method, TB915	PCc	Rayong
19Sutanol	01/11/23 9 02/11/23	ug/m3	0.50	1.52	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
19Propanol	01/11/23 9 02/11/23	ug/m3	0.40	1.23	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
29Hezanone	01/11/23 9 02/11/23	ug/m3	0.) 0	2.05	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong

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(enior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124038
c ate ReveiDed : J oD 02, 2023
c ate Reported : J oD 06, 2023
Report J umber : 28156569 1

Sample Number 231240389 2
Sampled Date J oD 01, 2023
Sample Description Air - uality
Location วัดหนองแฟบNA2f NQP(4) P 0) 2G828, 1403318f
Date Analysis Commenced J oD 03, 2023
Condition of Sample Contained in one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
29Pentanone	01/11/23 9 02/11/23	ug/m3	0.60	1.) 6	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
29Propanol	01/11/23 9 02/11/23	ug/m3	0.40	1.23	x 1.23	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
39Hezanone	01/11/23 9 02/11/23	ug/m3	0.) 0	2.05	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
39Pentanone	01/11/23 9 02/11/23	ug/m3	0.60	1.) 6	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Avetaldehyde	01/11/23 9 02/11/23	ug/m3	0.05	0.18	5.0G	860	Sased on w(EPA Compendium Method, TB915	PCc	Rayong
Avetone	01/11/23 9 02/11/23	ug/m3	0.08	0.24	14.) 3	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Avetonitrile	01/11/23 9 02/11/23	ug/m3	0.30	0.84	x 0.84	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Avrolein	01/11/23 9 02/11/23	ug/m3	0.08	0.23	J ot c etevted	0.55	Sased on w(EPA Compendium Method, TB915	PCc	Rayong
Avrylonitrile	01/11/23 9 02/11/23	ug/m3	0.0)	0.22	0.65	10	Sased on w(EPA Compendium Method, TB915	PCc	Rayong
SenUene	01/11/23 9 02/11/23	ug/m3	0.05	0.16	1.4)	) .6	Sased on w(EPA Compendium Method, TB915	PCc	Rayong
SenUyl Chloride	01/11/23 9 02/11/23	ug/m3	0.1)	0.52	J ot c etevted	12	Sased on w(EPA Compendium Method, TB915	PCc	Rayong

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P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124038
c ate ReveiDed : J oD 02, 2023
c ate Reported : J oD 06, 2023
Report J umber : 28156569 1

Sample Number	231240389 2
Sampled Date	J oD 01, 2023
Sample Description	Air - uality
Location	รัดหนองแฟบNA2f NQP(4) P 0) 2G828, 1403318f
Date Analysis Commenced	J oD 03, 2023
Condition of Sample	Contained in one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Sromodivhloromethane	01/11/23 9 02/11/23	ug/m3	1.00	3.35	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Sromo7orm	01/11/23 9 02/11/23	ug/m3	1.00	5.1)	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Sromomethane	01/11/23 9 02/11/23	ug/m3	0.06	0.1G	0.) 8	1G0	Sased on w(EPA Compendium Method, TB915	PCc	Rayong
Sutanal	01/11/23 9 02/11/23	ug/m3	0.4G	1.4)	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Carbon c isul7de	01/11/23 9 02/11/23	ug/m3	0.05	0.16	x 0.16	100	Sased on w(EPA Compendium Method, TB915	J ES	Rayong
Carbon Tetravhloride	01/11/23 9 02/11/23	ug/m3	0.10	0.31	x 0.31	150	Sased on w(EPA Compendium Method, TB915	PCc	Rayong
ChlorobenUene	01/11/23 9 02/11/23	ug/m3	0.80	2.30	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Chlorodi7uoromethane NHC<C922f	01/11/23 9 02/11/23	ug/m3	0.60	1.))	x 1.))	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Chloroethane	01/11/23 9 02/11/23	ug/m3	0.40	1.32	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Chloro7orm	01/11/23 9 02/11/23	ug/m3	0.08	0.24	0.3G	5)	Sased on w(EPA Compendium Method, TB915	PCc	Rayong
Chloromethane	01/11/23 9 02/11/23	ug/m3	0.30	1.03	4.6)	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong

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Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124038
c ate ReveiDed : J oD 02, 2023
c ate Reported : J oD 06, 2023
Report J umber : 28156569 1

Sample Number	231240389 2
Sampled Date	J oD 01, 2023
Sample Description	Air - uality
Location	รัดหนองแฟบNA2f NQP(4) P 0) 2G828, 1403318f
Date Analysis Commenced	J oD 03, 2023
Condition of Sample	Contained in one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
vis91,29c ivhloroethene	01/11/23 9 02/11/23	ug/m3	0.) 0	1.G8	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
vis91,39c ivhloropropene	01/11/23 9 02/11/23	ug/m3	0.80	2.2)	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Cyvlohezane	01/11/23 9 02/11/23	ug/m3	0.60	1.) 2	x 1.) 2	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Cyvlopentane	01/11/23 9 02/11/23	ug/m3	0.50	1.43	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
c ivhlorodi7uoromethane NC<C9112f	01/11/23 9 02/11/23	ug/m3	0.80	2.4)	3.26	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
c ivhloromethane	01/11/23 9 02/11/23	ug/m3	0.06	0.1)	1.53	210	Sased on w(EPA Compendium Method, TB915	PCc	Rayong
Ethanol	01/11/23 9 02/11/23	ug/m3	0.30	0.G4	8.14	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Ethyl SenUene	01/11/23 9 02/11/23	ug/m3	0.) 0	2.1)	x 2.1)	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Hezanal	01/11/23 9 02/11/23	ug/m3	0.60	2.05	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Hezane	01/11/23 9 02/11/23	ug/m3	0.60	1.) 6	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Isobutene	01/11/23 9 02/11/23	ug/m3	0.40	1.15	1.) 0	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong

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21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

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c ate Reported : J oD 06, 2023
Report J umber : 28156569 1

Sample Number	231240389 2
Sampled Date	J oD 01, 2023
Sample Description	Air - uality
Location	รัดหนองแฟบNA2f NQP(4) P 0) 2G828, 1403318f
Date Analysis Commenced	J oD 03, 2023
Condition of Sample	Contained in one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Isoprene	01/11/23 9 02/11/23	ug/m3	0.50	1.3G	1.50	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
m,p9Fylene	01/11/23 9 02/11/23	ug/m3	1.50	4.34	x 4.34	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Methavrolein	01/11/23 9 02/11/23	ug/m3	0.50	1.43	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Methanol	01/11/23 9 02/11/23	ug/m3	0.20	0.66	11.48	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Methyl Ethyl Xetone	01/11/23 9 02/11/23	ug/m3	0.50	1.4)	x 1.4)	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Methyl Iodide	01/11/23 9 02/11/23	ug/m3	0.G0	2.G0	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Methyl Isobutyl Xetone	01/11/23 9 02/11/23	ug/m3	0.)0	2.05	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Methyl tert butyl ether	01/11/23 9 02/11/23	ug/m3	0.60	1.80	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Methyl Kinyl Xetone	01/11/23 9 02/11/23	ug/m3	0.50	1.43	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
o9Fylene	01/11/23 9 02/11/23	ug/m3	0.)0	2.1)	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Pentanal	01/11/23 9 02/11/23	ug/m3	0.50	1.)6	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong

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21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124038
c ate ReveiDed : J oD 02, 2023
c ate Reported : J oD 06, 2023
Report J umber : 28156569 1

Sample Number	231240389 2
Sampled Date	J oD 01, 2023
Sample Description	Air - uality
Location	รัดหนองแฟบNA2f NQP(4) P 0) 2G828, 1403318f
Date Analysis Commenced	J oD 03, 2023
Condition of Sample	Contained in one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Pentane	01/11/23 9 02/11/23	ug/m3	0.50	1.48	2.0)	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Propanal	01/11/23 9 02/11/23	ug/m3	0.50	1.1G	x 1.1G	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Propene NPropylenef	01/11/23 9 02/11/23	ug/m3	0.30	0.86	5.G5	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
(tyrene	01/11/23 9 02/11/23	ug/m3	0.)0	2.13	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Tetravhloroethylene	01/11/23 9 02/11/23	ug/m3	0.11	0.34	J ot c etevted	400	Sased on w(EPA Compendium Method, TB915	PCc	Rayong
Toluene	01/11/23 9 02/11/23	ug/m3	0.60	1.88	5.13	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
trans91,29c ivhloroethene	01/11/23 9 02/11/23	ug/m3	0.)0	1.G8	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
trans91,39c ivhloropropene	01/11/23 9 02/11/23	ug/m3	0.80	2.2)	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Trivhloroethylene	01/11/23 9 02/11/23	ug/m3	0.0G	0.2)	J ot c etevted	130	Sased on w(EPA Compendium Method, TB915	PCc	Rayong
Trivhloro7uoromethane N-911f	01/11/23 9 02/11/23	ug/m3	0.G0	2.81	x 2.81	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong
Kinyl Avetate	01/11/23 9 02/11/23	ug/m3	0.60	1.)6	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB915	9	Rayong

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Sample Number	231240389 2
Sampled Date	J oD 01, 2023
Sample Description	Air - uality
Location	วัดหนองแฟบNA2f NQP(4) P 0) 2G828, 1403318f
Date Analysis Commenced	J oD 03, 2023
Condition of Sample	Contained in one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Kinyl Chloride	01/11/23 9 02/11/23	ug/m3	0.04	0.13	x 0.13	20	Sased on w(EPA Compendium Method, TB 9 15	PCc	Rayong

Guideline :
J ES : J oti7vation o7 J ational EnDironment Soard, S.E. 2560 N201) f
PCc : J oti7vation o7 the Pollution Control c epartment, Ohivh Oas published in the Royal QoDernment QaUette Kol. 126 (pevial Part 13 c dated Vanuary 2), S.E. 2552 N200Gf.
Sampled By : J antaOat (arin

Remark :
- LBc : Limit o7 c etevtion
- "x " : LoOer than LB- NLimit o7- uantitationf / LBR NLimit o7 Reportingf

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Report J umber : 28156569 1

Sample Number	231240389 3
Sampled Date	J oD 01, 2023
Sample Description	Air - uality
Location	วัดมาบชลูดNA3f NQP(4) P 0) 30826, 140) 360f
Date Analysis Commenced	J oD 03, 2023
Condition of Sample	Contained in one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,1,19Trivhloroethane	01/11/23 9 02/11/23	ug/m3	0.G0	2.) 3	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,1,2,29Tetravhloroethane	01/11/23 9 02/11/23	ug/m3	0.10	0.34	J ot c etevted	83	Sased on w(EPA Compendium Method, TB 9 15	PCc	Rayong
1,1,29Trivhloro91,2,29Tri7uoroethane	01/11/23 9 02/11/23	ug/m3	1.00	3.83	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,1,29Trivhloroethane	01/11/23 9 02/11/23	ug/m3	0.G0	2.) 3	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,19c ivhloroethane	01/11/23 9 02/11/23	ug/m3	0.) 0	2.02	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,19c ivhloroethene	01/11/23 9 02/11/23	ug/m3	0.) 0	1.G8	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,2,39TrimethylbenUene	01/11/23 9 02/11/23	ug/m3	0.80	2.46	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,2,49TrivhlorobenUene	01/11/23 9 02/11/23	ug/m3	1.20	3.) 1	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,2,49TrimethylbenUene	01/11/23 9 02/11/23	ug/m3	0.80	2.46	x 2.46	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,29c ibromoethane	01/11/23 9 02/11/23	ug/m3	0.10	0.38	J ot c etevted	3) 0	Sased on w(EPA Compendium Method, TB 9 15	PCc	Rayong
1,29c ivhlorobenUene	01/11/23 9 02/11/23	ug/m3	0.20	0.60	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong

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c ate ReveiDed : J oD 02, 2023
c ate Reported : J oD 06, 2023
Report J umber : 28156569 1

Sample Number	231240389 3
Sampled Date	J oD 01, 2023
Sample Description	Air - uality
Location	วัดมาบชลูดNA3f NQP(4) P 0) 30826, 140) 360f
Date Analysis Commenced	J oD 03, 2023
Condition of Sample	Contained in one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,29c ivhloroethane	01/11/23 9 02/11/23	ug/m3	0.0)	0.20	x 0.20	48	Sased on w(EPA Compendium Method, TB 9 15	PCc	Rayong
1,29c ivhloropropane	01/11/23 9 02/11/23	ug/m3	0.08	0.23	x 0.23	82	Sased on w(EPA Compendium Method, TB 9 15	PCc	Rayong
1,29c ivhlorotetra7luoroetha ne	01/11/23 9 02/11/23	ug/m3	1.20	3.50	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,3,59TrimethylbenUene	01/11/23 9 02/11/23	ug/m3	0.80	2.46	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,39Sutadiene	01/11/23 9 02/11/23	ug/m3	0.04	0.11	0.44	5.3	Sased on w(EPA Compendium Method, TB 9 15	PCc	Rayong
1,39c ivhlorobenUene	01/11/23 9 02/11/23	ug/m3	0.20	0.60	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
1,49c ivhlorobenUene	01/11/23 9 02/11/23	ug/m3	0.20	0.60	J ot c etevted	1100	Sased on w(EPA Compendium Method, TB 9 15	PCc	Rayong
1,49c iozane	01/11/23 9 02/11/23	ug/m3	0.10	0.36	J ot c etevted	860	Sased on w(EPA Compendium Method, TB 9 15	PCc	Rayong
19Sutanol	01/11/23 9 02/11/23	ug/m3	0.50	1.52	x 1.52	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
19Propanol	01/11/23 9 02/11/23	ug/m3	0.40	1.23	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
29Hezanone	01/11/23 9 02/11/23	ug/m3	0.) 0	2.05	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong

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(enior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124038
c ate ReveiDed : J oD 02, 2023
c ate Reported : J oD 06, 2023
Report J umber : 28156569 1

Sample Number	231240389 3
Sampled Date	J oD 01, 2023
Sample Description	Air - uality
Location	วัดมาบชลูดNA3f NQP(4) P 0) 30826, 140) 360f
Date Analysis Commenced	J oD 03, 2023
Condition of Sample	Contained in one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
29Pentanone	01/11/23 9 02/11/23	ug/m3	0.60	1.) 6	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
29Propanol	01/11/23 9 02/11/23	ug/m3	0.40	1.23	x 1.23	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
39Hezanone	01/11/23 9 02/11/23	ug/m3	0.) 0	2.05	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
39Pentanone	01/11/23 9 02/11/23	ug/m3	0.60	1.) 6	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
Avetaldehyde	01/11/23 9 02/11/23	ug/m3	0.05	0.18	6.85	860	Sased on w(EPA Compendium Method, TB 9 15	PCc	Rayong
Avetone	01/11/23 9 02/11/23	ug/m3	0.08	0.24	12.26	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
Avetonitrile	01/11/23 9 02/11/23	ug/m3	0.30	0.84	1.68	J o (tandard	Sased on w(EPA Compendium Method, TB 9 15	9	Rayong
Avrolein	01/11/23 9 02/11/23	ug/m3	0.08	0.23	J ot c etevted	0.55	Sased on w(EPA Compendium Method, TB 9 15	PCc	Rayong
Avrylonitrile	01/11/23 9 02/11/23	ug/m3	0.0)	0.22	J ot c etevted	10	Sased on w(EPA Compendium Method, TB 9 15	PCc	Rayong
SenUene	01/11/23 9 02/11/23	ug/m3	0.05	0.16	1.4)	) .6	Sased on w(EPA Compendium Method, TB 9 15	PCc	Rayong
SenUyl Chloride	01/11/23 9 02/11/23	ug/m3	0.1)	0.52	J ot c etevted	12	Sased on w(EPA Compendium Method, TB 9 15	PCc	Rayong

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c ej Changvhon
(enior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124038
c ate ReveiDed : J oD 02, 2023
c ate Reported : J oD 06, 2023
Report J umber : 28156569L

Sample Number	231240389B
Sampled Date	J oD 01, 2023
Sample Description	Air - uality
Location	รัดมาบชลูดNA3f NQP(4) P 0) 30826, 140) 360f
Date Analysis Commenced	J oD 03, 2023
Condition of Sample	Contained in one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Sromodivhloromethane	01/11/23 9 02/11/23	ug/m3	1.00	3.35	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 915	9	Rayong
Sromo7orm	01/11/23 9 02/11/23	ug/m3	1.00	5.1)	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 915	9	Rayong
Sromomethane	01/11/23 9 02/11/23	ug/m3	0.06	0.1G	x 0.1G	1G0	Sased on w(EPA Compendium Method, TB 915	PCc	Rayong
Sutanal	01/11/23 9 02/11/23	ug/m3	0.4G	1.4)	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 915	9	Rayong
Carbon c isul7de	01/11/23 9 02/11/23	ug/m3	0.05	0.16	x 0.16	100	Sased on w(EPA Compendium Method, TB 915	J ES	Rayong
Carbon Tetravhloride	01/11/23 9 02/11/23	ug/m3	0.10	0.31	x 0.31	150	Sased on w(EPA Compendium Method, TB 915	PCc	Rayong
ChlorobenUene	01/11/23 9 02/11/23	ug/m3	0.80	2.30	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 915	9	Rayong
Chlorodi7uoromethane NHC<C922f	01/11/23 9 02/11/23	ug/m3	0.60	1.))	x 1.))	J o (tandard	Sased on w(EPA Compendium Method, TB 915	9	Rayong
Chloroethane	01/11/23 9 02/11/23	ug/m3	0.40	1.32	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 915	9	Rayong
Chloro7orm	01/11/23 9 02/11/23	ug/m3	0.08	0.24	x 0.24	5)	Sased on w(EPA Compendium Method, TB 915	PCc	Rayong
Chloromethane	01/11/23 9 02/11/23	ug/m3	0.30	1.03	2.48	J o (tandard	Sased on w(EPA Compendium Method, TB 915	9	Rayong

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124038
c ate ReveiDed : J oD 02, 2023
c ate Reported : J oD 06, 2023
Report J umber : 28156569L

Sample Number	231240389B
Sampled Date	J oD 01, 2023
Sample Description	Air - uality
Location	รัดมาบชลูดNA3f NQP(4) P 0) 30826, 140) 360f
Date Analysis Commenced	J oD 03, 2023
Condition of Sample	Contained in one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
vis91,29c ivhloroethene	01/11/23 9 02/11/23	ug/m3	0.) 0	1.G8	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 915	9	Rayong
vis91,39c ivhloropropene	01/11/23 9 02/11/23	ug/m3	0.80	2.2)	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 915	9	Rayong
Cyvlohezane	01/11/23 9 02/11/23	ug/m3	0.60	1.) 2	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 915	9	Rayong
Cyvlopentane	01/11/23 9 02/11/23	ug/m3	0.50	1.43	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 915	9	Rayong
c ivhlorodi7uoromethane NC<C9112f	01/11/23 9 02/11/23	ug/m3	0.80	2.4)	2.4)	J o (tandard	Sased on w(EPA Compendium Method, TB 915	9	Rayong
c ivhloromethane	01/11/23 9 02/11/23	ug/m3	0.06	0.1)	2.36	210	Sased on w(EPA Compendium Method, TB 915	PCc	Rayong
Ethanol	01/11/23 9 02/11/23	ug/m3	0.30	0.G4	G.) 6	J o (tandard	Sased on w(EPA Compendium Method, TB 915	9	Rayong
Ethyl SenUene	01/11/23 9 02/11/23	ug/m3	0.) 0	2.1)	x 2.1)	J o (tandard	Sased on w(EPA Compendium Method, TB 915	9	Rayong
Hezanal	01/11/23 9 02/11/23	ug/m3	0.60	2.05	x 2.05	J o (tandard	Sased on w(EPA Compendium Method, TB 915	9	Rayong
Hezane	01/11/23 9 02/11/23	ug/m3	0.60	1.) 6	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 915	9	Rayong
Isobutene	01/11/23 9 02/11/23	ug/m3	0.40	1.15	1.84	J o (tandard	Sased on w(EPA Compendium Method, TB 915	9	Rayong

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(enior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124038
c ate ReveiDed : J oD 02, 2023
c ate Reported : J oD 06, 2023
Report J umber : 28156569 1

Sample Number	231240389 3
Sampled Date	J oD 01, 2023
Sample Description	Air - uality
Location	วัดมาบชลูดNA3f NQP(4) P 0) 30826, 140) 360f
Date Analysis Commenced	J oD 03, 2023
Condition of Sample	Contained in one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Isoprene	01/11/23 9 02/11/23	ug/m3	0.50	1.3G	1.56	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
m,p9Fylene	01/11/23 9 02/11/23	ug/m3	1.50	4.34	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Methavrolein	01/11/23 9 02/11/23	ug/m3	0.50	1.43	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Methanol	01/11/23 9 02/11/23	ug/m3	0.20	0.66	18.2G	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Methyl Ethyl Xetone	01/11/23 9 02/11/23	ug/m3	0.50	1.4)	1.))	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Methyl Iodide	01/11/23 9 02/11/23	ug/m3	0.G0	2.G0	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Methyl Isobutyl Xetone	01/11/23 9 02/11/23	ug/m3	0.) 0	2.05	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Methyl tert butyl ether	01/11/23 9 02/11/23	ug/m3	0.60	1.80	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Methyl Kinyl Xetone	01/11/23 9 02/11/23	ug/m3	0.50	1.43	x 1.43	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
o9Fylene	01/11/23 9 02/11/23	ug/m3	0.) 0	2.1)	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Pentanal	01/11/23 9 02/11/23	ug/m3	0.50	1.) 6	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124038
c ate ReveiDed : J oD 02, 2023
c ate Reported : J oD 06, 2023
Report J umber : 28156569 1

Sample Number	231240389 3
Sampled Date	J oD 01, 2023
Sample Description	Air - uality
Location	วัดมาบชลูดNA3f NQP(4) P 0) 30826, 140) 360f
Date Analysis Commenced	J oD 03, 2023
Condition of Sample	Contained in one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Pentane	01/11/23 9 02/11/23	ug/m3	0.50	1.48	1.G5	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Propanal	01/11/23 9 02/11/23	ug/m3	0.50	1.1G	x 1.1G	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Propene NPropylenef	01/11/23 9 02/11/23	ug/m3	0.30	0.86	3.55	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
(tyrene	01/11/23 9 02/11/23	ug/m3	0.) 0	2.13	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Tetravhloroethylene	01/11/23 9 02/11/23	ug/m3	0.11	0.34	J ot c etevted	400	Sased on w(EPA Compendium Method, TB 9 1 5	PCc	Rayong
Toluene	01/11/23 9 02/11/23	ug/m3	0.60	1.88	) .46	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
trans91,29c ivhloroethene	01/11/23 9 02/11/23	ug/m3	0.) 0	1.G8	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
trans91,39c ivhloropropene	01/11/23 9 02/11/23	ug/m3	0.80	2.2)	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Trivhloroethylene	01/11/23 9 02/11/23	ug/m3	0.0G	0.2)	J ot c etevted	130	Sased on w(EPA Compendium Method, TB 9 1 5	PCc	Rayong
Trivhloro7uoromethane N-9 1 1f	01/11/23 9 02/11/23	ug/m3	0.G0	2.81	x 2.81	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong
Kinyl Avetate	01/11/23 9 02/11/23	ug/m3	0.60	1.) 6	J ot c etevted	J o (tandard	Sased on w(EPA Compendium Method, TB 9 1 5	9	Rayong

Approved by

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Analysis / Test Report

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18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124038
c ate ReveiDed : J oD 02, 2023
c ate Reported : J oD 06, 2023
Report J umber : 28156569 1

Sample Number	231240389 3
Sampled Date	J oD 01, 2023
Sample Description	Air - uality
Location	วัดมาบชลูดNA3f NQP(4) P 0) 30826, 140) 360f
Date Analysis Commenced	J oD 03, 2023
Condition of Sample	Contained in one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Kinyl Chloride	01/11/23 9 02/11/23	ug/m3	0.04	0.13	x 0.13	20	Sased on w(EPA Compendium Method, TB 9 15	PCc	Rayong

Guideline :
J ES : J otiZvation o7J ational EnDironment Soard, S.E. 2560 N201) f
PCc : J otiZvation o7the Pollution Control c epartment, Ohivh Oas published in the Royal QoDernment QaUette Kol. 126 (pevial Part 13 c dated Vanuary 2), S.E. 2552 N200Gf.
Sampled By : J antaOat (arin

Remark :
- LBc : Limit o7c etevtion
- "x " : LoOer than LB- NLimit o7- uantitationf / LBR NLimit o7Reportingf

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124035
Date Received :Nov 02, 2023
Date Reported :Nov 07, 2023
Report Number :2815651-1

Sample Number	23124035-1
Parameter	Wind Speed / Wind Direction
Location	วัดหนองแฟบ(A2) (GPS 47P 0729828, 1403318)
Sampling Date	Nov 01 - Nov 02, 2023
Sampling by	Nantawat Sarin

Time	Nov 01 - Nov 02, 2023			-			-			-			-			-			-		
	WS (m/s)	WD (deg)		-	-		-	-		-	-		-	-		-	-		-	-	
10:00 AM - 11:00 AM	2.7	13.0	NNE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM - 12:00 PM	1.8	7.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 PM - 01:00 PM	2.4	4.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 PM - 02:00 PM	1.7	113.0	ESE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 PM - 03:00 PM	1.9	141.0	SE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 PM - 04:00 PM	1.5	249.0	WSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 PM - 05:00 PM	1.1	256.0	WSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 PM - 06:00 PM	0.6	261.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 PM - 07:00 PM	0.5	277.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 PM - 08:00 PM	0.4	267.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 PM - 09:00 PM	0.3	254.0	WSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 PM - 10:00 PM	1.0	277.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 PM - 11:00 PM	1.7	354.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 PM - 12:00 AM	2.7	356.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 AM - 01:00 AM	3.4	356.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 AM - 02:00 AM	3.3	1.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 AM - 03:00 AM	3.5	1.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 AM - 04:00 AM	3.3	359.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 AM - 05:00 AM	3.2	0.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 AM - 06:00 AM	3.5	357.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 AM - 07:00 AM	0.9	344.0	NNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 AM - 08:00 AM	2.4	357.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 AM - 09:00 AM	2.1	354.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 AM - 10:00 AM	2.5	0.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Sarayuth Jittranont
Assistant General Manager

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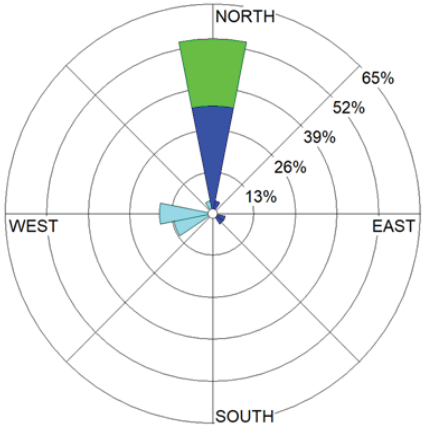
Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124035
Date Received :Nov 02, 2023
Date Reported :Nov 07, 2023
Report Number :2815651-1

Wind Rose



Date : Nov 01-02, 2023

	WS(m/s)	%
	≥ 10.0	0.00
	8.0-10.0	0.00
	5.5-8.0	0.00
	3.3-5.5	20.83
	1.7-3.3	45.83
	0.3-1.7	33.33
	Calms	0.00

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Sarayuth Jittranont
Assistant General Manager

Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124035
Date Received :Nov 02, 2023
Date Reported :Nov 07, 2023
Report Number :2815651-1

Sample Number 23124035-2
Parameter Wind Speed / Wind Direction
Location วัดมาบชลูด(A3) (GPS 47P 0730826, 1407360)
Sampling Date Nov 01 - Nov 02, 2023
Sampling by Nantawat Sarin

Time	Nov 01 - Nov 02, 2023			-			-			-			-			-			-		
	WS (m/s)	WD (deg)		-	-		-	-		-	-		-	-		-	-		-	-	
10:00 AM - 11:00 AM	1.7	0.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM - 12:00 PM	2.8	227.0	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 PM - 01:00 PM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 PM - 02:00 PM	0.9	0.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 PM - 03:00 PM	1.0	186.0	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 PM - 04:00 PM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 PM - 05:00 PM	0.4	86.0	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 PM - 06:00 PM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 PM - 07:00 PM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 PM - 08:00 PM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 PM - 09:00 PM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 PM - 10:00 PM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 PM - 11:00 PM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 PM - 12:00 AM	0.9	0.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 AM - 01:00 AM	1.1	0.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 AM - 02:00 AM	1.2	0.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 AM - 03:00 AM	0.8	0.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 AM - 04:00 AM	1.0	0.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 AM - 05:00 AM	0.8	0.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 AM - 06:00 AM	0.6	0.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 AM - 07:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 AM - 08:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 AM - 09:00 AM	0.8	0.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 AM - 10:00 AM	0.9	0.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Sarayuth Jittranont
Assistant General Manager

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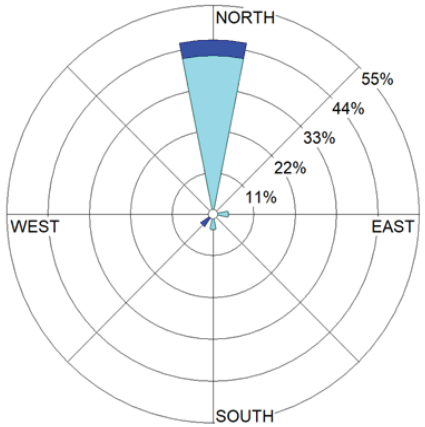
Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124035
Date Received :Nov 02, 2023
Date Reported :Nov 07, 2023
Report Number :2815651-1

Wind Rose



Date : Nov 01-02, 2023

	WS(m/s)	%
	≥ 10.0	0.00
	8.0-10.0	0.00
	5.5-8.0	0.00
	3.3-5.5	0.00
	1.7-3.3	8.33
	0.3-1.7	50.00
	Calms	41.67

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124032
Date Received :Nov 08, 2023
Date Reported :Nov 16, 2023
Report Number :2815648-1 C1

Sample Number 23124032-1
Parameter Wind Speed / Wind Direction
Location สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออก(มาบตาพุด)(A1)(GPS 47P 0730907, 1405264)
Sampling Date Nov 01 - Nov 02, 2023
Sampling by Nantawat Sarin

Time	Nov 01 - Nov 02, 2023			-			-			-			-			-			-		
	WS (m/s)	WD (deg)		-	-		-	-		-	-		-	-		-	-		-	-	
10:00 AM - 11:00 AM	0.5	40.0	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM - 12:00 PM	1.0	50.0	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 PM - 01:00 PM	1.3	55.0	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 PM - 02:00 PM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 PM - 03:00 PM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 PM - 04:00 PM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 PM - 05:00 PM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 PM - 06:00 PM	0.5	297.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 PM - 07:00 PM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 PM - 08:00 PM	0.5	331.0	NNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 PM - 09:00 PM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 PM - 10:00 PM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 PM - 11:00 PM	0.6	340.0	NNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 PM - 12:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 AM - 01:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 AM - 02:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 AM - 03:00 AM	1.1	60.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 AM - 04:00 AM	1.7	34.0	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 AM - 05:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 AM - 06:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 AM - 07:00 AM	0.3	79.0	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 AM - 08:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 AM - 09:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 AM - 10:00 AM	0.3	359.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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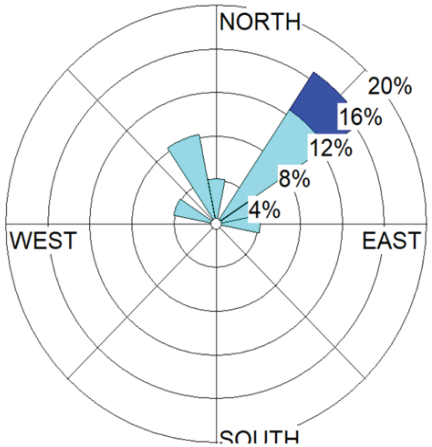
Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124032
Date Received :Nov 08, 2023
Date Reported :Nov 16, 2023
Report Number :2815648-1 C1

Wind Rose



Date : Nov 01-02, 2023

	WS(m/s)	%
	≥ 10.0	0.00
	8.0-10.0	0.00
	5.5-8.0	0.00
	3.3-5.5	0.00
	1.7-3.3	4.17
	0.3-1.7	37.50
	Calms	58.33

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134874
J ate ReDeived : J eD0c, 2023
J ate Reported : J eD15, 2023
Report 7umber : 28403869Q

Sample Number	231348c49Q
Sampled Date	J eD06, 2023
Sample Description	Air Nuality
Location	สำนักงานนิคมอุตสาหกรรมตับบลัวเอชเอตะวันออกfมาบตาพุดQJA1Q(P) 4cP 0c30G0c, 1405264Q
Date Analysis Commenced	J eD08, 2023
Condition of Sample	J raS n into one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,1,19TriDhloroethane	06/12/23 90c/12/23	ug/m3	0.G0	2.c3	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,1,2,29TetraDhloroethane	06/12/23 90c/12/23	ug/m3	0.10	0.34	7ot J eteDted	83	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
1,1,29TriDhloro91,2,29Tri-luoroethane	06/12/23 90c/12/23	ug/m3	1.00	3.83	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,1,29TriDhloroethane	06/12/23 90c/12/23	ug/m3	0.G0	2.c3	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,19J iDhloroethane	06/12/23 90c/12/23	ug/m3	0.c0	2.02	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,19J iDhloroethene	06/12/23 90c/12/23	ug/m3	0.c0	1.G8	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,2,39TrimethylbenQene	06/12/23 90c/12/23	ug/m3	0.80	2.46	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,2,49TriDhlorobenQene	06/12/23 90c/12/23	ug/m3	1.20	3.c1	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,2,49TrimethylbenQene	06/12/23 90c/12/23	ug/m3	0.80	2.46	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,29J ibromoethane	06/12/23 90c/12/23	ug/m3	0.10	0.38	7ot J eteDted	3c0	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
1,29J iDhlorobenQene	06/12/23 90c/12/23	ug/m3	0.20	0.60	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong

Results apply to the samplefsQas submitted, unless the sampling S as DonduDted by AL). 7o part o- this report may be reproduDed in any -orm S ithout S ritten Donsent -rom the laboratory. AL) Laboratory (roup fThailandQstrongly reDommends that this report is not reproduDed ezDept in -ull.

Approved by

J ej ChangDhon
) enior Manager

Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134874
J ate ReDeived : J eD0c, 2023
J ate Reported : J eD15, 2023
Report 7umber : 28403869l

Sample Number	231348c49l
Sampled Date	J eD06, 2023
Sample Description	Air Nuality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกfมาบตาพุดQJA1Q(P) 4cP 0c30G0c, 1405264Q
Date Analysis Commenced	J eD08, 2023
Condition of Sample	J raS n into one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,29I iChloroethane	06/12/23 90c/12/23	ug/m3	0.0c	0.20	x 0.20	48	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
1,29I iChloropropane	06/12/23 90c/12/23	ug/m3	0.08	0.23	x 0.23	82	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
1,29I iChlorotetra-luoroetha ne	06/12/23 90c/12/23	ug/m3	1.20	3.50	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,3,59TrimethylbenQene	06/12/23 90c/12/23	ug/m3	0.80	2.46	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,39wutadiene	06/12/23 90c/12/23	ug/m3	0.04	0.11	0.22	5.3	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
1,39I iChlorobenQene	06/12/23 90c/12/23	ug/m3	0.20	0.60	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,49I iChlorobenQene	06/12/23 90c/12/23	ug/m3	0.20	0.60	7ot J eteDted	1100	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
1,49I iozane	06/12/23 90c/12/23	ug/m3	0.10	0.36	7ot J eteDted	860	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
19wutanol	06/12/23 90c/12/23	ug/m3	0.50	1.52	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
19Propanol	06/12/23 90c/12/23	ug/m3	0.40	1.23	1.43	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
29Hezanone	06/12/23 90c/12/23	ug/m3	0.c0	2.05	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong

Approved by

J ej ChangDhon
) enior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134874
J ate ReDeived : J eD0c, 2023
J ate Reported : J eD15, 2023
Report 7umber : 28403869l

Sample Number	231348c49l
Sampled Date	J eD06, 2023
Sample Description	Air Nuality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกfมาบตาพุดQJA1Q(P) 4cP 0c30G0c, 1405264Q
Date Analysis Commenced	J eD08, 2023
Condition of Sample	J raS n into one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
29Pentanone	06/12/23 90c/12/23	ug/m3	0.60	1.c6	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
29Propanol	06/12/23 90c/12/23	ug/m3	0.40	1.23	x 1.23	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
39Hezanone	06/12/23 90c/12/23	ug/m3	0.c0	2.05	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
39Pentanone	06/12/23 90c/12/23	ug/m3	0.60	1.c6	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
ADetaldehyde	06/12/23 90c/12/23	ug/m3	0.05	0.18	3.5c	860	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
ADetone	06/12/23 90c/12/23	ug/m3	0.08	0.24	14.68	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
ADetonitrile	06/12/23 90c/12/23	ug/m3	0.30	0.84	x 0.84	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
ADrolein	06/12/23 90c/12/23	ug/m3	0.08	0.23	x 0.23	0.55	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
ADrylonitrile	06/12/23 90c/12/23	ug/m3	0.0c	0.22	0.6G	10	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
wenQene	06/12/23 90c/12/23	ug/m3	0.05	0.16	2.36	c.6	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
wenQyl Chloride	06/12/23 90c/12/23	ug/m3	0.1c	0.52	7ot J eteDted	12	wased on B) EPA Compendium Method, TU915	PCJ	Rayong

Approved by

J ej ChangDhon
) enior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134874
J ate ReDeived : J eD0c, 2023
J ate Reported : J eD15, 2023
Report 7umber : 28403869 1

Sample Number	231348c491
Sampled Date	J eD06, 2023
Sample Description	Air Nuality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกfมาบตาพุดQ(A1Q(P) 4cP 0c30G0c, 1405264Q
Date Analysis Commenced	J eD08, 2023
Condition of Sample	J raS n into one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
wromodiDhloromethane	06/12/23 90c/12/23	ug/m3	1.00	3.35	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
wromo-orm	06/12/23 90c/12/23	ug/m3	1.00	5.1c	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
wromomethane	06/12/23 90c/12/23	ug/m3	0.06	0.1G	0.4c	1G0	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
wutanal	06/12/23 90c/12/23	ug/m3	0.4G	1.4c	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Carbon J isul-ide	06/12/23 90c/12/23	ug/m3	0.05	0.16	x 0.16	100	wased on B) EPA Compendium Method, TU915	7Ew	Rayong
Carbon TetraDhloride	06/12/23 90c/12/23	ug/m3	0.10	0.31	x 0.31	150	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
ChlorobenQene	06/12/23 90c/12/23	ug/m3	0.80	2.30	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Chlorodi-luoromethane fHC<C922Q	06/12/23 90c/12/23	ug/m3	0.60	1.cc	x 1.cc	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Chloroethane	06/12/23 90c/12/23	ug/m3	0.40	1.32	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Chloro-orm	06/12/23 90c/12/23	ug/m3	0.08	0.24	0.2G	5c	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
Chloromethane	06/12/23 90c/12/23	ug/m3	0.30	1.03	2.23	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong

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Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134874
J ate ReDeived : J eD0c, 2023
J ate Reported : J eD15, 2023
Report 7umber : 28403869 1

Sample Number	231348c491
Sampled Date	J eD06, 2023
Sample Description	Air Nuality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกfมาบตาพุดQ(A1Q(P) 4cP 0c30G0c, 1405264Q
Date Analysis Commenced	J eD08, 2023
Condition of Sample	J raS n into one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Ds91,29 iDhloroethene	06/12/23 90c/12/23	ug/m3	0.c0	1.G8	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Ds91,39 iDhloropropene	06/12/23 90c/12/23	ug/m3	0.80	2.2c	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
CyDlohezane	06/12/23 90c/12/23	ug/m3	0.60	1.c2	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
CyDlopentane	06/12/23 90c/12/23	ug/m3	0.50	1.43	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
J iDhlorodi-luoromethane fC<C91 12Q	06/12/23 90c/12/23	ug/m3	0.80	2.4c	2.cc	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
J iDhloromethane	06/12/23 90c/12/23	ug/m3	0.06	0.1c	1.53	210	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
Ethanol	06/12/23 90c/12/23	ug/m3	0.30	0.G4	3.6G	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Ethyl wenQene	06/12/23 90c/12/23	ug/m3	0.c0	2.1c	x 2.1c	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Hezanal	06/12/23 90c/12/23	ug/m3	0.60	2.05	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Hezane	06/12/23 90c/12/23	ug/m3	0.60	1.c6	2.1G	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Isobutene	06/12/23 90c/12/23	ug/m3	0.40	1.15	x 1.15	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134874
J ate ReDeived : J eD0c, 2023
J ate Reported : J eD15, 2023
Report 7umber : 28403869l

Sample Number	231348c49l
Sampled Date	J eD06, 2023
Sample Description	Air Nuality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกfมาบตาพุดQJA1Q(P) 4cP 0c30G0c, 1405264Q
Date Analysis Commenced	J eD08, 2023
Condition of Sample	J raS n into one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Isoprene	06/12/23 90c/12/23	ug/m3	0.50	1.3G	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
m,p9Fylene	06/12/23 90c/12/23	ug/m3	1.50	4.34	x 4.34	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
MethaDrolein	06/12/23 90c/12/23	ug/m3	0.50	1.43	3.6c	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Methanol	06/12/23 90c/12/23	ug/m3	0.20	0.66	8.10	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Methyl Ethyl Xetone	06/12/23 90c/12/23	ug/m3	0.50	1.4c	1.8G	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Methyl Iodide	06/12/23 90c/12/23	ug/m3	0.G0	2.G0	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Methyl Isobutyl Xetone	06/12/23 90c/12/23	ug/m3	0.c0	2.05	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Methyl tert butyl ether	06/12/23 90c/12/23	ug/m3	0.60	1.80	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Methyl Kinyl Xetone	06/12/23 90c/12/23	ug/m3	0.50	1.43	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
o9Fylene	06/12/23 90c/12/23	ug/m3	0.c0	2.1c	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Pentanal	06/12/23 90c/12/23	ug/m3	0.50	1.c6	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134874
J ate ReDeived : J eD0c, 2023
J ate Reported : J eD15, 2023
Report 7umber : 28403869l

Sample Number	231348c49l
Sampled Date	J eD06, 2023
Sample Description	Air Nuality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกfมาบตาพุดQJA1Q(P) 4cP 0c30G0c, 1405264Q
Date Analysis Commenced	J eD08, 2023
Condition of Sample	J raS n into one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Pentane	06/12/23 90c/12/23	ug/m3	0.50	1.48	1.65	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Propanal	06/12/23 90c/12/23	ug/m3	0.50	1.1G	x 1.1G	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Propene fPropyleneQ	06/12/23 90c/12/23	ug/m3	0.30	0.86	3.61	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
) tyrene	06/12/23 90c/12/23	ug/m3	0.c0	2.13	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
TetraDhloroethylene	06/12/23 90c/12/23	ug/m3	0.11	0.34	x 0.34	400	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
Toluene	06/12/23 90c/12/23	ug/m3	0.60	1.88	5.c3	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
trans91,29J iDhloroethene	06/12/23 90c/12/23	ug/m3	0.c0	1.G8	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
trans91,39J iDhloropropene	06/12/23 90c/12/23	ug/m3	0.80	2.2c	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
TriDhloroethylene	06/12/23 90c/12/23	ug/m3	0.0G	0.2c	7ot J eteDted	130	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
TriDhloro-luoromethane f<911Q	06/12/23 90c/12/23	ug/m3	0.G0	2.81	x 2.81	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Kinyl ADetate	06/12/23 90c/12/23	ug/m3	0.60	1.c6	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong

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) enior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134874
J ate ReDeived : J eD0c, 2023
J ate Reported : J eD15, 2023
Report 7umber : 28403869l

Sample Number	231348c49l
Sampled Date	J eD06, 2023
Sample Description	Air Nuality
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกfมาบตาพุดQ(A1Q(P) 4cP 0c30G0c, 1405264Q
Date Analysis Commenced	J eD08, 2023
Condition of Sample	J raS n into one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Kinyl Chloride	06/12/23 90c/12/23	ug/m3	0.04	0.13	x 0.13	20	wased on B) EPA Compendium Method, TU915	PCJ	Rayong

Guideline :
7Ew : 7oti-iDation o- 7ational Environment woard, w.E. 2560 f201cQ
PCJ : 7oti-iDation o- the Pollution Control J epartment, S hiDh S as published in the Royal (overnment (aOette Kol. 126) peDal Part 13 J dated Vanuary 2c, w.E. 2552 f200GQ
Sampled By : Adisak Talesoon

Remark :
- LUJ : Limit o- J eteDtion
- "x" : LoS er than LUN fLimit o- NuantitationQ/ LUR fLimit o- ReportingQ

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134874
J ate ReDeived : J eD0c, 2023
J ate Reported : J eD15, 2023
Report 7umber : 28403869l

Sample Number	231348c49l
Sampled Date	J eD06, 2023
Sample Description	Air Nuality
Location	วัดหนองแฟbfA2Qf(P) 4cP 0c2G828, 1403318Q
Date Analysis Commenced	J eD08, 2023
Condition of Sample	J raS n into one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,1,19TriDhloroethane	06/12/23 90c/12/23	ug/m3	0.G0	2.c3	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,1,2,29TetraDhloroethane	06/12/23 90c/12/23	ug/m3	0.10	0.34	7ot J eteDted	83	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
1,1,29TriDhloro91,2,29Tri-luoroethane	06/12/23 90c/12/23	ug/m3	1.00	3.83	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,1,29TriDhloroethane	06/12/23 90c/12/23	ug/m3	0.G0	2.c3	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,19I iDhloroethane	06/12/23 90c/12/23	ug/m3	0.c0	2.02	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,19I iDhloroethene	06/12/23 90c/12/23	ug/m3	0.c0	1.G8	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,2,39TrimethylbenOene	06/12/23 90c/12/23	ug/m3	0.80	2.46	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,2,49TriDhlorobenOene	06/12/23 90c/12/23	ug/m3	1.20	3.c1	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,2,49TrimethylbenOene	06/12/23 90c/12/23	ug/m3	0.80	2.46	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,29I ibromoethane	06/12/23 90c/12/23	ug/m3	0.10	0.38	7ot J eteDted	3c0	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
1,29I iDhlorobenOene	06/12/23 90c/12/23	ug/m3	0.20	0.60	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong

Approved by

J ej ChangDhon
) enior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134874
J ate ReDeived : J eD0c, 2023
J ate Reported : J eD15, 2023
Report 7umber : 28403869 1

Sample Number	231348c492
Sampled Date	J eD06, 2023
Sample Description	Air Nuality
Location	รัดหนองแฟบfA2Qf(P) 4cP 0c2G828, 1403318Q
Date Analysis Commenced	J eD08, 2023
Condition of Sample	J raS n into one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,29I iChloroethane	06/12/23 90c/12/23	ug/m3	0.0c	0.20	x 0.20	48	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
1,29I iChloropropane	06/12/23 90c/12/23	ug/m3	0.08	0.23	x 0.23	82	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
1,29I iChlorotetra-luoroetha ne	06/12/23 90c/12/23	ug/m3	1.20	3.50	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,3,59TrimethylbenQene	06/12/23 90c/12/23	ug/m3	0.80	2.46	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,39wutadiene	06/12/23 90c/12/23	ug/m3	0.04	0.11	0.13	5.3	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
1,39I iChlorobenQene	06/12/23 90c/12/23	ug/m3	0.20	0.60	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,49I iChlorobenQene	06/12/23 90c/12/23	ug/m3	0.20	0.60	7ot J eteDted	1100	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
1,49I iozane	06/12/23 90c/12/23	ug/m3	0.10	0.36	7ot J eteDted	860	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
19wutanol	06/12/23 90c/12/23	ug/m3	0.50	1.52	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
19Propanol	06/12/23 90c/12/23	ug/m3	0.40	1.23	x 1.23	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
29Hezanone	06/12/23 90c/12/23	ug/m3	0.c0	2.05	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong

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P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134874
J ate ReDeived : J eD0c, 2023
J ate Reported : J eD15, 2023
Report 7umber : 28403869 1

Sample Number	231348c492
Sampled Date	J eD06, 2023
Sample Description	Air Nuality
Location	รัดหนองแฟบfA2Qf(P) 4cP 0c2G828, 1403318Q
Date Analysis Commenced	J eD08, 2023
Condition of Sample	J raS n into one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
29Pentanone	06/12/23 90c/12/23	ug/m3	0.60	1.c6	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
29Propanol	06/12/23 90c/12/23	ug/m3	0.40	1.23	x 1.23	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
39Hezanone	06/12/23 90c/12/23	ug/m3	0.c0	2.05	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
39Pentanone	06/12/23 90c/12/23	ug/m3	0.60	1.c6	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
ADetaldehyde	06/12/23 90c/12/23	ug/m3	0.05	0.18	5.63	860	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
ADetone	06/12/23 90c/12/23	ug/m3	0.08	0.24	11.83	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
ADetonitrile	06/12/23 90c/12/23	ug/m3	0.30	0.84	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
ADrolein	06/12/23 90c/12/23	ug/m3	0.08	0.23	7ot J eteDted	0.55	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
ADrylonitrile	06/12/23 90c/12/23	ug/m3	0.0c	0.22	x 0.22	10	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
wenQene	06/12/23 90c/12/23	ug/m3	0.05	0.16	2.11	c.6	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
wenQyl Chloride	06/12/23 90c/12/23	ug/m3	0.1c	0.52	7ot J eteDted	12	wased on B) EPA Compendium Method, TU915	PCJ	Rayong

Approved by

J ej ChangDhon
) enior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134874
J ate ReDeived : J eD0c, 2023
J ate Reported : J eD15, 2023
Report 7umber : 28403869l

Sample Number	231348c492
Sampled Date	J eD06, 2023
Sample Description	Air Nuality
Location	รัดหนองแฟบfA2Qf(P) 4cP 0c2G828, 1403318Q
Date Analysis Commenced	J eD08, 2023
Condition of Sample	J raS n into one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
wromodiDhloromethane	06/12/23 90c/12/23	ug/m3	1.00	3.35	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
wromo-orm	06/12/23 90c/12/23	ug/m3	1.00	5.1c	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
wromomethane	06/12/23 90c/12/23	ug/m3	0.06	0.1G	0.58	1G0	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
wutanal	06/12/23 90c/12/23	ug/m3	0.4G	1.4c	x 1.4c	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Carbon J isul-ide	06/12/23 90c/12/23	ug/m3	0.05	0.16	x 0.16	100	wased on B) EPA Compendium Method, TU915	7Ew	Rayong
Carbon TetraDhloride	06/12/23 90c/12/23	ug/m3	0.10	0.31	x 0.31	150	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
ChlorobenQene	06/12/23 90c/12/23	ug/m3	0.80	2.30	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Chlorodi-luoromethane fHC<C922Q	06/12/23 90c/12/23	ug/m3	0.60	1.cc	x 1.cc	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Chloroethane	06/12/23 90c/12/23	ug/m3	0.40	1.32	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Chloro-orm	06/12/23 90c/12/23	ug/m3	0.08	0.24	0.2G	5c	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
Chloromethane	06/12/23 90c/12/23	ug/m3	0.30	1.03	3.84	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong

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21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134874
J ate ReDeived : J eD0c, 2023
J ate Reported : J eD15, 2023
Report 7umber : 28403869l

Sample Number	231348c492
Sampled Date	J eD06, 2023
Sample Description	Air Nuality
Location	รัดหนองแฟบfA2Qf(P) 4cP 0c2G828, 1403318Q
Date Analysis Commenced	J eD08, 2023
Condition of Sample	J raS n into one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Ds91,29 iDhloroethene	06/12/23 90c/12/23	ug/m3	0.c0	1.G8	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Ds91,39 iDhloropropene	06/12/23 90c/12/23	ug/m3	0.80	2.2c	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
CyDlohezane	06/12/23 90c/12/23	ug/m3	0.60	1.c2	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
CyDlopentane	06/12/23 90c/12/23	ug/m3	0.50	1.43	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
J iDhlorodi-luoromethane fC<C9112Q	06/12/23 90c/12/23	ug/m3	0.80	2.4c	2.6c	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
J iDhloromethane	06/12/23 90c/12/23	ug/m3	0.06	0.1c	1.04	210	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
Ethanol	06/12/23 90c/12/23	ug/m3	0.30	0.G4	8.54	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Ethyl wenQene	06/12/23 90c/12/23	ug/m3	0.c0	2.1c	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Hezanal	06/12/23 90c/12/23	ug/m3	0.60	2.05	x 2.05	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Hezane	06/12/23 90c/12/23	ug/m3	0.60	1.c6	x 1.c6	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Isobutene	06/12/23 90c/12/23	ug/m3	0.40	1.15	x 1.15	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong

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Analysis / Test Report

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21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134874
J ate ReDeived : J eD0c, 2023
J ate Reported : J eD15, 2023
Report 7umber : 28403869l

Sample Number 231348c492
Sampled Date J eD06, 2023
Sample Description Air Nuality
Location รัดหนองแฟบfA2Qf(P) 4cP 0c2G828, 1403318Q
Date Analysis Commenced J eD08, 2023
Condition of Sample J raS n into one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Isoprene	06/12/23 90c/12/23	ug/m3	0.50	1.3G	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
m,p9Fylene	06/12/23 90c/12/23	ug/m3	1.50	4.34	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
MethaDrolein	06/12/23 90c/12/23	ug/m3	0.50	1.43	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Methanol	06/12/23 90c/12/23	ug/m3	0.20	0.66	G.c5	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Methyl Ethyl Xetone	06/12/23 90c/12/23	ug/m3	0.50	1.4c	x 1.4c	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Methyl Iodide	06/12/23 90c/12/23	ug/m3	0.G0	2.G0	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Methyl Isobutyl Xetone	06/12/23 90c/12/23	ug/m3	0.c0	2.05	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Methyl tert butyl ether	06/12/23 90c/12/23	ug/m3	0.60	1.80	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Methyl Kinyl Xetone	06/12/23 90c/12/23	ug/m3	0.50	1.43	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
o9Fylene	06/12/23 90c/12/23	ug/m3	0.c0	2.1c	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Pentanal	06/12/23 90c/12/23	ug/m3	0.50	1.c6	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong

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21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134874
J ate ReDeived : J eD0c, 2023
J ate Reported : J eD15, 2023
Report 7umber : 28403869l

Sample Number 231348c492
Sampled Date J eD06, 2023
Sample Description Air Nuality
Location รัดหนองแฟบfA2Qf(P) 4cP 0c2G828, 1403318Q
Date Analysis Commenced J eD08, 2023
Condition of Sample J raS n into one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Pentane	06/12/23 90c/12/23	ug/m3	0.50	1.48	1.68	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Propanal	06/12/23 90c/12/23	ug/m3	0.50	1.1G	x 1.1G	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Propene fPropyleneQ	06/12/23 90c/12/23	ug/m3	0.30	0.86	3.41	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
) tyrene	06/12/23 90c/12/23	ug/m3	0.c0	2.13	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
TetraDhloroethylene	06/12/23 90c/12/23	ug/m3	0.11	0.34	x 0.34	400	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
Toluene	06/12/23 90c/12/23	ug/m3	0.60	1.88	5.31	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
trans91,29J iDhloroethene	06/12/23 90c/12/23	ug/m3	0.c0	1.G8	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
trans91,39J iDhloropropene	06/12/23 90c/12/23	ug/m3	0.80	2.2c	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
TriDhloroethylene	06/12/23 90c/12/23	ug/m3	0.0G	0.2c	7ot J eteDted	130	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
TriDhloro-luoromethane f<911Q	06/12/23 90c/12/23	ug/m3	0.G0	2.81	x 2.81	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Kinyl ADetate	06/12/23 90c/12/23	ug/m3	0.60	1.c6	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong

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P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134874
J ate ReDeived : J eD0c, 2023
J ate Reported : J eD15, 2023
Report 7umber : 28403869 1

Sample Number	231348c492
Sampled Date	J eD06, 2023
Sample Description	Air Nuality
Location	วัดหนองแฟบfA2Qf(P) 4cP 0c2G828, 1403318Q
Date Analysis Commenced	J eD08, 2023
Condition of Sample	J raS n into one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Kinyl Chloride	06/12/23 90c/12/23	ug/m3	0.04	0.13	x 0.13	20	wased on B) EPA Compendium Method, TU915	PCJ	Rayong

Guideline :
7Ew : 7oti-iDation o- 7ational Environment woard, w.E. 2560 f201cQ
PCJ : 7oti-iDation o- the Pollution Control J epartment, S hiDh S as published in the Royal (overnment (aOette Kol. 126) peDal Part 13 J dated Vanuary 2c, w.E. 2552 f200GQ
Sampled By : Adisak Talesoon

Remark :
- LUJ : Limit o- J eteDtion
- "x" : LoS er than LUN fLimit o- NuantitationQ/ LUR fLimit o- ReportingQ

Approved by

J ej ChangDhon
) enior Manager

Results apply to the samplefsQas submitted, unless the sampling S as DonduDted by AL). 7o part o- this report may be reproduDed in any -orm S ithout S ritten Donsent -rom the laboratory. AL) Laboratory (roup fThailandQstrongly reDommends that this report is not reproduDed ezDept in -ull.

Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134874
J ate ReDeived : J eD0c, 2023
J ate Reported : J eD15, 2023
Report 7umber : 28403869 1

Sample Number	231348c493
Sampled Date	J eD06, 2023
Sample Description	Air Nuality
Location	วัดมาบชลูดfA3Qf(P) 4cP 0c30826, 140c360Q
Date Analysis Commenced	J eD08, 2023
Condition of Sample	J raS n into one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,1,19TriDhloroethane	06/12/23 90c/12/23	ug/m3	0.G0	2.c3	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,1,2,29TetraDhloroethane	06/12/23 90c/12/23	ug/m3	0.10	0.34	7ot J eteDted	83	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
1,1,29TriDhloro91,2,29Tri-lu oroethane	06/12/23 90c/12/23	ug/m3	1.00	3.83	x 3.83	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,1,29TriDhloroethane	06/12/23 90c/12/23	ug/m3	0.G0	2.c3	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,19J iDhloroethane	06/12/23 90c/12/23	ug/m3	0.c0	2.02	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,19J iDhloroethene	06/12/23 90c/12/23	ug/m3	0.c0	1.G8	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,2,39TrimethylbenOene	06/12/23 90c/12/23	ug/m3	0.80	2.46	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,2,49TriDhlorobenOene	06/12/23 90c/12/23	ug/m3	1.20	3.c1	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,2,49TrimethylbenOene	06/12/23 90c/12/23	ug/m3	0.80	2.46	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,29J ibromoethane	06/12/23 90c/12/23	ug/m3	0.10	0.38	7ot J eteDted	3c0	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
1,29J iDhlorobenOene	06/12/23 90c/12/23	ug/m3	0.20	0.60	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong

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) enior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134874
J ate ReDeived : J eD0c, 2023
J ate Reported : J eD15, 2023
Report 7umber : 28403869 1

Sample Number	231348c49 3
Sampled Date	J eD06, 2023
Sample Description	Air Nuality
Location	รัดมาบชลูดfA3Qf(P) 4cP 0c30826, 140c360Q
Date Analysis Commenced	J eD08, 2023
Condition of Sample	J raS n into one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
1,29I iChloroethane	06/12/23 90c/12/23	ug/m3	0.0c	0.20	x 0.20	48	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
1,29I iChloropropane	06/12/23 90c/12/23	ug/m3	0.08	0.23	x 0.23	82	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
1,29I iChlorotetra-luoroetha ne	06/12/23 90c/12/23	ug/m3	1.20	3.50	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,3,59TrimethylbenQene	06/12/23 90c/12/23	ug/m3	0.80	2.46	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,39wutadiene	06/12/23 90c/12/23	ug/m3	0.04	0.11	0.18	5.3	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
1,39I iChlorobenQene	06/12/23 90c/12/23	ug/m3	0.20	0.60	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
1,49I iChlorobenQene	06/12/23 90c/12/23	ug/m3	0.20	0.60	7ot J eteDted	1100	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
1,49I iozane	06/12/23 90c/12/23	ug/m3	0.10	0.36	7ot J eteDted	860	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
19wutanol	06/12/23 90c/12/23	ug/m3	0.50	1.52	x 1.52	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
19Propanol	06/12/23 90c/12/23	ug/m3	0.40	1.23	x 1.23	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
29Hezanone	06/12/23 90c/12/23	ug/m3	0.c0	2.05	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong

Approved by

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Analysis / Test Report

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P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134874
J ate ReDeived : J eD0c, 2023
J ate Reported : J eD15, 2023
Report 7umber : 28403869 1

Sample Number	231348c49 3
Sampled Date	J eD06, 2023
Sample Description	Air Nuality
Location	รัดมาบชลูดfA3Qf(P) 4cP 0c30826, 140c360Q
Date Analysis Commenced	J eD08, 2023
Condition of Sample	J raS n into one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
29Pentanone	06/12/23 90c/12/23	ug/m3	0.60	1.c6	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
29Propanol	06/12/23 90c/12/23	ug/m3	0.40	1.23	x 1.23	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
39Hezanone	06/12/23 90c/12/23	ug/m3	0.c0	2.05	x 2.05	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
39Pentanone	06/12/23 90c/12/23	ug/m3	0.60	1.c6	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
ADetaldehyde	06/12/23 90c/12/23	ug/m3	0.05	0.18	2.GG	860	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
ADetone	06/12/23 90c/12/23	ug/m3	0.08	0.24	G.cG	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
ADetonitrile	06/12/23 90c/12/23	ug/m3	0.30	0.84	x 0.84	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
ADrolein	06/12/23 90c/12/23	ug/m3	0.08	0.23	7ot J eteDted	0.55	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
ADrylonitrile	06/12/23 90c/12/23	ug/m3	0.0c	0.22	7ot J eteDted	10	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
wenQene	06/12/23 90c/12/23	ug/m3	0.05	0.16	0.8G	c.6	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
wenQyl Chloride	06/12/23 90c/12/23	ug/m3	0.1c	0.52	7ot J eteDted	12	wased on B) EPA Compendium Method, TU915	PCJ	Rayong

Approved by

J ej ChangDhon
) enior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134874
J ate ReDeived : J eD0c, 2023
J ate Reported : J eD15, 2023
Report 7umber : 284038691

Sample Number	231348c493
Sampled Date	J eD06, 2023
Sample Description	Air Nuality
Location	รัดมาบชลูดfA3Qf(P) 4cP 0c30826, 140c360Q
Date Analysis Commenced	J eD08, 2023
Condition of Sample	J raS n into one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
wromodiDhloromethane	06/12/23 90c/12/23	ug/m3	1.00	3.35	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
wromo-orm	06/12/23 90c/12/23	ug/m3	1.00	5.1c	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
wromomethane	06/12/23 90c/12/23	ug/m3	0.06	0.1G	0.3G	1G0	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
wutanal	06/12/23 90c/12/23	ug/m3	0.4G	1.4c	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Carbon J isul-ide	06/12/23 90c/12/23	ug/m3	0.05	0.16	x 0.16	100	wased on B) EPA Compendium Method, TU915	7Ew	Rayong
Carbon TetraDhloride	06/12/23 90c/12/23	ug/m3	0.10	0.31	0.38	150	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
ChlorobenQene	06/12/23 90c/12/23	ug/m3	0.80	2.30	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Chlorodi-luoromethane fHC<C922Q	06/12/23 90c/12/23	ug/m3	0.60	1.cc	x 1.cc	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Chloroethane	06/12/23 90c/12/23	ug/m3	0.40	1.32	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Chloro-orm	06/12/23 90c/12/23	ug/m3	0.08	0.24	0.3G	5c	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
Chloromethane	06/12/23 90c/12/23	ug/m3	0.30	1.03	1.G8	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134874
J ate ReDeived : J eD0c, 2023
J ate Reported : J eD15, 2023
Report 7umber : 284038691

Sample Number	231348c493
Sampled Date	J eD06, 2023
Sample Description	Air Nuality
Location	รัดมาบชลูดfA3Qf(P) 4cP 0c30826, 140c360Q
Date Analysis Commenced	J eD08, 2023
Condition of Sample	J raS n into one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Ds91,29 iDhloroethene	06/12/23 90c/12/23	ug/m3	0.c0	1.G8	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Ds91,39 iDhloropropene	06/12/23 90c/12/23	ug/m3	0.80	2.2c	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
CyDlohezane	06/12/23 90c/12/23	ug/m3	0.60	1.c2	x 1.c2	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
CyDlopentane	06/12/23 90c/12/23	ug/m3	0.50	1.43	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
J iDhlorodi-luoromethane fC<C9112Q	06/12/23 90c/12/23	ug/m3	0.80	2.4c	2.cc	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
J iDhloromethane	06/12/23 90c/12/23	ug/m3	0.06	0.1c	1.88	210	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
Ethanol	06/12/23 90c/12/23	ug/m3	0.30	0.G4	c.35	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Ethyl wenQene	06/12/23 90c/12/23	ug/m3	0.c0	2.1c	x 2.1c	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Hezanal	06/12/23 90c/12/23	ug/m3	0.60	2.05	7ot J eteDted	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Hezane	06/12/23 90c/12/23	ug/m3	0.60	1.c6	x 1.c6	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Isobutene	06/12/23 90c/12/23	ug/m3	0.40	1.15	x 1.15	7o) tandard	wased on B) EPA Compendium Method, TU915	9	Rayong

Approved by

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) enior Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134874
J ate ReDeived : J eD0c, 2023
J ate Reported : J eD15, 2023
Report 7umber : 28403869l

Sample Number	231348c49B
Sampled Date	J eD06, 2023
Sample Description	Air Nuality
Location	รัดมาบชลูดfA3Qf(P) 4cP 0c30826, 140c360Q
Date Analysis Commenced	J eD08, 2023
Condition of Sample	J raS n into one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Isoprene	06/12/23 90c/12/23	ug/m3	0.50	1.3G	x 1.3G	7o)tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
m,p9Fylene	06/12/23 90c/12/23	ug/m3	1.50	4.34	x 4.34	7o)tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
MethaDrolein	06/12/23 90c/12/23	ug/m3	0.50	1.43	7ot J eteDted	7o)tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Methanol	06/12/23 90c/12/23	ug/m3	0.20	0.66	G.44	7o)tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Methyl Ethyl Xetone	06/12/23 90c/12/23	ug/m3	0.50	1.4c	x 1.4c	7o)tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Methyl Iodide	06/12/23 90c/12/23	ug/m3	0.G0	2.G0	7ot J eteDted	7o)tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Methyl Isobutyl Xetone	06/12/23 90c/12/23	ug/m3	0.c0	2.05	7ot J eteDted	7o)tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Methyl tert butyl ether	06/12/23 90c/12/23	ug/m3	0.60	1.80	7ot J eteDted	7o)tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Methyl Kinyl Xetone	06/12/23 90c/12/23	ug/m3	0.50	1.43	7ot J eteDted	7o)tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
o9Fylene	06/12/23 90c/12/23	ug/m3	0.c0	2.1c	7ot J eteDted	7o)tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Pentanal	06/12/23 90c/12/23	ug/m3	0.50	1.c6	7ot J eteDted	7o)tandard	wased on B) EPA Compendium Method, TU915	9	Rayong

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18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand
21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134874
J ate ReDeived : J eD0c, 2023
J ate Reported : J eD15, 2023
Report 7umber : 28403869l

Sample Number	231348c49B
Sampled Date	J eD06, 2023
Sample Description	Air Nuality
Location	รัดมาบชลูดfA3Qf(P) 4cP 0c30826, 140c360Q
Date Analysis Commenced	J eD08, 2023
Condition of Sample	J raS n into one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Pentane	06/12/23 90c/12/23	ug/m3	0.50	1.48	1.5G	7o)tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Propanal	06/12/23 90c/12/23	ug/m3	0.50	1.1G	x 1.1G	7o)tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Propene fPropyleneQ	06/12/23 90c/12/23	ug/m3	0.30	0.86	2.0c	7o)tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
)tyrene	06/12/23 90c/12/23	ug/m3	0.c0	2.13	7ot J eteDted	7o)tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
TetraDhloroethylene	06/12/23 90c/12/23	ug/m3	0.11	0.34	x 0.34	400	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
Toluene	06/12/23 90c/12/23	ug/m3	0.60	1.88	6.63	7o)tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
trans91,29J iDhloroethene	06/12/23 90c/12/23	ug/m3	0.c0	1.G8	7ot J eteDted	7o)tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
trans91,39J iDhloropropene	06/12/23 90c/12/23	ug/m3	0.80	2.2c	7ot J eteDted	7o)tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
TriDhloroethylene	06/12/23 90c/12/23	ug/m3	0.0G	0.2c	7ot J eteDted	130	wased on B) EPA Compendium Method, TU915	PCJ	Rayong
TriDhloro-luoromethane f<911Q	06/12/23 90c/12/23	ug/m3	0.G0	2.81	x 2.81	7o)tandard	wased on B) EPA Compendium Method, TU915	9	Rayong
Kinyl ADetate	06/12/23 90c/12/23	ug/m3	0.60	1.c6	7ot J eteDted	7o)tandard	wased on B) EPA Compendium Method, TU915	9	Rayong

Approved by

J ej ChangDhon
)enior Manager

Results apply to the samplefsQas submitted, unless the sampling S as DonduDted by AL). 7o part o- this report may be reproduDed in any -orm S ithout S ritten Donsent -rom the laboratory. AL) Laboratory (roup fThailandQstrongly reDommends that this report is not reproduDed ezDept in -ull.

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company
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4cG8101/ EMAIL

Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134874
J ate ReDeived : J eD0c, 2023
J ate Reported : J eD15, 2023
Report 7umber : 28403869l

Sample Number	231348c49B
Sampled Date	J eD06, 2023
Sample Description	Air Nuality
Location	วัดมาบชลูดfA3Qf(P) 4cP 0c30826, 140c360Q
Date Analysis Commenced	J eD08, 2023
Condition of Sample	J raS n into one 69L Canister

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Kinyl Chloride	06/12/23 90c/12/23	ug/m3	0.04	0.13	x 0.13	20	wased on B) EPA Compendium Method, TU915	PCJ	Rayong

Guideline :
7Ew : 7oti-iDation o- 7ational Environment woard, w.E. 2560 f201cQ
PCJ : 7oti-iDation o- the Pollution Control J epartment, S hiDh S as published in the Royal (overnment (aOette Kol. 126) peDal Part 13 J dated Vanuary 2c, w.E. 2552 f200GQ
Sampled By : Adisak Talesoon

Remark :
- LUJ : Limit o- J eteDtion
- "x " : LoS er than LUN fLimit o- NuantitationQ/ LUR fLimit o- ReportingQ

Approved by

J ej ChangDhon
) enior Manager

Results apply to the samplefsQas submitted, unless the sampling S as DondudDed by AL). 7o part o- this report may be reproduDed in any -orm S ithout S ritten Donsent -rom the laboratory. AL) Laboratory (roup fThailandQstrongly reDommends that this report is not reproduDed ezDept in -ull.

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134871
Date Received :Dec 07, 2023
Date Reported :Dec 15, 2023
Report Number :2840385-1

Sample Number	23134871-1
Parameter	Wind Speed / Wind Direction
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออก(มาบตาพุด)(A1) (GPS 47P 0730907, 1405264)
Sampling Date	Dec 06 - Dec 07, 2023
Sampling by	Adisak Talesoon

Time	Dec 06 - Dec 07, 2023			-			-			-			-			-			-		
	WS (m/s)	WD (deg)		-	-		-	-		-	-		-	-		-	-		-	-	
01:00 PM - 02:00 PM	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 PM - 03:00 PM	1.1	279.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 PM - 04:00 PM	0.7	274.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 PM - 05:00 PM	0.6	227.0	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 PM - 06:00 PM	1.7	292.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 PM - 07:00 PM	0.8	307.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 PM - 08:00 PM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 PM - 09:00 PM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 PM - 10:00 PM	0.7	308.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 PM - 11:00 PM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 PM - 12:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 AM - 01:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 AM - 02:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 AM - 03:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 AM - 04:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 AM - 05:00 AM	0.9	27.0	NNE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 AM - 06:00 AM	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 AM - 07:00 AM	2.5	40.0	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 AM - 08:00 AM	3.7	39.0	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 AM - 09:00 AM	1.1	35.0	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 AM - 10:00 AM	0.3	49.0	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 AM - 11:00 AM	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM - 12:00 PM	0.3	71.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 PM - 01:00 PM	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Sarayuth Jittranont
Assistant General Manager

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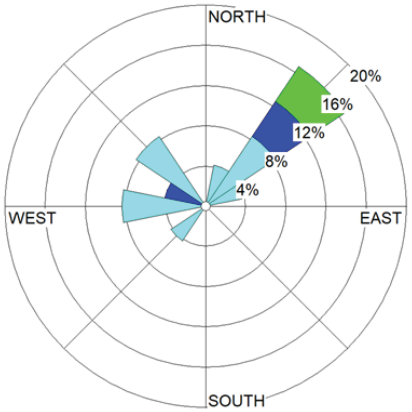
Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134871
Date Received :Dec 07, 2023
Date Reported :Dec 15, 2023
Report Number :2840385-1

Wind Rose



Date : Dec 06-07, 2023

WS(m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	4.17
1.7-3.3	8.33
0.3-1.7	37.50
Calms	50.00

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134871
Date Received :Dec 07, 2023
Date Reported :Dec 15, 2023
Report Number :2840385-1

Sample Number 23134871-2
Parameter Wind Speed / Wind Direction
Location วัดหนองแฟบ(A2) (GPS 47P 0729828, 1403318)
Sampling Date Dec 06 - Dec 07, 2023
Sampling by Adisak Talesoon

Time	Dec 06 - Dec 07, 2023			-			-			-			-			-			-		
	WS (m/s)	WD (deg)		-	-		-	-		-	-		-	-		-	-		-	-	
01:00 PM - 02:00 PM	0.9	204.0	SSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 PM - 03:00 PM	1.1	315.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 PM - 04:00 PM	1.1	220.0	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 PM - 05:00 PM	2.3	203.0	SSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 PM - 06:00 PM	0.5	326.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 PM - 07:00 PM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 PM - 08:00 PM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 PM - 09:00 PM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 PM - 10:00 PM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 PM - 11:00 PM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 PM - 12:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 AM - 01:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 AM - 02:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 AM - 03:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 AM - 04:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 AM - 05:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 AM - 06:00 AM	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 AM - 07:00 AM	1.1	26.0	NNE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 AM - 08:00 AM	0.3	24.0	NNE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 AM - 09:00 AM	2.3	9.0	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 AM - 10:00 AM	0.6	63.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 AM - 11:00 AM	2.5	16.0	NNE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM - 12:00 PM	1.1	81.0	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 PM - 01:00 PM	3.5	143.0	SE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Sarayuth Jittranont
Assistant General Manager

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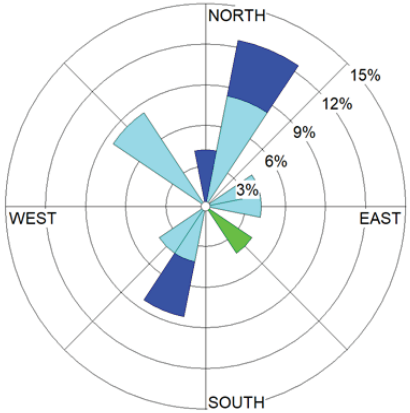
Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134871
Date Received :Dec 07, 2023
Date Reported :Dec 15, 2023
Report Number :2840385-1

Wind Rose



Date : Dec 06-07, 2023

WS(m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	4.17
1.7-3.3	12.50
0.3-1.7	33.33
Calms	50.00

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Client : WHA Eastern Industrial Estate Co., Ltd.
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P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134871
Date Received :Dec 07, 2023
Date Reported :Dec 15, 2023
Report Number :2840385-1

Sample Number 23134871-3
Parameter Wind Speed / Wind Direction
Location วัดมาบชลูด(A3) (GPS 47P 0730826, 1407360)
Sampling Date Dec 06 - Dec 07, 2023
Sampling by Adisak Talesoon

Time	Dec 06 - Dec 07, 2023			-			-			-			-			-			-		
	WS (m/s)	WD (deg)		-	-		-	-		-	-		-	-		-	-		-	-	
11:00 AM - 12:00 PM	0.3	65.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 PM - 01:00 PM	0.4	55.0	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 PM - 02:00 PM	0.3	280.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 PM - 03:00 PM	0.5	180.0	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 PM - 04:00 PM	0.4	296.0	WNW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 PM - 05:00 PM	0.3	241.0	WSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 PM - 06:00 PM	0.3	269.0	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 PM - 07:00 PM	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 PM - 08:00 PM	0.5	306.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 PM - 09:00 PM	0.6	305.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 PM - 10:00 PM	1.5	305.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 PM - 11:00 PM	0.3	305.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 PM - 12:00 AM	0.4	305.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 AM - 01:00 AM	0.8	305.0	NW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01:00 AM - 02:00 AM	2.4	63.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:00 AM - 03:00 AM	0.3	63.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03:00 AM - 04:00 AM	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04:00 AM - 05:00 AM	0.3	63.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05:00 AM - 06:00 AM	0.6	63.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06:00 AM - 07:00 AM	1.0	73.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07:00 AM - 08:00 AM	0.3	60.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08:00 AM - 09:00 AM	0.5	58.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09:00 AM - 10:00 AM	0.6	68.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 AM - 11:00 AM	0.4	78.0	ENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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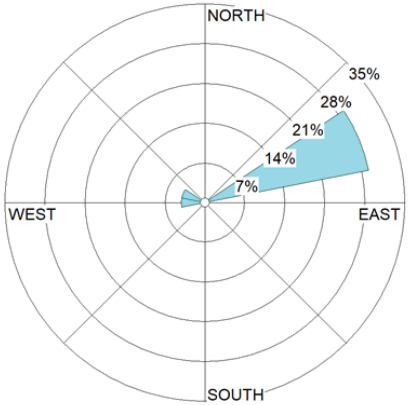
Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134871
Date Received :Dec 07, 2023
Date Reported :Dec 15, 2023
Report Number :2840385-1

Wind Rose



Date : Dec 06-07, 2023

	WS(m/s)	%
	≥ 10.0	0.00
	8.0-10.0	0.00
	5.5-8.0	0.00
	3.3-5.5	0.00
	1.7-3.3	0.00
	0.3-1.7	37.50
	Calms	62.50

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Sarayuth Jittranont
Assistant General Manager

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ภาคผนวก ค-2

คุณภาพน้ำผิวดิน

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2396640
Date Received : Sep 01, 2023
Date Reported : Sep 08, 2023
Report Number : 2770618-1

Sample Number	2396640-1
Sampled Date	Sep 01, 2023 11:00 AM
Sample Description	Surface Water
Location	บริเวณก่อนไหลผ่านจุดระบายน้ำทิ้งของนิคมฯ (W1)
Date Analysis Commenced	Sep 01, 2023
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Arsenic	mg/L	0.0003	0.0005	0.005	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Copper	mg/L	0.0003	0.0005	0.003	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
[A] Iron	mg/L	0.003	0.005	1.40	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Lead	mg/L	0.0003	0.0005	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Manganese	mg/L	0.0003	0.0005	0.16	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok

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
Dej Changchon
Senior Manager

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2396640
Date Received : Sep 01, 2023
Date Reported : Sep 08, 2023
Report Number : 2770618-1

Sample Number	2396640-1
Sampled Date	Sep 01, 2023 11:00 AM
Sample Description	Surface Water
Location	บริเวณก่อนไหลผ่านจุดระบายน้ำทิ้งของนิคมฯ (W1)
Date Analysis Commenced	Sep 01, 2023
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Nickel	mg/L	0.0003	0.0005	0.001	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Selenium	mg/L	0.0003	0.0005	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Zinc	mg/L	0.003	0.005	0.04	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Microbiological Testing							
Total Coliform	MPN/100mL	-	-	2400.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.22	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
BOD *	mg/L	-	2	<2	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
Dissolved Oxygen *	mg/L	-	0.1	6.6	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.71	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong

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Dej Changchon
Senior Manager

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Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2396640
Date Received : Sep 01, 2023
Date Reported : Sep 08, 2023
Report Number : 2770618-1

Sample Number	2396640-1
Sampled Date	Sep 01, 2023 11:00 AM
Sample Description	Surface Water
Location	บริเวณก่อนไหลผ่านจุดระบายน้ำทิ้งของนิคมฯ (W1)
Date Analysis Commenced	Sep 01, 2023
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.6	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	31.3	Not Change from natural condition	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong

Guideline : Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
n': Change from Natural condition not more than 3 degree C
Sampling By : Sansoen Khuiyoksui , Thanasoun Namakunna

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DSS Accreditation No. 0009.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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Approved by
Dej Changchon
Senior Manager

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2396640
Date Received : Sep 01, 2023
Date Reported : Sep 08, 2023
Report Number : 2770624-1

Sample Number	2396640-7
Sampled Date	Sep 01, 2023 11:00 AM
Sample Description	Surface Water
Location	บริเวณก่อนไหลผ่านจุดระบายน้ำทิ้งของนิคมฯ (W1)
Date Analysis Commenced	Sep 02, 2023
Condition of Sample	Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
v ater Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	144	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Hardness as CaCO3 *	mg/L	-	1	65	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	<5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
n': Change from Natural condition not more than 3 degree C
Sampling Wy : Sansoen Khuiyoksui , Thanasoun Namakunna

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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ApproBed by
Dej Changchon
Senior Manager

Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108410
Date Received : Sep 18, 2023
Date Reported : Sep 21, 2023
Report Number : 2784307-1

Sample Number	23108410-1
Sampled Date	Sep 18, 2023 2:37 PM
Sample Description	Surface Water
Location	บริเวณก่อนไหลผ่านจุดระบายน้ำทิ้งของนิคมฯ (W1)
Date Analysis Commenced	Sep 19, 2023
Condition of Sample	Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Nitrate as N	mg/L	0.015	0.05	0.60	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong

Guideline : Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
n': Change from Natural condition not more than 3 degree C
Sampling By : Nattawut Athomprommarat

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Approved by
Narumon Banchongkit
Supervisor

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2396640
Date Received : Sep 01, 2023
Date Reported : Sep 08, 2023
Report Number : 2770619-1

Sample Number	2396640-2
Sampled Date	Sep 01, 2023 10:45 AM
Sample Description	Surface Water
Location	บริเวณจุดระบายน้ำทิ้งของนิคมฯ(W2)
Date Analysis Commenced	Sep 01, 2023
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.004	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	0.0006	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.004	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Iron	mg/L	0.003	0.005	0.69	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Lead	mg/L	0.0003	0.0005	0.0006	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	0.27	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury	mg/L	0.0001	0.0005	<0.0005	≤0.002	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok

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Dej Changchon
Senior Manager

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2396640
Date Received : Sep 01, 2023
Date Reported : Sep 08, 2023
Report Number : 2770619-1

Sample Number	2396640-2
Sampled Date	Sep 01, 2023 10:45 AM
Sample Description	Surface Water
Location	บริเวณจุดระบายน้ำทิ้งของนิคมฯ(W2)
Date Analysis Commenced	Sep 01, 2023
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Nickel	mg/L	0.0003	0.0005	0.02	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Selenium	mg/L	0.0003	0.0005	0.001	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.19	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Microbiological Testing							
Total Coliform	MPN/100mL	-	-	1300.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.12	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
BOD *	mg/L	-	2	<2	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
Dissolved Oxygen *	mg/L	-	0.1	6.1	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong

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Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2396640
Date Received : Sep 01, 2023
Date Reported : Sep 08, 2023
Report Number : 2770619-1

Sample Number	2396640-2
Sampled Date	Sep 01, 2023 10:45 AM
Sample Description	Surface Water
Location	บริเวณจุดระบายน้ำทิ้งของนิคมฯ(W2)
Date Analysis Commenced	Sep 01, 2023
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	8.2	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	34.5	Not Change from natural condition	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong

Guideline : Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazettle, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
n': Change from Natural condition not more than 3 degree C
Sampling By : Sansoen Khuiyoksui , Thanasoun Namakunna

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DSS Accreditation No. 0009.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2396640
Date Received : Sep 01, 2023
Date Reported : Sep 08, 2023
Report Number : 2770625-1

Sample Number	2396640-8
Sampled Date	Sep 01, 2023 10:45 AM
Sample Description	Surface Water
Location	บริเวณจุดระบายน้ำทิ้งของนิคมฯ(W2)
Date Analysis Commenced	Sep 02, 2023
Condition of Sample	Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
v ater Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1890	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Hardness as CaCO3 *	mg/L	-	1	223	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	10	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Notification of the National Environmental <oard, No. 8, <.E.2537 issued under the Enhancement and Conservation of National Environmental Buality Act. <.E.2535, published in the Royal Qovernment QaGettle, zol. 111, Part 16, Dated February 24, <.E. 2537 (Class 4)
nV Change from Natural condition not more than 3 degree C
Sampling Wy : Sansoen ' huiyoksui , Thanasoun Namakunna

Remark :
- LOD : Limit of Detection
- K' K : Lower than LOB (Limit of Buantitation) / LOR (Limit of Reporting)
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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108410
Date Received : Sep 18, 2023
Date Reported : Sep 21, 2023
Report Number : 2784308-1

Sample Number	23108410-2
Sampled Date	Sep 18, 2023 2:45 PM
Sample Description	Surface Water
Location	บริเวณจุดระบายน้ำทิ้งของนิคมฯ(W2)
Date Analysis Commenced	Sep 19, 2023
Condition of Sample	Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Nitrate as N	mg/L	0.015	0.05	1.38	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong

Guideline : Notification of the National Environmental 6oard, No. 8, 6.E.2537 issued under the Enhancement and Conservation of National Environmental Buality Act. 6.E.2535, published in the Royal Qovernment QaGettle, zol. 111, Part 1V, Dated February 24, 6.E. 2537 (Class 4)
n': Change from Natural condition not more than 3 degree C
Sampling By : Nattawut Athomprommarat

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOB (Limit of Buantitation) / LOR (Limit of Reporting)

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Narumon 6anchongkit
Supervisor

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2396640
Date Received : Sep 01, 2023
Date Reported : Sep 08, 2023
Report Number : 2770620-1

Sample Number	2396640-3
Sampled Date	Sep 01, 2023 11:30 AM
Sample Description	Surface Water
Location	บริเวณหลังผ่านจุดระบายน้ำทิ้งของนิคมฯ((W3)
Date Analysis Commenced	Sep 01, 2023
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Arsenic	mg/L	0.0003	0.0005	0.004	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Cadmium	mg/L	0.0003	0.0005	0.0006	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Copper	mg/L	0.0003	0.0005	0.003	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
[A] Iron	mg/L	0.003	0.005	0.84	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Lead	mg/L	0.0003	0.0005	z 0.0005	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Manganese	mg/L	0.0003	0.0005	0.27	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury	mg/L	0.0001	0.0005	z 0.0005	≤0.002	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok

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Approved by
Dej Changchon
Senior Manager

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2396640
Date Received : Sep 01, 2023
Date Reported : Sep 08, 2023
Report Number : 2770620-1

Sample Number	2396640-3
Sampled Date	Sep 01, 2023 11:30 AM
Sample Description	Surface Water
Location	บริเวณหลังผ่านจุดระบายน้ำทิ้งของนิคมฯ((W3)
Date Analysis Commenced	Sep 01, 2023
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Nickel	mg/L	0.0003	0.0005	0.01	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Selenium	mg/L	0.0003	0.0005	0.001	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] *inc	mg/L	0.003	0.005	0.15	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Microbiological Testing							
[A] Total Coliform	MPN/100mL	-	-	4900.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
Ammonia Nitrogen <	mg/L	0.02	0.05	0.40	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
BOD <	mg/L	-	2	z 2	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
Dissolved Oxygen <	mg/L	-	0.1	8.4	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & \ rease <	mg/L	-	3	z 3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong

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Dej Changchon
Senior Manager

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Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2396640
Date Received : Sep 01, 2023
Date Reported : Sep 08, 2023
Report Number : 2770620-1

Sample Number	2396640-3
Sampled Date	Sep 01, 2023 11:30 AM
Sample Description	Surface Water
Location	บริเวณหลังผ่านจุดระบายน้ำทิ้งของนิคมฯ((W3)
Date Analysis Commenced	Sep 01, 2023
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	8.5	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature <	Degree C	-	-	33.8	Not Change from natural condition	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong

Guideline : Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal \ overnment \ aGettle, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
n': Change from Natural condition not more than 3 degree C
Sampling By : Sansoen Khuiyoksui , Thanasoun Namakunna

Remark :
- LOD : Limit of Detection
- "z " : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked < is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory \ roup (Thailand) Co.,Ltd. Bangkok Branch, DSS Accreditation No. 0009.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2396640
Date Received : Sep 01, 2023
Date Reported : Sep 08, 2023
Report Number : 2770626-1

Sample Number	2396640-9
Sampled Date	Sep 01, 2023 11:30 AM
Sample Description	Surface Water
Location	บริเวณหลังผ่านจุดระบายน้ำทิ้งของนิคมฯ((W3)
Date Analysis Commenced	Sep 02, 2023
Condition of Sample	Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
v ater Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1520	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Hardness as CaCO3 *	mg/L	-	1	235	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	8	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Notification of the National Environmental <oard, No. 8, <.E.2537 issued under the Enhancement and Conservation of National Environmental Buality Act. <.E.2535, published in the Royal Qovernment QaGettle, zol. 111, Part 16, Dated February 24, <.E. 2537 (Class 4)
nV Change from Natural condition not more than 3 degree C
Sampling Wy : Sansoen ' huiyoksui , Thanasoun Namakunna

Remark :
- LOD : Limit of Detection
- K" K : Lower than LOB (Limit of Buantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108410
Date Received : Sep 18, 2023
Date Reported : Sep 21, 2023
Report f umber : 278430- N1

Sample Number	23108410N8
Sampled Date	Sep 18, 2023 2:55 PM
Sample Description	Sur(ace Water
Location	บริเวณหลังผ่านจุดระบายน้ำทิ้งของนิคมฯ))W39
Date Analysis Commenced	Sep 1- , 2023
Condition of Sample	Contained in one plastic bottle, sample containers comply to pretreatment Npreservation standards)APHA, USEPA9
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
f itrate as f	mg/L	0.015	0.05	1.75	≤5	Standard Methods (or the Examination o(Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500N' O3)E9	Rayong

Guideline : f oti(ication o(the f ational Environmental 6oard, f o. 8, 6.E.2537 issued under the Enhancement and Conservation o(f ational Environmental Buality Act. 6.E.2535, published in the Royal Qovernment QaGettle, zol. 111, Part 1V, Dated February 24, 6.E. 2537)Class 49
n': Change (rom f atural condition not more than 3 degree C
Sampling By : f attawut Athomprommarat

Remark :
- LOD : Limit o(Detection
- "<" : Lower than LOB)Limit o(Buantitation9 / LOR)Limit o(Reporting9

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Approved by
f arumon 6anchongkit
Supervisor

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2396640
Date Received : Sep 01, 2023
Date Reported : Sep 08, 2023
Report Number : 2770621-1

Sample Number	2396640-4
Sampled Date	Sep 01, 2023 11:40 AM
Sample Description	Surface Water
Location	บริเวณก่อนไหลลงสู่ทะเล(W4)
Date Analysis Commenced	Sep 01, 2023
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Arsenic	mg/L	0.0003	0.0005	0.006	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Cadmium	mg/L	0.0003	0.0005	0.0006	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Copper	mg/L	0.0003	0.0005	0.004	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
[A] Iron	mg/L	0.003	0.005	0.87	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Lead	mg/L	0.0003	0.0005	0.001	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Manganese	mg/L	0.0003	0.0005	0.19	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok

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Dej Changchon
Senior Manager

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2396640
Date Received : Sep 01, 2023
Date Reported : Sep 08, 2023
Report Number : 2770621-1

Sample Number	2396640-4
Sampled Date	Sep 01, 2023 11:40 AM
Sample Description	Surface Water
Location	บริเวณก่อนไหลลงสู่ทะเล(W4)
Date Analysis Commenced	Sep 01, 2023
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Nickel	mg/L	0.0003	0.0005	0.01	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Selenium	mg/L	0.0003	0.0005	0.001	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Zinc	mg/L	0.003	0.005	0.17	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Microbiological Testing							
[A] Total Coliform	MPN/100mL	-	-	24000.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.43	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
BOD *	mg/L	-	2	<2	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
Dissolved Oxygen *	mg/L	-	0.1	7.3	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2396640
Date Received : Sep 01, 2023
Date Reported : Sep 08, 2023
Report Number : 2770621-1

Sample Number	2396640-4
Sampled Date	Sep 01, 2023 11:40 AM
Sample Description	Surface Water
Location	บริเวณก่อนไหลลงสู่ทะเล(W4)
Date Analysis Commenced	Sep 01, 2023
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	8.5	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	33.7	Not Change from natural condition	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong

Guideline : Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazettle, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
n': Change from Natural condition not more than 3 degree C
Sampling By : Sansoen Khuiyoksui , Thanasoun Namakunna

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DSS Accreditation No. 0009.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 2396640
Date Received : Sep 01, 2023
Date Reported : Sep 08, 2023
Report Number : 2770627-1

Sample Number	2396640-10
Sampled Date	Sep 01, 2023 11:40 AM
Sample Description	Surface Water
Location	บริเวณก่อนไหลลงสู่ทะเล(W4)
Date Analysis Commenced	Sep 02, 2023
Condition of Sample	Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
v ater Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	7460	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Hardness as CaCO3 *	mg/L	-	1	410	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	39	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Notification of the National Environmental <oard, No. 8, <.E.2537 issued under the Enhancement and Conservation of National Environmental Buality Act. <.E.2535, published in the Royal Qovernment QaGettle, zol. 111, Part 16, Dated February 24, <.E. 2537 (Class 4)
nV Change from Natural condition not more than 3 degree C
Sampling Wy : Sansoen ' huiyoksui , Thanasoun Namakunna

Remark :
- LOD : Limit of Detection
- K' K : Lower than LOB (Limit of Buantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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Dej Changchon
Senior Manager

Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23108410
Date Received : Sep 18, 2023
Date Reported : Sep 21, 2023
Report Number : 2784310-1

Sample Number	23108410-4
Sampled Date	Sep 18, 2023 3:03 PM
Sample Description	Surface Water
Location	บริเวณก่อนไหลลงสู่ทะเล(W4)
Date Analysis Commenced	Sep 19, 2023
Condition of Sample	Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Nitrate as N	mg/L	0.015	0.05	2.50	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong

Guideline : Notification of the National Environmental 6oard, No. 8, 6.E.2537 issued under the Enhancement and Conservation of National Environmental Buality Act. 6.E.2535, published in the Royal Qovernment QaGettle, zol. 111, Part 1V, Dated February 24, 6.E. 2537 (Class 4)
n': Change from Natural condition not more than 3 degree C
Sampling By : Nattawut Athomprommarat

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOB (Limit of Buantitation) / LOR (Limit of Reporting)

The above results are valid only for the analyGed/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 Qroup (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by
Narumon 6anchongkit
Supervisor

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134876
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2861881-1

Sample Number	23134876-1
Sampled Date	Dec 05, 2023 10:55 AM
Sample Description	Surface Water
Location	บริเวณก่อนไหลผ่านจุดระบายน้ำทิ้งของนิคมฯ (W1)
Date Analysis Commenced	Dec 05, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle, five plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Arsenic	mg/L	0.0003	0.0005	0.007	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Copper	mg/L	0.0003	0.0005	0.001	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
[A] Iron	mg/L	0.003	0.005	3.36	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Lead	mg/L	0.0003	0.0005	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Manganese	mg/L	0.0003	0.0005	0.32	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

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Approved by
Dej Changchon
Senior Manager

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134876
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2861881-1

Sample Number	23134876-1
Sampled Date	Dec 05, 2023 10:55 AM
Sample Description	Surface Water
Location	บริเวณก่อนไหลผ่านจุดระบายน้ำทิ้งของนิคมฯ (W1)
Date Analysis Commenced	Dec 05, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle, five plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
[A] Nickel	mg/L	0.0003	0.0005	0.001	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Selenium	mg/L	0.0003	0.0005	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Zinc	mg/L	0.003	0.005	0.04	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Microbiological Testing							
[A] Total Coliform	MPN/100mL	-	-	330.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.19	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
BOD *	mg/L	-	2	3.4	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong

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Dej Changchon
Senior Manager

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Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134876
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2861881-1

Sample Number	23134876-1
Sampled Date	Dec 05, 2023 10:55 AM
Sample Description	Surface Water
Location	บริเวณก่อนไหลผ่านจุดระบายน้ำทิ้งของนิคมฯ (W1)
Date Analysis Commenced	Dec 05, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle, five plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Dissolved Oxygen *	mg/L	-	0.1	6.0	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.75	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	In-house method : STM 02-004 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.6	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	29.7	n'	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong

Guideline : Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazettle, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
n': Change from Natural condition not more than 3 degree C
Sampling By : Chainusorn Lertnanthakunchai

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DSS Accreditation No. 0009.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report 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.

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Dej Changchon
Senior Manager

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134876
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2861887-1

Sample Number	23134876-7
Sampled Date	Dec 05, 2023 10:55 AM
Sample Description	Surface Water
Location	บริเวณก่อนไหลผ่านจุดระบายน้ำทิ้งของนิคมฯ (W1)
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
v ater Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	192	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Hardness as CaCO3 *	mg/L	-	1	75	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	6	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazettle, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
n': Change from Natural condition not more than 3 degree C
Sampling Wy : Chainusorn Lertnanthakunchai

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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ApproBed by
Narumon Banchongkit
Supervisor

Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23147440
Date Received : Dec 26, 2023
Date Reported : Dec 27, 2023
Report Number : 2875009-1

Sample Number	23147440-1
Sampled Date	Dec 26, 2023 10:35 AM
Sample Description	Surface Water
Location	บริเวณก่อนไหลผ่านจุดระบายน้ำทิ้งของนิคมฯ (W1)
Date Analysis Commenced	Dec 27, 2023
Condition of Sample	Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Ammonia Nitrogen	mg/L	0.02	0.05	0.16	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
Nitrate as N	mg/L	0.015	0.05	1.56	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong

Guideline : Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazettle, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
n': Change from Natural condition not more than 3 degree C
Sampling By : Tanasit Wongsachai

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Approved by
Wilawan Borirak
Manager

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134876
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2861882-1

Sample Number	23134876-2
Sampled Date	Dec 05, 2023 11:05 AM
Sample Description	Surface Water
Location	บริเวณจุดระบายน้ำทิ้งของนิคมฯ(W2)
Date Analysis Commenced	Dec 05, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle, five plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Arsenic	mg/L	0.0003	0.0005	0.004	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Cadmium	mg/L	0.0003	0.0005	0.0005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Copper	mg/L	0.0003	0.0005	0.004	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
[A] Iron	mg/L	0.003	0.005	0.G7	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Lead	mg/L	0.0003	0.0005	0.0007	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Manganese	mg/L	0.0003	0.0005	0.25	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory \ roup (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by
Dej Changchon
Senior Manager

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134876
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2861882-1

Sample Number	23134876-2
Sampled Date	Dec 05, 2023 11:05 AM
Sample Description	Surface Water
Location	บริเวณจุดระบายน้ำทิ้งของนิคมฯ(W2)
Date Analysis Commenced	Dec 05, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle, five plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
[A] Nickel	mg/L	0.0003	0.0005	0.01	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Selenium	mg/L	0.0003	0.0005	Z0.0005	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] *inc	mg/L	0.003	0.005	0.1G	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Microbiological Testing							
[A] Total Coliform	MPN/100mL	-	-	1300.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part G221 B	Bangkok
Water Testing							
BOD <	mg/L	-	2	3.3	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
Dissolved Oxygen <	mg/L	-	0.1	5.6	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong

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Dej Changchon
Senior Manager

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134876
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2861882-1

Sample Number	23134876-2
Sampled Date	Dec 05, 2023 11:05 AM
Sample Description	Surface Water
Location	บริเวณจุดระบายน้ำทิ้งของนิคมฯ(W2)
Date Analysis Commenced	Dec 05, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle, five plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Oil & \ rease <	mg/L	-	3	Z3	No Standard	In-house method : STM 02-004 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	8.5	5.0-G0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature <	Degree C	-	-	30.1	n'	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong

Guideline : Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal \ overnment \ azettle, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
n': Change from Natural condition not more than 3 degree C
Sampling By : Chainusorn Lertnanthakunchai

Remark :
- LOD : Limit of Detection
- "Z" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked < is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory \ roup (Thailand) Co.,Ltd. Bangkok Branch, DSS Accreditation No. 000G.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory \ roup (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by
Dej Changchon
Senior Manager

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Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134876
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2861888-1

Sample Number	23134876-8
Sampled Date	Dec 05, 2023 11:05 AM
Sample Description	Surface Water
Location	บริเวณจุดระบายน้ำทิ้งของนิคมฯ(W2)
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
v ater Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1510	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Hardness as CaCO3 *	mg/L	-	1	160	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	18	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazettle, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
n': Change from Natural condition not more than 3 degree C
Sampling Wy : Chainusorn Lertnanthakunchai

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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ApproBed by
Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23147440
Date Received : Dec 26, 2023
Date Reported : Dec 27, 2023
Report Number : 2875010-1

Sample Number	23147440-2
Sampled Date	Dec 26, 2023 10:25 AM
Sample Description	Surface Water
Location	บริเวณจุดระบายน้ำทิ้งของนิคมฯ(W2)
Date Analysis Commenced	Dec 27, 2023
Condition of Sample	Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Ammonia Nitrogen	mg/L	0.02	0.05	0.13	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
Nitrate as N	mg/L	0.015	0.05	4.52	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong

Guideline : Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazettle, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
n': Change from Natural condition not more than 3 degree C
Sampling By : Tanasit Wongsachai

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Approved by
Wilawan Borirak
Manager

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Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134876
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2861883-1

Sample Number	23134876-3
Sampled Date	Dec 05, 2023 11:10 AM
Sample Description	Surface Water
Location	บริเวณหลังผ่านจุดระบายน้ำทิ้งของนิคมฯ((W3)
Date Analysis Commenced	Dec 05, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle, five plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Arsenic	mg/L	0.0003	0.0005	0.004	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Cadmium	mg/L	0.0003	0.0005	0.0007	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Copper	mg/L	0.0003	0.0005	0.005	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
[A] Iron	mg/L	0.003	0.005	0.88	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Lead	mg/L	0.0003	0.0005	0.001	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Manganese	mg/L	0.0003	0.0005	0.24	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

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Approved by
Dej Changchon
Senior Manager

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Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134876
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2861883-1

Sample Number	23134876-3
Sampled Date	Dec 05, 2023 11:10 AM
Sample Description	Surface Water
Location	บริเวณหลังผ่านจุดระบายน้ำทิ้งของนิคมฯ((W3)
Date Analysis Commenced	Dec 05, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle, five plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
[A] Nickel	mg/L	0.0003	0.0005	0.01	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Selenium	mg/L	0.0003	0.0005	0.001	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Zinc	mg/L	0.003	0.005	0.14	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Microbiological Testing							
[A] Total Coliform	MPN/100mL	-	-	790.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
BOD *	mg/L	-	2	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
Dissolved Oxygen *	mg/L	-	0.1	5.9	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong

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Approved by
Dej Changchon
Senior Manager

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479-101/ EMAIL S:\Reports_All_GL.rpt (11:33AM)

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134876
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2861883-1

Sample Number	23134876-3
Sampled Date	Dec 05, 2023 11:10 AM
Sample Description	Surface Water
Location	บริเวณหลังผ่านจุดระบายน้ำทิ้งของนิคมฯ((W3)
Date Analysis Commenced	Dec 05, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle, five plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Oil & Grease *	mg/L	-	3	<3	No Standard	In-house method : STM 02-004 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	8.0	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	29.9	n'	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong

Guideline : Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
n': Change from Natural condition not more than 3 degree C
Sampling By : Chainusorn Lertnanthakunchai

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DSS Accreditation No. 0009.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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Dej Changchon
Senior Manager

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134876
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2861887-1

Sample Number	231348S6-7
Sampled Date	Dec 05, 2023 11:10 AM
Sample Description	(urface Water
Location	บริเวณหลังผ่านจุดระบายน้ำทิ้งของนิคมฯ))W3U
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards)APHA, Y(EPAU
Physical Property	wellox , some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
v ater Testing							
Total Dissolved (olids Dried at 180 degree C	mg/L	-	5	14420	No (tandard	(tandard Methods for the E&amination of Water and Wastex ater. APHA, AWWA F WE9, 23rd ed., 201S, part 2540 C	Rayong
Total Hardness as CaCO3 *	mg/L	-	1	4882	No (tandard	(tandard Methods for the E&amination of Water and Wastex ater. APHA, AWWA F WE9, 23rd ed., 201S, part 2340 C	Rayong
Total (uspended (olids Dried at 103-105 degree C *	mg/L	-	5	26	No (tandard	(tandard Methods for the E&amination of Water and Wastex ater. APHA, AWWA F WE9, 23rd ed., 201S, part 2540 D	Rayong

Guideline : Notification of the National Environmental Board, No. 8, B.E.253S issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated 9ebruary 24, B.E. 253S)Class 4U
n': Change from Natural condition not more than 3 degree C
Sampling Wy : Chainusorn Lertnanthakunchai

Remark :
- LOD : Limit of Detection
- "<" : Lox er than LOQ)Limit of QuantitationU/ LOR)Limit of ReportingU
- Analyte)sUmarked * is/are not included in scope of Accreditation I(O/IEC 1S025.
- The laboratory has been accepted as an accredited laboratory complying x ith the I(O/IEC 1S025.

Results apply to the sample)sUas submitted, unless the sampling x as conducted by AL(. No part of this report may be reproduced in any form x ithout x ritten consent from the laboratory. AL(Laboratory Group)ThailandUstrongly recommends that this report is not reproduced e&cept in full.

ApproBed by
Narumon Banchongkit
(upervisor

Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23147440
Date Received : Dec 26, 2023
Date Reported : Dec 27, 2023
Report Number : 2875011-1

Sample Number	23147440-3
Sampled Date	Dec 26, 2023 10:46 AM
Sample Description	Surface Water
Location	บริเวณหลังผ่านจุดระบายน้ำทิ้งของนิคมฯ((W3)
Date Analysis Commenced	Dec 27, 2023
Condition of Sample	Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Ammonia Nitrogen	mg/L	0.02	0.05	0.14	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong

Guideline : Notification of the National Environmental Ooard, No. 8, O.E.2537 issued under the Enhancement and Conservation of National Environmental Buality Act. O.E.2535, published in the Royal Qovernment QaGettle, zol. 111, Part 16, Dated February 24, O.E. 2537 (Class 4)
nV Change from Natural condition not more than 3 degree C
Sampling By : Tanasit Wongsachai

Remark :
- L' D : Limit of Detection
- "<" : Lower than L' B (Limit of Buantitation) / L' R (Limit of Reporting)

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Wilawan Oorirak
Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23147440
Date Received : Dec 26, 2023
Date Reported : Dec 27, 2023
Report Number : 2875011-2

Sample Number	23147440-3
Sampled Date	Dec 26, 2023 10:46 AM
Sample Description	Surface Water
Location	บริเวณหลังผ่านจุดระบายน้ำทิ้งของนิคมฯ((W3)
Date Analysis Commenced	Dec 27, 2023
Condition of Sample	Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Nitrate as N	mg/L	0.015	0.05	6.44	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong

Guideline : Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazettle, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
n': Change from Natural condition not more than 3 degree C
Sampling By : Tanasit Wongsachai

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Approved by
Wilawan Borirak
Manager

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Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134876
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2861884-1

Sample Number	23134876-4
Sampled Date	Dec 05, 2023 11:20 AM
Sample Description	Surface Water
Location	บริเวณก่อนไหลลงสู่ทะเล(W4)
Date Analysis Commenced	Dec 05, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle, five plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Arsenic	mg/L	0.0003	0.0005	0.005	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Cadmium	mg/L	0.0003	0.0005	0.0008	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Copper	mg/L	0.0003	0.0005	0.005	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
[A] Iron	mg/L	0.003	0.005	0.58	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Lead	mg/L	0.0003	0.0005	0.0007	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Manganese	mg/L	0.0003	0.0005	0.1G	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

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Approved by
Dej Changchon
Senior Manager

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Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134876
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2861884-1

Sample Number	23134876-4
Sampled Date	Dec 05, 2023 11:20 AM
Sample Description	Surface Water
Location	บริเวณก่อนไหลลงสู่ทะเล(W4)
Date Analysis Commenced	Dec 05, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle, five plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
[A] Nickel	mg/L	0.0003	0.0005	0.02	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Selenium	mg/L	0.0003	0.0005	0.0010	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Zinc	mg/L	0.003	0.005	0.17	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Microbiological Testing							
[A] Total Coliform	MPN/100mL	-	-	4G00.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part G221 B	Bangkok
Water Testing							
BOD *	mg/L	-	2	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
Dissolved Oxygen *	mg/L	-	0.1	5.G	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong

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Approved by
Dej Changchon
Senior Manager

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47G-101/ EMAIL S:_Reports_9All9\ L.rpt (11:34AM)

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134876
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2861884-1

Sample Number	23134876-4
Sampled Date	Dec 05, 2023 11:20 AM
Sample Description	Surface Water
Location	บริเวณก่อนไหลลงสู่ทะเล(W4)
Date Analysis Commenced	Dec 05, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle, five plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Oil & \ rease *	mg/L	-	3	<3	No Standard	In-house method : STM 02-004 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	8.3	5.0-G.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	30.3	n'	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong

Guideline : Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal \ overnment \ azettle, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
n': Change from Natural condition not more than 3 degree C
Sampling By : Chainusorn Lertnanthakunchai

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory \ roup (Thailand) Co.,Ltd. Bangkok Branch, DSS Accreditation No. 000G.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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Dej Changchon
Senior Manager

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134876
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2861870-1

Sample Number	231348S6-10
Sampled Date	Dec 05, 2023 11:20 AM
Sample Description	(urface Water
Location	บริเวณก่อนไหลลงสู่ทะเล)W4U
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards)APHA, Y(EPAU
Physical Property	wellox , some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
v ater Testing							
Total Dissolved (olids Dried at 180 degree C	mg/L	-	5	S880	No (tandard	(tandard Methods for the E&amination of Water and Wastex ater. APHA, AWWA F WE9, 23rd ed., 201S, part 2540 C	Rayong
Total Hardness as CaCO3 *	mg/L	-	1	117S	No (tandard	(tandard Methods for the E&amination of Water and Wastex ater. APHA, AWWA F WE9, 23rd ed., 201S, part 2340 C	Rayong
Total (uspended (olids Dried at 103-105 degree C *	mg/L	-	5	41	No (tandard	(tandard Methods for the E&amination of Water and Wastex ater. APHA, AWWA F WE9, 23rd ed., 201S, part 2540 D	Rayong

Guideline : Notification of the National Environmental Board, No. 8, B.E.253S issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazettle, Vol. 111, Part 16, Dated 9ebruary 24, B.E. 253S)Class 4U
n': Change from Natural condition not more than 3 degree C
Sampling Wy : Chainusorn Lertnanthakunchai

Remark :
- LOD : Limit of Detection
- "<" : Lox er than LOQ)Limit of QuantitationU/ LOR)Limit of ReportingU
- Analyte)sUmarked * is/are not included in scope of Accreditation I(O/IEC 1S025.
- The laboratory has been accepted as an accredited laboratory complying x ith the I(O/IEC 1S025.

Results apply to the sample)sUas submitted, unless the sampling x as conducted by AL(. No part of this report may be reproduced in any form x ithout x ritten consent from the laboratory. AL(Laboratory Group)ThailandUstrongly recommends that this report is not reproduced e&cept in full.

ApproBed by
Narumon Banchongkit
(upervisor

Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23147440
Date Received : Dec 26, 2023
Date Reported : Dec 27, 2023
Report - umber : 28750129 1

Sample Number	231f 7f f 09f
Sampled Date	Dec 26, 2023 10:53 AM
Sample Description	4urNace Water
Location	บริเวณก่อนไหลลงสู่ทะเลSWf (
Date Analysis Commenced	Dec 27, 2023
Condition of Sample	Contained in one plastic bottle, sample containers comply to pretreatment 9 preservation standards SAPHA,) 4EPA(

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Ammonia - itrogen	mg/L	0.02	0.05	0.1F	≤0.5	4tandard Methods Nor the EUamination oNWater and Wastex ater. APHA, AWWA w WE&, 23rd ed., 2017, part f 5009- H3 SD(	Rayong

Guideline : - otiNcation oNthe - ational Environmental Coard, - o. 8, O.E.2537 issued under the Enhancement and Conservation oN- ational Environmental Buality Act. O.E.2535, published in the Royal Qovernment QaGettle, z ol. 111, Part 16, Dated &ebruary 2f , O.E. 2537 SClass f (
nV Change Nom - atural condition not more than 3 degree C
Sampling By : Tanasit Wongsachai

Remark :
- L' D : Limit oNDetection
- "<" : Lox er than L' B SLimit oNBuantitation(/ L' R SLimit oNReporting(

Results apply to the sampleSs(as submitted, unless the sampling x as conducted by AL4. - o part oNthis report may be reproduced in any Nrm x ithout x ritten consent Nom the laboratory. AL4 Laboratory Qroup SThailand(strongly recommends that this report is not reproduced eUcept in Nill.

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Wilax an Oorirak
Manager

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23147440
Date Received : Dec 26, 2023
Date Reported : Dec 27, 2023
Report Number : 2875012-2

Sample Number	23147440-4
Sampled Date	Dec 26, 2023 10:53 AM
Sample Description	Surface Water
Location	บริเวณก่อนไหลลงสู่ทะเล(W4)
Date Analysis Commenced	Dec 27, 2023
Condition of Sample	Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Nitrate as N	mg/L	0.015	0.05	12.1	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong

Guideline : Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazettle, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
n': Change from Natural condition not more than 3 degree C
Sampling By : Tanasit Wongsachai

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Wilawan Borirak
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ภาคผนวก ค-3

คุณภาพน้ำทะเล

Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134878
Date Received : Dec 05, 2023
Date Reported : Dec 19, 2023
Report Number : 2840390-1

Sample Number	23134878-1
Sampled Date	Dec 05, 2023 9:20 AM
Sample Description	Sea Water
Location	บริเวณน้ำทะเลที่ระยะห่าง 500 เมตร จากปากคลองบางเบิด-ด้านซ้าย(S1)
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in four glass vials, three amber glass bottles and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.002	0.005	Not Detected	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.001	0.003	Not Detected	≤0.008	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Iron	mg/L	0.001	0.003	0.07	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.001	0.003	0.008	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

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Siriluk Puengpang
Section Head

Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134878
Date Received : Dec 05, 2023
Date Reported : Dec 19, 2023
Report Number : 2840390-1

Sample Number	23134878-1
Sampled Date	Dec 05, 2023 9:20 AM
Sample Description	Sea Water
Location	บริเวณน้ำทะเลที่ระยะห่าง 500 เมตร จากปากคลองบางเบิด-ด้านซ้าย(S1)
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in four glass vials, three amber glass bottles and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.003	0.01	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Selenium	mg/L	0.003	0.01	<0.01	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.001	0.003	0.009	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Petroleum Hydrocarbons							
C10-C14	ug/L	-	10	<10	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
C15-C28	ug/L	-	50	<50	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
C29-C36	ug/L	-	50	<50	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
C6-C9	ug/L	-	20	<20	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030B and 8260D	Bangkok
Water Testing							

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Siriluk Puengpang
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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134878
Date Received : Dec 05, 2023
Date Reported : Dec 19, 2023
Report Number : 2840390-1

Sample Number	23134878-1
Sampled Date	Dec 05, 2023 9:20 AM
Sample Description	Sea Water
Location	บริเวณน้ำทะเลที่ระยะห่าง 500 เมตร จากปากคลองบางเบิด-ด้านซ้าย(S1)
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in four glass vials, three amber glass bottles and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Petroleum Hydrocarbon	ug/L	0.015	0.05	0.09	≤5	Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984)	Bangkok
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32950	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampling By : Chainusorn Lertnanthakunchai

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134878
Date Received : Dec 05, 2023
Date Reported : Dec 19, 2023
Report Number : 2840390-1

Sample Number	23134878-2
Sampled Date	Dec 05, 2023 9:30 AM
Sample Description	Sea Water
Location	บริเวณน้ำทะเลที่ระยะห่าง 500 เมตร จากปากคลองบางเบิด-ตรงกลาง(S2)
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in four glass vials, three amber glass bottles and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.002	0.005	Not Detected	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.001	0.003	Not Detected	≤0.008	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Iron	mg/L	0.001	0.003	0.08	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.001	0.003	0.01	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

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Siriluk Puengpang
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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134878
Date Received : Dec 05, 2023
Date Reported : Dec 19, 2023
Report Number : 2840390-1

Sample Number	23134878-2
Sampled Date	Dec 05, 2023 9:30 AM
Sample Description	Sea Water
Location	บริเวณน้ำทะเลที่ระยะห่าง 500 เมตร จากปากคลองบางเบิด-ตรงกลาง(S2)
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in four glass vials, three amber glass bottles and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Mercury	mg/L	0.000003	0.00005	Not Detected	≤0.0001	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.003	0.01	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Selenium	mg/L	0.003	0.01	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.001	0.003	0.01	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Petroleum Hydrocarbons							
C10-C14	ug/L	-	10	<10	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
C15-C28	ug/L	-	50	<50	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
C29-C36	ug/L	-	50	<50	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
C6-C9	ug/L	-	20	<20	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030B and 8260D	Bangkok
Water Testing							

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134878
Date Received : Dec 05, 2023
Date Reported : Dec 19, 2023
Report Number : 2840390-1

Sample Number	23134878-2
Sampled Date	Dec 05, 2023 9:30 AM
Sample Description	Sea Water
Location	บริเวณน้ำทะเลที่ระยะห่าง 500 เมตร จากปากคลองบางเบิด-ตรงกลาง(S2)
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in four glass vials, three amber glass bottles and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Petroleum Hydrocarbon	ug/L	0.015	0.05	0.11	≤5	Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984)	Bangkok
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33250	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampling By : Chainusorn Lertnanthakunchai

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Section Head

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Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134878
Date Received : Dec 05, 2023
Date Reported : Dec 19, 2023
Report Number : 2840390-1

Sample Number	23134878-3
Sampled Date	Dec 05, 2023 9:40 AM
Sample Description	Sea Water
Location	บริเวณน้ำทะเลที่ระยะห่าง 500 เมตร จากปากคลองบางเบิด-ด้านขวา(S3)
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in four glass vials, three amber glass bottles and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.002	0.005	<0.005	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.001	0.003	Not Detected	≤0.008	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Iron	mg/L	0.001	0.003	0.10	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.001	0.003	0.009	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

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Siriluk Puengpang
Section Head

Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134878
Date Received : Dec 05, 2023
Date Reported : Dec 19, 2023
Report Number : 2840390-1

Sample Number	23134878-3
Sampled Date	Dec 05, 2023 9:40 AM
Sample Description	Sea Water
Location	บริเวณน้ำทะเลที่ระยะห่าง 500 เมตร จากปากคลองบางเบิด-ด้านขวา(S3)
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in four glass vials, three amber glass bottles and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Mercury	mg/L	0.000003	0.00005	Not Detected	≤0.0001	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.003	0.01	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Selenium	mg/L	0.003	0.01	<0.01	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.001	0.003	0.008	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Petroleum Hydrocarbons							
C10-C14	ug/L	-	10	<10	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
C15-C28	ug/L	-	50	<50	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
C29-C36	ug/L	-	50	<50	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
C6-C9	ug/L	-	20	<20	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030B and 8260D	Bangkok
Water Testing							

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Siriluk Puengpang
Section Head

Analysis / Test Report

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134878
Date Received : Dec 05, 2023
Date Reported : Dec 19, 2023
Report Number : 2840390-1

Sample Number	23134878-3
Sampled Date	Dec 05, 2023 9:40 AM
Sample Description	Sea Water
Location	บริเวณน้ำทะเลที่ระยะห่าง 500 เมตร จากปากคลองบางเบิด-ด้านขวา(S3)
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in four glass vials, three amber glass bottles and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Petroleum Hydrocarbon	ug/L	0.015	0.05	0.08	≤5	Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984)	Bangkok
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33500	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampling By : Chainusorn Lertnanthakunchai

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Siriluk Puengpang
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คุณภาพน้ำใต้ดิน

Analysis / Test Report

TESTING
No.0009

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134882
Date Received : Dec 05, 2023
Date Reported : Dec 14, 2023
Report Number : 2840395-1

Sample Number	23134882-1
Sampled Date	Dec 05, 2023 12:12 PM
Sample Description	Underground Water
Location	บ่อน้ำใต้ดินบริเวณบ่อพักน้ำฝนแห่งที่2 (U1)
Date Analysis Commenced	Dec 07, 2023
Condition of Sample	Contained in two plastic bottles, two vials and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Colorless, some odour, solid, and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.002	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.003	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	Not Detected	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Iron	mg/L	0.003	0.005	0.01	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Lead	mg/L	0.0003	0.0005	Not Detected	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	0.03	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

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Chanattagarn Imchom
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Analysis / Test Report

TESTING
No.0009

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134882
Date Received : Dec 05, 2023
Date Reported : Dec 14, 2023
Report Number : 2840395-1

Sample Number	23134882-1
Sampled Date	Dec 05, 2023 12:12 PM
Sample Description	Underground Water
Location	บ่อน้ำใต้ดินบริเวณบ่อพักน้ำฝนแห่งที่2 (U1)
Date Analysis Commenced	Dec 07, 2023
Condition of Sample	Contained in two plastic bottles, two vials and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Colorless, some odour, solid, and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.001	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
Nickel	mg/L	0.0003	0.0005	0.003	≤0.02	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Selenium	mg/L	0.0003	0.0005	Not Detected	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.42	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Volatile Organics Compounds							
1,1,1,2-Tetrachloroethane *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
1,1,1-Trichloroethane	ug/L	0.08	0.5	Not Detected	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
1,1,2,2-Tetrachloroethane *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
1,1,2-Trichloroethane	ug/L	0.08	0.5	Not Detected	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok

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Analysis / Test Report

TESTING
No.0009

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134882
Date Received : Dec 05, 2023
Date Reported : Dec 14, 2023
Report Number : 2840395-1

Sample Number	23134882-1
Sampled Date	Dec 05, 2023 12:12 PM
Sample Description	Underground Water
Location	บ่อน้ำใต้ดินบริเวณบ่อพักน้ำฝนแห่งที่2 (U1)
Date Analysis Commenced	Dec 07, 2023
Condition of Sample	Contained in two plastic bottles, two vials and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Colorless, some odour, solid, and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Volatile Organics Compounds							
1,1-Dichloroethane *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
1,1-Dichloroethene	ug/L	0.11	0.5	Not Detected	≤7	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
1,1-Dichloropropene *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
1,2,3-Trichlorobenzene *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
1,2,3-Trichloropropane *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
1,2,4-Trichlorobenzene *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
1,2,4-Trimethylbenzene *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
1,2-Dibromo-3-chloropropane *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
1,2-Dibromoethane *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok

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Analysis / Test Report

TESTING
No.0009

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134882
Date Received : Dec 05, 2023
Date Reported : Dec 14, 2023
Report Number : 2840395-1

Sample Number	23134882-1
Sampled Date	Dec 05, 2023 12:12 PM
Sample Description	Underground Water
Location	บ่อน้ำใต้ดินบริเวณบ่อพักน้ำฝนแห่งที่2 (U1)
Date Analysis Commenced	Dec 07, 2023
Condition of Sample	Contained in two plastic bottles, two vials and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Colorless, some odour, solid, and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Volatile Organics Compounds							
1,2-Dichlorobenzene *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
1,2-Dichloroethane *	ug/L	0.07	0.5	Not Detected	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
1,2-Dichloropropane *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
1,3,5-Trimethylbenzene *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
1,3-Dichlorobenzene *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
1,3-Dichloropropane *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
1,4-Dichlorobenzene *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
2,2-Dichloropropane *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
2-Chlorotoluene *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok

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Analysis / Test Report

TESTING
No.0009

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134882
Date Received : Dec 05, 2023
Date Reported : Dec 14, 2023
Report Number : 2840395-1

Sample Number	23134882-1
Sampled Date	Dec 05, 2023 12:12 PM
Sample Description	Underground Water
Location	บ่อน้ำใต้ดินบริเวณบ่อพักน้ำฝนแห่งที่2 (U1)
Date Analysis Commenced	Dec 07, 2023
Condition of Sample	Contained in two plastic bottles, two vials and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Colorless, some odour, solid, and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Volatile Organics Compounds							
4-Chlorotoluene *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
4-Isopropyltoluene *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
Benzene	ug/L	0.03	0.5	Not Detected	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
Bromobenzene *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
Bromochloromethane *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
Bromodichloromethane *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
Bromoform *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
Carbon tetrachloride	ug/L	0.08	0.5	Not Detected	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
Chlorobenzene *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok

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Analysis / Test Report

TESTING
No.0009

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134882
Date Received : Dec 05, 2023
Date Reported : Dec 14, 2023
Report Number : 2840395-1

Sample Number	23134882-1
Sampled Date	Dec 05, 2023 12:12 PM
Sample Description	Underground Water
Location	บ่อน้ำใต้ดินบริเวณบ่อพักน้ำฝนแห่งที่2 (U1)
Date Analysis Commenced	Dec 07, 2023
Condition of Sample	Contained in two plastic bottles, two vials and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Colorless, some odour, solid, and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Volatile Organics Compounds							
Chloroform *	ug/L	0.15	0.5	0.8	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
Chloromethane *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
cis-1,2-Dichloroethene	ug/L	0.04	0.5	Not Detected	≤70	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
cis-1,3-Dichloropropene *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
Dibromochloromethane *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
Dibromomethane *	ug/L	0.10	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
Ethylbenzene	ug/L	0.03	0.5	Not Detected	≤700	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
Hexachlorobutadiene *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
Isopropylbenzene *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok

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Analysis / Test Report

TESTING
No.0009

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134882
Date Received : Dec 05, 2023
Date Reported : Dec 14, 2023
Report Number : 2840395-1

Sample Number	23134882-1
Sampled Date	Dec 05, 2023 12:12 PM
Sample Description	Underground Water
Location	บ่อน้ำใต้ดินบริเวณบ่อพักน้ำฝนแห่งที่2 (U1)
Date Analysis Commenced	Dec 07, 2023
Condition of Sample	Contained in two plastic bottles, two vials and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Colorless, some odour, solid, and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Volatile Organics Compounds							
m,p-Xylene	ug/L	0.3	1.0	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
Methylene Chloride (Dichloromethane)	ug/L	0.1	0.5	Not Detected	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
Naphthalene *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
n-Butylbenzene *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
n-Propylbenzene *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
o-Xylene	ug/L	0.01	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
sec-Butylbenzene *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
Styrene	ug/L	0.02	0.5	Not Detected	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
tert-Butylbenzene *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok

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Analysis / Test Report

TESTING
No.0009

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23134882
Date Received : Dec 05, 2023
Date Reported : Dec 14, 2023
Report Number : 2840395-1

Sample Number	23134882-1
Sampled Date	Dec 05, 2023 12:12 PM
Sample Description	Underground Water
Location	บ่อน้ำใต้ดินบริเวณบ่อพักน้ำฝนแห่งที่2 (U1)
Date Analysis Commenced	Dec 07, 2023
Condition of Sample	Contained in two plastic bottles, two vials and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Colorless, some odour, solid, and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Volatile Organics Compounds							
Tetrachloroethene	ug/L	0.07	0.5	Not Detected	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
Toluene	ug/L	0.04	0.5	Not Detected	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
Total Xylene	ug/L	0.04	1.5	Not Detected	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
trans-1,2-Dichloroethene	ug/L	0.1	0.5	Not Detected	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
trans-1,3-Dichloropropene *	ug/L	0.15	0.5	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
Trichloroethene	ug/L	0.05	0.5	Not Detected	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok
Vinyl chloride (Chloroethylene)	ug/L	0.16	0.3	Not Detected	≤2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok

Guideline : Notification of the National Environmental Board, No. 20, B.E.2543

Sampling By : Chainusorn Lertnanthakunchai

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report 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 Chanatt L.
Chanattagarn Imchom
Section Head

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ภาคผนวก ค-5

คุณลักษณะน้ำเสียก่อนเข้าและหลังออก
จากระบบบำบัดน้ำเสีย ส่วนกลาง

Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 2374471
Date Received : Jul 03, 2023
Date Reported : Jul 10, 2023
Report Number : 2698227-1

Sample Number	2374471-1
Sampled Date	Jul 03, 2023 10:08 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Jul 03, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	26.6	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	112	≤600	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	6	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	6.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Temperature *	Degree C	-	-	36.6	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1308	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	7.3	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 2374471
Date Received : Jul 03, 2023
Date Reported : Jul 10, 2023
Report Number : 2698227-1

Sample Number	2374471-1
Sampled Date	Jul 03, 2023 10:08 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Jul 03, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	66	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Wanlop Hunchainaow ทะเบียนเลขที่ ว-323-จ-9457 , Kardbundit Kitisupavanit ทะเบียนเลขที่ ว-204-จ-0001

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 2374471
Date Received : Jul 03, 2023
Date Reported : Jul 11, 2023
Report Number : 2698227-2

Sample Number	2374471-1
Sampled Date	Jul 03, 2023 10:08 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Jul 04, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.009	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Chromium	mg/L	0.0003	0.0005	0.02	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.04	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	0.003	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	0.15	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	<0.0005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok

Technical Management Sawitree N.
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709

Approved by Kanokkorn Anek
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 2374471
Date Received : Jul 03, 2023
Date Reported : Jul 11, 2023
Report Number : 2698227-2

Sample Number	2374471-1
Sampled Date	Jul 03, 2023 10:08 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Jul 04, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Nickel	mg/L	0.0003	0.0005	0.02	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Selenium	mg/L	0.0003	0.0005	0.0006	≤0.02	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	0.02	≤0.75	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.52	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Wanlop Hunchainaow ทะเบียนเลขที่ ว-323-จ-9457 , Kardbundit Kitisupavanit ทะเบียนเลขที่ ว-204-จ-0001

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management Sawitree N.
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709

Approved by Kanokkorn Anek
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 2374471
Date Received : Jul 03, 2023
Date Reported : Jul 11, 2023
Report Number : 2698227-3

Sample Number	2374471-1
Sampled Date	Jul 03, 2023 10:08 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Jul 04, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	5.01	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Anionic Surfactant as MBAS *	mg/L	0.015	0.05	0.08	≤30	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5540 B, C	Bangkok
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	2134	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Total Phosphorus as P *	mg/L	0.2	0.5	2.1	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 365.4	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Wanlop Hunchainaow , Kardbundit Kitisupavanit

Remark :
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Approved by
Sawitree Noisangiam
Manager

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 2388260
Date Received : Aug 02, 2023
Date Reported : Aug 09, 2023
Report Number : 2730655-1

Sample Number	2388260-1
Sampled Date	Aug 02, 2023 9:55 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Aug 02, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and seven plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	21.1	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	69	≤600	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	0.2	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	7.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Temperature *	Degree C	-	-	34.6	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1004	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	3.1	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 2388260
Date Received : Aug 02, 2023
Date Reported : Aug 09, 2023
Report Number : 2730655-1

Sample Number	2388260-1
Sampled Date	Aug 02, 2023 9:55 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Aug 02, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and seven plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	22	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476 , Thanasoun Namakunna ทะเบียนเลขที่ ว-204-จ-8592

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 2388260
Date Received : Aug 02, 2023
Date Reported : Aug 10, 2023
Report Number : 2730655-2

Sample Number	2388260-1
Sampled Date	Aug 02, 2023 9:55 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Aug 03, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and seven plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.005	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Chromium	mg/L	0.0003	0.0005	0.005	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.02	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	0.0006	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	0.16	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	<0.0005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok

Technical Management
Chanattagarn Imchom
Section Head
ทะเบียนเลขที่ ว-204-จ-4710

Approved by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 2388260
Date Received : Aug 02, 2023
Date Reported : Aug 10, 2023
Report Number : 2730655-2

Sample Number	2388260-1
Sampled Date	Aug 02, 2023 9:55 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Aug 03, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and seven plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Nickel	mg/L	0.0003	0.0005	0.01	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Selenium	mg/L	0.0003	0.0005	<0.0005	≤0.02	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	≤0.75	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.40	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476 , Thanasoun Namakunna ทะเบียนเลขที่ ว-204-จ-8592

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management
Chanattagarn Imchom
Section Head
ทะเบียนเลขที่ ว-204-จ-4710

Approved by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 2388260
Date Received : Aug 02, 2023
Date Reported : Aug 10, 2023
Report Number : 2730655-3

Sample Number	2388260-1
Sampled Date	Aug 02, 2023 9:55 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Aug 03, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and seven plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	1.38	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Anionic Surfactant as MBAS *	mg/L	0.015	0.05	0.13	≤30	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5540 B, C	Bangkok
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	1887	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Total Phosphorus as P *	mg/L	0.2	0.5	2.0	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 365.4	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun , Thanasoun Namakunna

Remark :
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Approved by
Suwimon Chairuangwut
Scientist (3)

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23101491
Date Received : Sep 01, 2023
Date Reported : Sep 08, 2023
Report Number : 2760195-1

Sample Number	23101491-1
Sampled Date	Sep 01, 2023 9:50 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Sep 01, 2023
Condition of Sample	Contained in two glass vials, three amber glass bottles and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	39.0	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	107	≤600	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	0.2	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	6.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Temperature *	Degree C	-	-	37.8	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1468	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.4	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23101491
Date Received : Sep 01, 2023
Date Reported : Sep 08, 2023
Report Number : 2760195-1

Sample Number	23101491-1
Sampled Date	Sep 01, 2023 9:50 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Sep 01, 2023
Condition of Sample	Contained in two glass vials, three amber glass bottles and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	21	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Tanasit Wongsachai ทะเบียนเลขที่ ว-323-จ-9460 , Samart Khumphlee ทะเบียนเลขที่ ว-204-จ-7830

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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23101491
Date Received : Sep 01, 2023
Date Reported : Sep 08, 2023
Report Number : 2760195-2

Sample Number	23101491-1
Sampled Date	Sep 01, 2023 9:50 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Sep 04, 2023
Condition of Sample	Contained in two glass vials, three amber glass bottles and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.004	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Chromium	mg/L	0.0003	0.0005	0.02	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.03	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	0.0007	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	0.09	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	0.0006	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok

Technical Management Chanattagarn Imchom
Section Head
ทะเบียนเลขที่ ว-204-จ-4710

Approved by Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23101491
Date Received : Sep 01, 2023
Date Reported : Sep 08, 2023
Report Number : 2760195-2

Sample Number	23101491-1
Sampled Date	Sep 01, 2023 9:50 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Sep 04, 2023
Condition of Sample	Contained in two glass vials, three amber glass bottles and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Nickel	mg/L	0.0003	0.0005	0.02	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Selenium	mg/L	0.0003	0.0005	<0.0005	≤0.02	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	0.02	≤0.75	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.48	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Tanasit Wongsachai ทะเบียนเลขที่ ว-323-จ-9460 , Samart Khumphlee ทะเบียนเลขที่ ว-204-จ-7830

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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Chanattagarn Imchom
Section Head
ทะเบียนเลขที่ ว-204-จ-4710

Approved by Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23101491
Date Received : Sep 01, 2023
Date Reported : Sep 08, 2023
Report Number : 2760195-3

Sample Number	23101491-1
Sampled Date	Sep 01, 2023 9:50 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Sep 01, 2023
Condition of Sample	Contained in two glass vials, three amber glass bottles and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	1.93	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Anionic Surfactant as MBAS *	mg/L	0.015	0.05	0.10	≤30	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5540 B, C	Bangkok
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	2324	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Total Phosphorus as P *	mg/L	0.2	0.5	1.3	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 365.4	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Tanasit Wongsachai , Samart Khumphlee

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Approved by
Chanattagarn Imchom
Section Head

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23113852
Date Received : Oct 02, 2023
Date Reported : Oct 10, 2023
Report Number : 2791286-1

Sample Number	23113852-1
Sampled Date	Oct 02, 2023 9:40 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Oct 02, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	18.3	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	70	≤600	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	0.2	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	7.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Temperature *	Degree C	-	-	35.1	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	904	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	6.0	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23113852
Date Received : Oct 02, 2023
Date Reported : Oct 10, 2023
Report Number : 2791286-1

Sample Number	23113852-1
Sampled Date	Oct 02, 2023 9:40 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Oct 02, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	60	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23113852
Date Received : Oct 02, 2023
Date Reported : Oct 10, 2023
Report Number : 2791286-2

Sample Number	23113852-1
Sampled Date	Oct 02, 2023 9:40 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Oct 03, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.005	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Chromium	mg/L	0.0003	0.0005	0.01	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.02	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	0.002	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	0.12	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	<0.0005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok

Technical Management
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709

Approved by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23113852
Date Received : Oct 02, 2023
Date Reported : Oct 10, 2023
Report Number : 2791286-2

Sample Number	23113852-1
Sampled Date	Oct 02, 2023 9:40 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Oct 03, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Nickel	mg/L	0.0003	0.0005	0.01	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Selenium	mg/L	0.0003	0.0005	0.0006	≤0.02	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	0.01	≤0.75	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.33	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709

Approved by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23113852
Date Received : Oct 02, 2023
Date Reported : Oct 10, 2023
Report Number : 2791286-3

Sample Number	23113852-1
Sampled Date	Oct 02, 2023 9:40 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Oct 03, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	2.90	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Anionic Surfactant as MBAS *	mg/L	0.015	0.05	0.11	≤30	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5540 B, C	Bangkok
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	1567	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Total Phosphorus as P *	mg/L	0.2	0.5	2.0	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 365.4	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun , Pattarapol Sawangjaitam

Remark :
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Approved by
Sawitree Noisangiam
Manager

Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23127130
Date Received : Nov 01, 2023
Date Reported : Nov 08, 2023
Report Number : 2821300-1

Sample Number	23127130-1
Sampled Date	Nov 01, 2023 9:49 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Nov 01, 2023
Condition of Sample	Contained in one amber glass bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	19.9	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	110	≤600	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	16	≤600	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	15	≤600	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	7.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Temperature *	Degree C	-	-	35.2	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23127130
Date Received : Nov 01, 2023
Date Reported : Nov 08, 2023
Report Number : 2821300-1

Sample Number	23127130-1
Sampled Date	Nov 01, 2023 9:49 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Nov 01, 2023
Condition of Sample	Contained in one amber glass bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1004	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	10.0	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	78	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Surawit Narapong ทะเบียนเลขที่ ว-323-จ-0011 , Samart Khumphlee ทะเบียนเลขที่ ว-204-จ-7830

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Technical Management
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Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23127130
Date Received : Nov 01, 2023
Date Reported : Nov 09, 2023
Report Number : 2821300-2

Sample Number	23127130-1
Sampled Date	Nov 01, 2023 9:49 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Nov 03, 2023
Condition of Sample	Contained in one amber glass bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.006	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Chromium	mg/L	0.0003	0.0005	0.02	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.03	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	0.004	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	0.15	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Technical Management Sawitree N.
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709

Approved by Kanokkorn Anek
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.
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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23127130
Date Received : Nov 01, 2023
Date Reported : Nov 09, 2023
Report Number : 2821300-2

Sample Number	23127130-1
Sampled Date	Nov 01, 2023 9:49 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Nov 03, 2023
Condition of Sample	Contained in one amber glass bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Mercury *	mg/L	0.0001	0.0005	<0.0005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	0.02	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Selenium	mg/L	0.0003	0.0005	0.0007	≤0.02	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	0.02	≤0.75	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.47	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Surawit Narapong ทะเบียนเลขที่ ว-323-จ-0011 , Samart Khumphlee ทะเบียนเลขที่ ว-204-จ-7830

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Sawitree N.
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709

Approved by Kanokkorn Anek
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23127130
Date Received : Nov 01, 2023
Date Reported : Nov 09, 2023
Report Number : 2821300-3

Sample Number	23127130-1
Sampled Date	Nov 01, 2023 9:49 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Nov 02, 2023
Condition of Sample	Contained in one amber glass bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	4.25	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Anionic Surfactant as MBAS *	mg/L	0.015	0.05	<0.05	≤30	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5540 B, C	Bangkok
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	1687	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Total Phosphorus as P *	mg/L	0.2	0.5	2.2	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 365.4	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Surawit Narapong , Samart Khumphlee

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Approved by
Sawitree Noisangiam
Manager

Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23135945
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2842405-1

Sample Number	23135945-1
Sampled Date	Dec 05, 2023 9:50 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Dec 05, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	24.4	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	103	≤600	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Temperature *	Degree C	-	-	36.8	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1036	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23135945
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2842405-1

Sample Number	23135945-1
Sampled Date	Dec 05, 2023 9:50 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Dec 05, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.6	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	27	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Wanlop Hunchainaow ทะเบียนเลขที่ ว-323-จ-9457 , Samart Khumphlee ทะเบียนเลขที่ ว-204-จ-7830

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management
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Approved by
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Senior Manager
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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23135945
Date Received : Dec 05, 2023
Date Reported : Dec 14, 2023
Report Number : 2842405-2

Sample Number	23135945-1
Sampled Date	Dec 05, 2023 9:50 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Dec 07, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.005	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Chromium	mg/L	0.0003	0.0005	0.002	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.01	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	0.001	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	0.17	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23135945
Date Received : Dec 05, 2023
Date Reported : Dec 14, 2023
Report Number : 2842405-2

Sample Number	23135945-1
Sampled Date	Dec 05, 2023 9:50 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Dec 07, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	0.01	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Selenium	mg/L	0.0003	0.0005	Not Detected	≤0.02	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	≤0.75	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.31	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Wanlop Hunchainaow ทะเบียนเลขที่ ว-323-จ-9457 , Samart Khumphlee ทะเบียนเลขที่ ว-204-จ-7830

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Manager
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Approved by
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ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23135945
Date Received : Dec 05, 2023
Date Reported : Dec 14, 2023
Report Number : 2842405-3

Sample Number	23135945-1
Sampled Date	Dec 05, 2023 9:50 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	1.14	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Anionic Surfactant as MBAS *	mg/L	0.015	0.05	0.08	≤30	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5540 B, C	Bangkok
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	1716	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Total Phosphorus as P *	mg/L	0.2	0.5	0.7	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 365.4	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Wanlop Hunchainaow , Samart Khumphlee

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Approved by
Sawitree Noisangiam
Manager

Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23135984
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2842596-1

Sample Number	23135984-1
Sampled Date	Dec 05, 2023 9:50 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in two amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Cyanide as CN *	mg/L	0.001	0.005	<0.005	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Phenol	mg/L	0.005	0.01	0.02	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-S2 (C, F)	Rayong

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Sampling By : Wanlop Hunchainaow ทะเบียนเลขที่ ว-323-จ-9457 , Samart Khumphlee ทะเบียนเลขที่ ว-204-จ-7830

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Approved by
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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23135984
Date Received : Dec 05, 2023
Date Reported : Dec 14, 2023
Report Number : 2842596-2

Sample Number	23135984-1
Sampled Date	Dec 05, 2023 9:50 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in two amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Barium	mg/L	0.0003	0.0005	0.11	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Pesticides - Organochlorine Group							
2,4-DDD *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
2,4-DDE *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
2,4-DDT *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
4,4-DDD *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
4,4-DDE *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
4,4-DDT *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

Technical Management
Chanattagarn Imchom
Section Head
ทะเบียนเลขที่ ว-204-จ-4710

Approved by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23135984
Date Received : Dec 05, 2023
Date Reported : Dec 14, 2023
Report Number : 2842596-2

Sample Number	23135984-1
Sampled Date	Dec 05, 2023 9:50 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in two amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organochlorine Group							
Aldrin *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
alpha-BHC *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
beta-BHC *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Chlordane *	ug/L	0.02	0.04	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
delta-BHC *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Dieldrin *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Endosulfan I *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

Technical Management
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Section Head
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Approved by
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Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23135984
Date Received : Dec 05, 2023
Date Reported : Dec 14, 2023
Report Number : 2842596-2

Sample Number	23135984-1
Sampled Date	Dec 05, 2023 9:50 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in two amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organochlorine Group							
Endosulfan II *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Endrin *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Heptachlor *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Heptachlor-Epoxide *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Lindane (gamma-BHC) *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Methoxychlor *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Wanlop Hunchainaow ทะเบียนเลขที่ ว-323-จ-9457 , Samart Khumphlee ทะเบียนเลขที่ ว-204-จ-7830

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Technical Management
Chanattagarn Imchom
Section Head
ทะเบียนเลขที่ ว-204-จ-4710

Approved by
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ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23135984
Date Received : Dec 05, 2023
Date Reported : Dec 14, 2023
Report Number : 2842596-2

- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Chanattagarn Imchom
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ทะเบียนเลขที่ ว-204-จ-4710

Approved by Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23135984
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2842596-3

Sample Number	23135984-1
Sampled Date	Dec 05, 2023 9:50 AM
Sample Description	Influent
Location	WHA EIE : Pumping Station
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in two amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organochlorine Group							
alpha-Chlordane	ug/L	0.01	0.02	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
gamma-Chlordane	ug/L	0.01	0.02	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Hexachlorobenzene	ug/L	0.01	0.02	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Mirex	ug/L	0.01	0.02	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Wanlop Hunchainaow , Samart Khumphlee

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Approved by Siriluk Puengpang
Section Head

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 2374480
Date Received : Jul 03, 2023
Date Reported : Jul 10, 2023
Report Number : 2698240-1

Sample Number	2374480-1
Sampled Date	Jul 03, 2023 10:33 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Jul 03, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and ten plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	2.1	≤16	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD *	mg/L	1.5	25	36	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Cyanide as CN *	mg/L	0.001	0.005	0.005	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	8.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 2374480
Date Received : Jul 03, 2023
Date Reported : Jul 10, 2023
Report Number : 2698240-1

Sample Number	2374480-1
Sampled Date	Jul 03, 2023 10:33 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Jul 03, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and ten plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-S2 (C, F)	Rayong
Temperature *	Degree C	-	-	35.5	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2092	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.1	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	21	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Note : BOD Guideline set by Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Wanlop Hunchainaow ทะเบียนเลขที่ ว-323-จ-9457 , Kardbundit Kitisupavanit ทะเบียนเลขที่ ว-204-จ-0001

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 2374480
Date Received : Jul 03, 2023
Date Reported : Jul 10, 2023
Report Number : 2698240-2

Sample Number	2374480-1
Sampled Date	Jul 03, 2023 10:33 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Jul 04, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and ten plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.006	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Barium	mg/L	0.0003	0.0005	0.14	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	0.0007	≤0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Chromium	mg/L	0.0003	0.0005	0.005	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.003	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	<0.0005	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Technical Management Sawitree N.
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709

Approved by Kanokkorn Anek
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 2374480
Date Received : Jul 03, 2023
Date Reported : Jul 10, 2023
Report Number : 2698240-2

Sample Number	2374480-1
Sampled Date	Jul 03, 2023 10:33 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Jul 04, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and ten plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Manganese	mg/L	0.0003	0.0005	0.32	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	0.02	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Selenium	mg/L	0.0003	0.0005	0.0007	≤0.02	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	≤0.75	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.24	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Note : BOD Guideline set by Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Wanlop Hunchainaow ทะเบียนเลขที่ ว-323-จ-9457 , Kardbundit Kitisupavanit ทะเบียนเลขที่ ว-204-จ-0001

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Technical Management Sawitree N.
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709

Approved by Kanokkorn Anek
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 2374480
Date Received : Jul 03, 2023
Date Reported : Jul 10, 2023
Report Number : 2698240-2

- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Sawitree N.
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709

Approved by Kanokkorn Anek
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 2374480
Date Received : Jul 03, 2023
Date Reported : Jul 10, 2023
Report Number : 2698240-3

Sample Number	2374480-1
Sampled Date	Jul 03, 2023 10:33 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Jul 03, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and ten plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.55	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.65	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	3354	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Nitrate as N *	mg/L	0.015	0.05	4.08	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Silica as SiO2 *	mg/L	0.2	0.5	19.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-SiO2 (D)	Rayong
Total Phosphorus as P *	mg/L	0.2	0.5	1.4	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 365.4	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Note : BOD Guideline set by Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Wanlop Hunchainaow , Kardbundit Kitisupavanit

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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Approved by Suwimon C.
Suwimon Chairuangwut
Scientist (3)

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 2388263
Date Received : Aug 02, 2023
Date Reported : Aug 11, 2023
Report Number : 2730675-1

Sample Number	2388263-1
Sampled Date	Aug 02, 2023 10:23 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Aug 02, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and ten plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤16	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	29	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Cyanide as CN *	mg/L	0.001	0.005	0.006	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	8.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 2388263
Date Received : Aug 02, 2023
Date Reported : Aug 11, 2023
Report Number : 2730675-1

Sample Number	2388263-1
Sampled Date	Aug 02, 2023 10:23 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Aug 02, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and ten plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-S2 (C, F)	Rayong
Temperature *	Degree C	-	-	34.7	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1860	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.7	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	34	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476 , Thanasoun Namakunna ทะเบียนเลขที่ ว-204-จ-8592

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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5317-131/ EMAIL S:\Reports_All_GL.rpt (3:24PM)

Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 2388263
Date Received : Aug 02, 2023
Date Reported : Aug 11, 2023
Report Number : 2730675-2

Sample Number	2388263-1
Sampled Date	Aug 02, 2023 10:23 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Aug 03, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and ten plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.005	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Barium	mg/L	0.0003	0.0005	0.15	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	0.0007	≤0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Chromium	mg/L	0.0003	0.0005	0.008	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.007	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	0.0008	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Technical Management Chanattagarn Imchom
Section Head
ทะเบียนเลขที่ ว-204-จ-4710

Approved by Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 2388263
Date Received : Aug 02, 2023
Date Reported : Aug 11, 2023
Report Number : 2730675-2

Sample Number	2388263-1
Sampled Date	Aug 02, 2023 10:23 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Aug 03, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and ten plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Manganese	mg/L	0.0003	0.0005	0.29	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	0.02	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Selenium	mg/L	0.0003	0.0005	0.0005	≤0.02	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	≤0.75	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.43	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476 , Thanasoun Namakunna ทะเบียนเลขที่ ว-204-จ-8592

Remark :
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Technical Management Chanattagarn Imchom
Section Head
ทะเบียนเลขที่ ว-204-จ-4710

Approved by Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 2388263
Date Received : Aug 02, 2023
Date Reported : Aug 11, 2023
Report Number : 2730675-3

Sample Number	2388263-1
Sampled Date	Aug 02, 2023 10:23 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Aug 02, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and ten plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	1.27	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Ammonia Nitrogen *	mg/L	0.02	0.05	1.88	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	3834	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Nitrate as N *	mg/L	0.015	0.05	6.09	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Silica as SiO2 *	mg/L	0.2	0.5	14.5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-SiO2 (D)	Rayong
Total Phosphorus as P *	mg/L	0.2	0.5	1.5	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 365.4	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Paramet Sattayakun , Thanasoun Namakunna

Remark :
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Approved by
Chanattagarn Imchom
Section Head

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23101493
Date Received : Sep 01, 2023
Date Reported : Sep 12, 2023
Report Number : 2760200-1

Sample Number	23101493-1
Sampled Date	Sep 01, 2023 10:20 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Sep 01, 2023
Condition of Sample	Contained in one amber glass bottle, two glass vials and ten plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤16	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	33	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Cyanide as CN *	mg/L	0.001	0.005	0.007	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1.0	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	8.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	0.1	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23101493
Date Received : Sep 01, 2023
Date Reported : Sep 12, 2023
Report Number : 2760200-1

Sample Number	23101493-1
Sampled Date	Sep 01, 2023 10:20 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Sep 01, 2023
Condition of Sample	Contained in one amber glass bottle, two glass vials and ten plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-S2 (C, F)	Rayong
Temperature *	Degree C	-	-	34.8	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2180	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.1	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	28	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Note : BOD Guideline set by Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Tanasit Wongsachai ทะเบียนเลขที่ ว-323-จ-9460 , Samart Khumphlee ทะเบียนเลขที่ ว-204-จ-7830

Remark :
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23101493
Date Received : Sep 01, 2023
Date Reported : Sep 12, 2023
Report Number : 2760200-2

Sample Number	23101493-1
Sampled Date	Sep 01, 2023 10:20 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Sep 04, 2023
Condition of Sample	Contained in one amber glass bottle, two glass vials and ten plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.004	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Barium	mg/L	0.0003	0.0005	0.18	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	0.0006	≤0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Chromium	mg/L	0.0003	0.0005	0.007	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.005	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	0.0008	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Technical Management
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709

Approved by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23101493
Date Received : Sep 01, 2023
Date Reported : Sep 12, 2023
Report Number : 2760200-2

Sample Number	23101493-1
Sampled Date	Sep 01, 2023 10:20 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Sep 04, 2023
Condition of Sample	Contained in one amber glass bottle, two glass vials and ten plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Manganese	mg/L	0.0003	0.0005	0.36	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	<0.0005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	0.02	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Selenium	mg/L	0.0003	0.0005	0.001	≤0.02	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	≤0.75	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.37	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Note : BOD Guideline set by Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Tanasit Wongsachai ทะเบียนเลขที่ ว-323-จ-9460 , Samart Khumphlee ทะเบียนเลขที่ ว-204-จ-7830

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Technical Management Sawitree N.
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709

Approved by Kanokkorn Anek
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-จ-6111

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Analysis / Test Report
TESTING
No.0009
Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE
Lot ID: 23101493
Date Received : Sep 01, 2023
Date Reported : Sep 12, 2023
Report Number : 2760200-2

- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Sawitree N.
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709
Approved by Kanokkorn Anek
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-จ-6111
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Analysis / Test Report

TESTING
No.0009

Lot ID: 23101493

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Date Received : Sep 01, 2023
Date Reported : Sep 12, 2023
Report Number : 2760200-3

Sample Number	23101493-1
Sampled Date	Sep 01, 2023 10:20 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Sep 01, 2023
Condition of Sample	Contained in one amber glass bottle, two glass vials and ten plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.99	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.12	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	3596	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Nitrate as N *	mg/L	0.015	0.05	4.75	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Silica as SiO2 *	mg/L	0.2	0.5	14.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-SiO2 (D)	Rayong
Total Phosphorus as P *	mg/L	0.2	0.5	1.5	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 365.4	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Note : BOD Guideline set by Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Tanasit Wongsachai , Samart Khumphlee

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
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Approved by
Sawitree Noisangiam
Manager

Analysis / Test Report

TESTING
No.0042

Lot ID: 23113855

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Date Received : Oct 02, 2023
Date Reported : Oct 09, 2023
Report Number : 2791296-1

Sample Number	23113855-1
Sampled Date	Oct 02, 2023 10:21 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Oct 02, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and ten plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Colorless, odourless, no solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤16	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	33	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Cyanide as CN *	mg/L	0.001	0.005	0.005	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	8.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	0.2	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23113855
Date Received : Oct 02, 2023
Date Reported : Oct 09, 2023
Report Number : 2791296-1

Sample Number	23113855-1
Sampled Date	Oct 02, 2023 10:21 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Oct 02, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and ten plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Colorless, odourless, no solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-S2 (C, F)	Rayong
Temperature *	Degree C	-	-	35.4	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1940	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.6	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Note : BOD Guideline set by Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23113855
Date Received : Oct 02, 2023
Date Reported : Oct 09, 2023
Report Number : 2791296-2

Sample Number	23113855-1
Sampled Date	Oct 02, 2023 10:21 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Oct 03, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and ten plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Colorless, odourless, no solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.002	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Barium	mg/L	0.0003	0.0005	0.09	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	<0.0005	≤0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Chromium	mg/L	0.0003	0.0005	0.002	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.003	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	Not Detected	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Technical Management
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709

Approved by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23113855
Date Received : Oct 02, 2023
Date Reported : Oct 09, 2023
Report Number : 2791296-2

Sample Number	23113855-1
Sampled Date	Oct 02, 2023 10:21 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Oct 03, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and ten plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Colorless, odourless, no solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Manganese	mg/L	0.0003	0.0005	0.29	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	0.01	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Selenium	mg/L	0.0003	0.0005	0.0009	≤0.02	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	≤0.75	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.20	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Note : BOD Guideline set by Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Technical Management Sawitree N.
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709

Approved by Kanokkorn Anek
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report
TESTING
No.0009
Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE
Lot ID: 23113855
Date Received : Oct 02, 2023
Date Reported : Oct 09, 2023
Report Number : 2791296-2

- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Sawitree N.
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709
Approved by Kanokkorn Anek
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111
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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23113855
Date Received : Oct 02, 2023
Date Reported : Oct 09, 2023
Report Number : 2791296-3

Sample Number	23113855-1
Sampled Date	Oct 02, 2023 10:21 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Oct 03, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and ten plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Colorless, odourless, no solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.30	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.10	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	2990	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Nitrate as N *	mg/L	0.015	0.05	3.82	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Silica as SiO2 *	mg/L	0.2	0.5	8.3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-SiO2 (D)	Rayong
Total Phosphorus as P *	mg/L	0.2	0.5	1.0	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 365.4	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Note : BOD Guideline set by Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun , Pattarapol Sawangjaitam

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Approved by
Sawitree N.
Sawitree Noisangiam
Manager

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23127132
Date Received : Nov 01, 2023
Date Reported : Nov 08, 2023
Report Number : 2821305-1

Sample Number	23127132-1
Sampled Date	Nov 01, 2023 10:04 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Nov 01, 2023
Condition of Sample	Contained in one amber glass bottle, two glass vials and ten plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤16	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	33	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	30	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	28	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Cyanide as CN *	mg/L	0.001	0.005	0.008	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	8.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong

Technical Management
N.Banchongkit
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
D.Changchon
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23127132
Date Received : Nov 01, 2023
Date Reported : Nov 08, 2023
Report Number : 2821305-1

Sample Number	23127132-1
Sampled Date	Nov 01, 2023 10:04 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Nov 01, 2023
Condition of Sample	Contained in one amber glass bottle, two glass vials and ten plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-S2 (C, F)	Rayong
Temperature *	Degree C	-	-	34.5	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1808	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	3.1	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	12	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Note : BOD Guideline set by Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Surawit Narapong ทะเบียนเลขที่ ว-323-จ-0011 , Samart Khumphlee ทะเบียนเลขที่ ว-204-จ-7830

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23127132
Date Received : Nov 01, 2023
Date Reported : Nov 08, 2023
Report Number : 2821305-2

Sample Number	23127132-1
Sampled Date	Nov 01, 2023 10:04 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Nov 03, 2023
Condition of Sample	Contained in one amber glass bottle, two glass vials and ten plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.004	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Barium	mg/L	0.0003	0.0005	0.11	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	0.0008	≤0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Chromium	mg/L	0.0003	0.0005	0.005	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.004	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	0.0007	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Technical Management
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709

Approved by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23127132
Date Received : Nov 01, 2023
Date Reported : Nov 08, 2023
Report Number : 2821305-2

Sample Number	23127132-1
Sampled Date	Nov 01, 2023 10:04 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Nov 03, 2023
Condition of Sample	Contained in one amber glass bottle, two glass vials and ten plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Manganese	mg/L	0.0003	0.0005	0.22	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	0.02	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Selenium	mg/L	0.0003	0.0005	0.0009	≤0.02	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	≤0.75	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.27	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Surawit Narapong ทะเบียนเลขที่ ว-323-จ-0011 , Samart Khumphlee ทะเบียนเลขที่ ว-204-จ-7830

Remark :
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Technical Management
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709

Approved by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23127132
Date Received : Nov 01, 2023
Date Reported : Nov 08, 2023
Report Number : 2821305-3

Sample Number	23127132-1
Sampled Date	Nov 01, 2023 10:04 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Nov 02, 2023
Condition of Sample	Contained in one amber glass bottle, two glass vials and ten plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.59	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Ammonia Nitrogen *	mg/L	0.02	0.05	1.92	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	2860	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Nitrate as N *	mg/L	0.015	0.05	12.5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Silica as SiO2 *	mg/L	0.2	0.5	12.9	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-SiO2 (D)	Rayong
Total Phosphorus as P *	mg/L	0.2	0.5	1.4	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 365.4	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Surawit Narapong , Samart Khumphlee

Remark :
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Sawitree Noisangiam
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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23135948
Date Received : Dec 05, 2023
Date Reported : Dec 12, 2023
Report Number : 2842423-1

Sample Number	23135948-1
Sampled Date	Dec 05, 2023 10:40 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Dec 05, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and ten plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	5.7	≤16	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	37	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Cyanide as CN *	mg/L	0.001	0.005	0.008	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	8.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.
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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23135948
Date Received : Dec 05, 2023
Date Reported : Dec 12, 2023
Report Number : 2842423-1

Sample Number	23135948-1
Sampled Date	Dec 05, 2023 10:40 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Dec 05, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and ten plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-S2 (C, F)	Rayong
Temperature *	Degree C	-	-	34.6	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1590	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	3.7	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	17	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Note : BOD Guideline set by Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Wanlop Hunchainaow ทะเบียนเลขที่ ว-323-จ-9457 , Samart Khumphlee ทะเบียนเลขที่ ว-204-จ-7830

Remark :
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23135948
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2842423-2

Sample Number	23135948-1
Sampled Date	Dec 05, 2023 10:40 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Dec 07, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and ten plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.004	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Barium	mg/L	0.0003	0.0005	0.11	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	0.0008	≤0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Chromium	mg/L	0.0003	0.0005	0.006	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.006	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	0.0009	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Technical Management
Chanattagarn Imchom
Section Head
ทะเบียนเลขที่ ว-204-จ-4710

Approved by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.
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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23135948
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2842423-2

Sample Number	23135948-1
Sampled Date	Dec 05, 2023 10:40 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Dec 07, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and ten plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Manganese	mg/L	0.0003	0.0005	0.26	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	0.02	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Selenium	mg/L	0.0003	0.0005	0.0006	≤0.02	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	≤0.75	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.32	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Note : BOD Guideline set by Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Wanlop Hunchainaow ทะเบียนเลขที่ ว-323-จ-9457 , Samart Khumphlee ทะเบียนเลขที่ ว-204-จ-7830

Remark :
* LOD : Limit of Detection

Technical Management
Chanattagarn Imchom
Section Head
ทะเบียนเลขที่ ว-204-จ-4710

Approved by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23135948
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2842423-2

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Technical Management

Chanattagarn Imchom
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Approved by

Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23135948
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2842423-3

Sample Number	23135948-1
Sampled Date	Dec 05, 2023 10:40 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and ten plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.87	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Ammonia Nitrogen *	mg/L	0.02	0.05	1.80	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	2662	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Nitrate as N *	mg/L	0.015	0.05	1.89	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Silica as SiO2 *	mg/L	0.2	0.5	7.6	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-SiO2 (D)	Rayong
Total Phosphorus as P *	mg/L	0.2	0.5	1.0	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 365.4	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Note : BOD Guideline set by Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Wanlop Hunchainaow , Samart Khumphlee

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report 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

Chanattagarn Imchom
Section Head

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23135948
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2842423-3

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report 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
Chanattagarn Imchom
Section Head

Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23135985
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2842597-1

Sample Number	23135985-1
Sampled Date	Dec 05, 2023 10:40 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in two amber glass bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organochlorine Group							
2,4-DDD	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
2,4-DDE	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
2,4-DDT	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
4,4-DDD	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
4,4-DDE	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
4,4-DDT	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Aldrin	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

Technical Management
Siriluk Puengpang
Section Head
ทะเบียนเลขที่ ว-204-จ-4720

Approved by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23135985
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2842597-1

Sample Number	23135985-1
Sampled Date	Dec 05, 2023 10:40 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in two amber glass bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organochlorine Group							
alpha-BHC	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
beta-BHC	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Chlordane	ug/L	0.02	0.04	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
delta-BHC	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Dieldrin	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Endosulfan I	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Endosulfan II	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

Technical Management
Siriluk P.
Siriluk Puengpang
Section Head
ทะเบียนเลขที่ ว-204-จ-4720

Approved by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23135985
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2842597-1

Sample Number	23135985-1
Sampled Date	Dec 05, 2023 10:40 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in two amber glass bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organochlorine Group							
Endrin	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Heptachlor	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Heptachlor-Epoxide	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Lindane (gamma-BHC)	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Methoxychlor	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Wanlop Hunchainaow ทะเบียนเลขที่ ว-323-จ-9457

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Technical Management
Siriluk P.
Siriluk Puengpang
Section Head
ทะเบียนเลขที่ ว-204-จ-4720

Approved by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23135985
Date Received : Dec 05, 2023
Date Reported : Dec 13, 2023
Report Number : 2842597-2

Sample Number	23135985-1
Sampled Date	Dec 05, 2023 10:40 AM
Sample Description	Effluent
Location	WHA EIE : WWTP
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in two amber glass bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organochlorine Group							
alpha-Chlordane	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
gamma-Chlordane	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Hexachlorobenzene	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Mirex	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Wanlop Hunchainaow

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Approved by
Siriluk P.
Siriluk Puengpang
Section Head

Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 2374522
Date Received : Jul 03, 2023
Date Reported : Jul 10, 2023
Report Number : 2698332-1

Sample Number	2374522-1
Sampled Date	Jul 03, 2023 11:10 AM
Sample Description	Wastewater
Location	WHA EIE : Effluent_High TDS
Date Analysis Commenced	Jul 03, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤16	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	40	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	8.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	37.5	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	12690	(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	20	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Note : BOD Guideline set by Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Wanlop Hunchainaow ทะเบียนเลขที่ ว-323-จ-9457

Technical Management
N.Banchongkit
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
D.Changchon
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 2374522
Date Received : Jul 03, 2023
Date Reported : Jul 10, 2023
Report Number : 2698332-1

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 2388282
Date Received : Aug 02, 2023
Date Reported : Aug 08, 2023
Report Number : 2730708-1

Sample Number	2388282-1
Sampled Date	Aug 02, 2023 11:25 AM
Sample Description	Wastewater
Location	WHA EIE : Effluent_High TDS
Date Analysis Commenced	Aug 02, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤16	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	41	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	8.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	36.4	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	13250	(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	37	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Note : BOD Guideline set by Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 2388282
Date Received : Aug 02, 2023
Date Reported : Aug 08, 2023
Report Number : 2730708-1

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23101507
Date Received : Sep 01, 2023
Date Reported : Sep 08, 2023
Report Number : 2760210-1

Sample Number	23101507-1
Sampled Date	Sep 01, 2023 11:25 AM
Sample Description	Wastewater
Location	WHA EIE : Effluent_High TDS
Date Analysis Commenced	Sep 01, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	3.0	≤16	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	44	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	8.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	31.1	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	11080	(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	19	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Note : BOD Guideline set by Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Tanasit Wongsachai ทะเบียนเลขที่ ว-323-จ-9460

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23101507
Date Received : Sep 01, 2023
Date Reported : Sep 08, 2023
Report Number : 2760210-1

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23113878
Date Received : Oct 02, 2023
Date Reported : Oct 09, 2023
Report Number : 2791326-1

Sample Number	23113878-1
Sampled Date	Oct 02, 2023 11:50 AM
Sample Description	Wastewater
Location	WHA EIE : Effluent_High TDS
Date Analysis Commenced	Oct 02, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	2.1	≤16	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	50	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	8.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	35.9	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	10300	(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	18	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Note : BOD Guideline set by Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23113878
Date Received : Oct 02, 2023
Date Reported : Oct 09, 2023
Report Number : 2791326-1

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23127249
Date Received : Nov 01, 2023
Date Reported : Nov 07, 2023
Report Number : 2821491-1

Sample Number	23127249-1
Sampled Date	Nov 01, 2023 11:36 AM
Sample Description	Wastewater
Location	WHA EIE : Effluent_High TDS
Date Analysis Commenced	Nov 01, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤16	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	50	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	37.3	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	11200	(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	32	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Note : BOD Guideline set by Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Surawit Narapong ทะเบียนเลขที่ ว-323-จ-0011

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23127249
Date Received : Nov 01, 2023
Date Reported : Nov 07, 2023
Report Number : 2821491-1

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by

Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23135963
Date Received : Dec 05, 2023
Date Reported : Dec 12, 2023
Report Number : 2842452-1

Sample Number	23135963-1
Sampled Date	Dec 05, 2023 11:30 AM
Sample Description	Wastewater
Location	WHA EIE : Effluent_High TDS
Date Analysis Commenced	Dec 05, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	3.9	≤16	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	47	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	8.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	36.1	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	9500	(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	24	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : BOD Guideline set by Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563

Technical Management

Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by

Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report 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.

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: WHA EIE

Lot ID: 23135963
Date Received : Dec 05, 2023
Date Reported : Dec 12, 2023
Report Number : 2842452-1

Sampling By : Wanlop Hunchainaow ทะเบียนเลขที่ ว-323-จ-9457

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by

Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.
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ภาคผนวก ค-6

คุณลักษณะน้ำเสียโรงงาน

Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374834
Date Received : Jul 04, 2023
Date Reported : Jul 10, 2023
Report Number : 2699489-1

Sample Number 2374834-1
Sampled Date Jul 04, 2023 9:58 AM
Sample Description Wastewater
Contract ID L_EIE_001_2556 **Plot** G-69,G-70 **Site** Aditya Birla Chemicals (Thailand) Ltd. (Advanced Materials)
Date Analysis Commenced Jul 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	25.2	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	420	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	8	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	400	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	12	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Surawit Narapong ทะเบียนเลขที่ ว-323-จ-0011

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374830
Date Received : Jul 07, 2023
Date Reported : Jul 14, 2023
Report Number : 2699483-1

Sample Number 2374830-1
Sampled Date Jul 07, 2023 10:25 AM
Sample Description Wastewater
Contract ID L_EIE_018_2550 **Plot** G-08 **Site** AGC Vinythai Public Company Limited
Date Analysis Commenced Jul 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	8.3	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	42	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	408	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374821
Date Received : Jul 05, 2023
Date Reported : Jul 12, 2023
Report Number : 2699472-1

Sample Number 2374821-1
Sampled Date Jul 05, 2023 2:00 PM
Sample Description Wastewater
Contract ID L_EIE_014_2550 **Plot** G-35 **Site** Allnex (Thailand) Ltd.
Date Analysis Commenced Jul 05, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	60.9	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	152	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	9	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	492	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	33	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374822
Date Received : Jul 04, 2023
Date Reported : Jul 10, 2023
Report Number : 2699474-1

Sample Number 2374822-1
Sampled Date Jul 04, 2023 10:28 AM
Sample Description Wastewater
Contract ID L_EIE_001_2550 **Plot** G-29 **Site** Arakawa Chemical (Thailand) Ltd.
Date Analysis Commenced Jul 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, some solid and a lot of turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	42.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	129	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	8	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	424	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	17	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Surawit Narapong ทะเบียนเลขที่ ว-323-จ-0011

Remark :
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374823
Date Received : Jul 04, 2023
Date Reported : Jul 10, 2023
Report Number : 2699475-1

Sample Number 2374823-1
Sampled Date Jul 04, 2023 1:45 PM
Sample Description Wastewater
Contract ID L_EIE_002_2550 **Plot** G-09 **Site** Asia Petroleum Thailand Co.,Ltd.
Date Analysis Commenced Jul 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	212	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Surawit Narapong ทะเบียนเลขที่ ว-323-จ-0011

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374840
Date Received : Jul 10, 2023
Date Reported : Jul 17, 2023
Report Number : 2699502-1

Sample Number 2374840-1
Sampled Date Jul 10, 2023 11:20 AM
Sample Description Wastewater
Contract ID L_EIE_002_2556 **Plot** H-37 **Site** Bangkok Industrial Gas Company Limited.
Date Analysis Commenced Jul 10, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	684	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Wanlop Hunchainaow ทะเบียนเลขที่ ว-323-จ-9457

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374842
Date Received : Jul 07, 2023
Date Reported : Jul 14, 2023
Report Number : 2699505-1

Sample Number 2374842-1
Sampled Date Jul 07, 2023 11:05 AM
Sample Description Wastewater
Contract ID L_EIE_004_2550 **Plot** G-37 **Site** Carbide Chemical (Thailand) Ltd.
Location Inspection manhole
Date Analysis Commenced Jul 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Colorless, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	53.4	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	193	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1096	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374880
Date Received : Jul 06, 2023
Date Reported : Jul 12, 2023
Report Number : 2699563-1

Sample Number 2374880-1
Sampled Date Jul 06, 2023 10:20 AM
Sample Description Wastewater
Contract ID L_EIE_001_2566 **Plot** G-1/1 **Site** E-COATINGS ASIA COMPANY LIMITED
Date Analysis Commenced Jul 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and a lot of turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	19.5	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	78	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	384	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	22	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374846
Date Received : Jul 07, 2023
Date Reported : Jul 14, 2023
Report Number : 2699536-1

Sample Number 2374846-1
Sampled Date Jul 07, 2023 9:55 AM
Sample Description Wastewater
Contract ID L_WHA EIE_006_2563 **Plot** G.77, G.77/1, H.42, H.44 **Site** GC Polyols Company Limited
Date Analysis Commenced Jul 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	668	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374836
Date Received : Jul 06, 2023
Date Reported : Jul 12, 2023
Report Number : 2699496-1

Sample Number 2374836-1
Sampled Date Jul 06, 2023 3:10 PM
Sample Description Wastewater
Contract ID L_EIE_001_2551 **Plot** G-06A **Site** Global Green Chemicals Co.,Ltd.
Date Analysis Commenced Jul 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	18.7	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	80	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	612	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	19	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374832
Date Received : Jul 07, 2023
Date Reported : Jul 14, 2023
Report Number : 2699486-1

Sample Number 2374832-1
Sampled Date Jul 07, 2023 3:25 PM
Sample Description Wastewater
Contract ID L_EIE_024_2550 **Plot** G-76 **Site** Global Power Synergy Co.,Ltd.
Location CUP-1
Date Analysis Commenced Jul 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	232	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	13	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374831
Date Received : Jul 06, 2023
Date Reported : Jul 12, 2023
Report Number : 2699485-1

Sample Number 2374831-1
Sampled Date Jul 06, 2023 3:35 PM
Sample Description Wastewater
Contract ID L_EIE_002_2553 **Plot** H-17 **Site** Global Power Synergy Co.,Ltd.
Location CUP-3
Date Analysis Commenced Jul 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	256	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374835
Date Received : Jul 07, 2023
Date Reported : Jul 14, 2023
Report Number : 2699495-1

Sample Number 2374835-1
Sampled Date Jul 07, 2023 2:30 PM
Sample Description Wastewater
Contract ID L_EIE_003_2553 **Plot** G-06 **Site** HMC Polymers Co.,Ltd.
Date Analysis Commenced Jul 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	264	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374855
Date Received : Jul 05, 2023
Date Reported : Jul 12, 2023
Report Number : 2699509-1

Sample Number 2374855-1
Sampled Date Jul 05, 2023 10:25 AM
Sample Description Wastewater
Contract ID L_EIE_002_2561 **Plot** H.52A **Site** Iharanikkei Chemical (Thailand) Co.,Ltd.
Date Analysis Commenced Jul 05, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤400	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	356	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563 (Expansion)
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374820
Date Received : Jul 04, 2023
Date Reported : Jul 10, 2023
Report Number : 2699470-1

Sample Number 2374820-1
Sampled Date Jul 04, 2023 11:03 AM
Sample Description Wastewater
Contract ID L_EIE_009_2550 **Plot** G-31 **Site** Italian-Thai Development Public Co.,Ltd.
Date Analysis Commenced Jul 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	67.4	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	285	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	10	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	536	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	39	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Surawit Narapong ทะเบียนเลขที่ ว-323-จ-0011

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374818
Date Received : Jul 04, 2023
Date Reported : Jul 10, 2023
Report Number : 2699468-1

Sample Number 2374818-1
Sampled Date Jul 04, 2023 10:18 AM
Sample Description Wastewater
Contract ID L_EIE_005_2552 **Plot** G-30 **Site** KLJ Organic (Thailand) Ltd.
Date Analysis Commenced Jul 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Colorless, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	220	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Surawit Narapong ทะเบียนเลขที่ ว-323-จ-0011

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Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374859
Date Received : Jul 05, 2023
Date Reported : Jul 12, 2023
Report Number : 2699562-1

Sample Number 2374859-1
Sampled Date Jul 05, 2023 3:45 PM
Sample Description Wastewater
Contract ID L_EIE_002_2565 **Plot** H.13a, H.13e, PW.27-1, H.47b **Site** Kuraray Advanced chemicals(Thailand) Co.,Ltd.
Date Analysis Commenced Jul 05, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤400	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	100	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563 (Expansion)
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374858
Date Received : Jul 05, 2023
Date Reported : Jul 12, 2023
Report Number : 2699560-1

Sample Number 2374858-1
Sampled Date Jul 05, 2023 3:35 PM
Sample Description Wastewater
Contract ID L_EIE_001_2565 **Plot** PW.28, PW.31, H.47a, H.47c, H.51 **Site** Kuraray GC Advanced Materials Co.,Ltd. (North)
Date Analysis Commenced Jul 05, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	2.7	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	42	≤400	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1288	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563 (Expansion)
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374829
Date Received : Jul 04, 2023
Date Reported : Jul 10, 2023
Report Number : 2699482-1

Sample Number 2374829-1
Sampled Date Jul 04, 2023 2:18 PM
Sample Description Wastewater
Contract ID L_EIE_015_2550 **Plot** G-14 **Site** Linde (Thailand) PLC.
Date Analysis Commenced Jul 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	22.8	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	67	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	7	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	292	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	14	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Surawit Narapong ทะเบียนเลขที่ ว-323-จ-0011

Remark :
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374841
Date Received : Jul 05, 2023
Date Reported : Jul 12, 2023
Report Number : 2699503-1

Sample Number 2374841-1
Sampled Date Jul 05, 2023 11:30 AM
Sample Description Wastewater
Contract ID L_EIE_004_2556 **Plot** H-10 , H-11 **Site** Linde (Thailand) Public Company Limited.
Date Analysis Commenced Jul 05, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	37	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1212	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374819
Date Received : Jul 04, 2023
Date Reported : Jul 10, 2023
Report Number : 2699469-1

Sample Number	2374819-1
Sampled Date	Jul 04, 2023 10:50 AM
Sample Description	Wastewater
Contract ID	L_EIE_002_2551 **Plot** G-23 **Site** MARC (Thailand) Co.,Ltd.
Date Analysis Commenced	Jul 04, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	17.3	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	91	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	9	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	368	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	24	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Surawit Narapong ทะเบียนเลขที่ ว-323-จ-0011

Remark :
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Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374837
Date Received : Jul 05, 2023
Date Reported : Jul 12, 2023
Report Number : 2699497-1

Sample Number	2374837-1
Sampled Date	Jul 05, 2023 2:45 PM
Sample Description	Wastewater
Contract ID	L_EIE_010_2550 **Plot** G-03 **Site** MCLS Asia Co.,Ltd.
Date Analysis Commenced	Jul 05, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, a lot of odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	47.3	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	131	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1536	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	49	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374825
Date Received : Jul 04, 2023
Date Reported : Jul 10, 2023
Report Number : 2699477-1

Sample Number	2374825-1
Sampled Date	Jul 04, 2023 2:09 PM
Sample Description	Wastewater
Contract ID	L_EIE_011_2550 **Plot** G-12 **Site** Mechema Chemical Co.,Ltd.
Date Analysis Commenced	Jul 04, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	164	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	8	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Surawit Narapong ทะเบียนเลขที่ ว-323-จ-0011

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Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374817
Date Received : Jul 04, 2023
Date Reported : Jul 10, 2023
Report Number : 2699467-1

Sample Number	2374817-1
Sampled Date	Jul 04, 2023 11:15 AM
Sample Description	Wastewater
Contract ID	L_EIE_025_2550 **Plot** G-43 **Site** MIG Production Co.,Ltd.
Date Analysis Commenced	Jul 04, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Green, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	4.2	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	44	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	896	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Surawit Narapong ทะเบียนเลขที่ ว-323-จ-0011

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Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374874
Date Received : Jul 04, 2023
Date Reported : Jul 10, 2023
Report Number : 2699552-1

Sample Number 2374874-1
Sampled Date Jul 04, 2023 9:37 AM
Sample Description Wastewater
Contract ID L_EIE_003_2550 **Plot** G-72 **Site** NS BlueScope (Thailand) Limited.
Date Analysis Commenced Jul 04, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	13.4	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	77	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	7	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1612	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	17	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Surawit Narapong ทะเบียนเลขที่ ว-323-จ-0011 , Kardbundit Kitisupavanit ทะเบียนเลขที่ ว-204-จ-0001

Remark :
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374874
Date Received : Jul 04, 2023
Date Reported : Jul 11, 2023
Report Number : 2699552-2

Sample Number 2374874-1
Sampled Date Jul 04, 2023 9:37 AM
Sample Description Wastewater
Contract ID L_EIE_003_2550 **Plot** G-72 **Site** NS BlueScope (Thailand) Limited.
Date Analysis Commenced Jul 05, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Zinc	mg/L	0.003	0.005	0.02	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Surawit Narapong ทะเบียนเลขที่ ว-323-จ-0011 , Kardbundit Kitisupavanit ทะเบียนเลขที่ ว-204-จ-0001

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709

Approved by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374874
Date Received : Jul 04, 2023
Date Reported : Jul 11, 2023
Report Number : 2699552-3

Sample Number 2374874-1
Sampled Date Jul 04, 2023 9:37 AM
Sample Description Wastewater
Contract ID L_EIE_003_2550 **Plot** G-72 **Site** NS BlueScope (Thailand) Limited.
Date Analysis Commenced Jul 05, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	3.71	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Surawit Narapong , Kardbundit Kitisupavanit

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Approved by
Sawitree Noisangiam
Manager

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374871
Date Received : Jul 06, 2023
Date Reported : Jul 12, 2023
Report Number : 2699548-1

Sample Number 2374871-1
Sampled Date Jul 06, 2023 11:10 AM
Sample Description Wastewater
Contract ID L_EIE_020_2550 **Plot** G-56 - G-66,68 **Site** NS-Siam United Steel Co.,Ltd.
Location Factory 1
Date Analysis Commenced Jul 06, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	24.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	74	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	5.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	39.5	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1288	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	11	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Thanasoun Namakunna ทะเบียนเลขที่ ว-204-จ-8592

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374871
Date Received : Jul 06, 2023
Date Reported : Jul 12, 2023
Report Number : 2699548-1

- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374871
Date Received : Jul 06, 2023
Date Reported : Jul 13, 2023
Report Number : 2699548-2

Sample Number 2374871-1
Sampled Date Jul 06, 2023 11:10 AM
Sample Description Wastewater
Contract ID L_EIE_020_2550 **Plot** G-56 - G-66,68 **Site** NS-Siam United Steel Co.,Ltd.
Location Factory 1
Date Analysis Commenced Jul 07, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	1.85	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui , Thanasoun Namakunna

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Approved by
Chanattagarn Imchom
Section Head

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374873
Date Received : Jul 06, 2023
Date Reported : Jul 12, 2023
Report Number : 2699549-1

Sample Number 2374873-1
Sampled Date Jul 06, 2023 11:00 AM
Sample Description Wastewater
Contract ID L_EIE_003_2556 **Plot** G-67 **Site** Ns-Siam United Steel Co.,Ltd.
Location Factory 2
Date Analysis Commenced Jul 06, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	344	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Thanasoun Namakunna ทะเบียนเลขที่ ว-204-จ-8592

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374873
Date Received : Jul 06, 2023
Date Reported : Jul 13, 2023
Report Number : 2699549-2

Sample Number 2374873-1
Sampled Date Jul 06, 2023 11:00 AM
Sample Description Wastewater
Contract ID L_EIE_003_2556 **Plot** G-67 **Site** Ns-Siam United Steel Co.,Ltd.
Location Factory 2
Date Analysis Commenced Jul 07, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Zinc	mg/L	0.003	0.005	0.49	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Thanasoun Namakunna ทะเบียนเลขที่ ว-204-จ-8592

Remark :
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Technical Management
Chanattagarn Imchom
Section Head
ทะเบียนเลขที่ ว-204-จ-4710

Approved by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 2374839
Date Received : Jul 06, 2023
Date Reported : Jul 12, 2023
Report Number : 2699499-1

Sample Number 2374839-1
Sampled Date Jul 06, 2023 2:40 PM
Sample Description Wastewater
Contract ID L_EIE_002_2554 **Plot** H-12 **Site** PTT Asahi Chemical Co.,Ltd.
Date Analysis Commenced Jul 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	12.7	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	39	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1832	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	9	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 2374828
Date Received : Jul 07, 2023
Date Reported : Jul 14, 2023
Report Number : 2699480-1

Sample Number 2374828-1
Sampled Date Jul 07, 2023 10:10 AM
Sample Description Wastewater
Contract ID L_EIE_003_2554 **Plot** G-02,03 **Site** PTT Global Chemical Public Company Limited. (EA Plant)
Date Analysis Commenced Jul 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	110	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	293	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1156	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	49	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 2374865
Date Received :Jul 06, 2023
Date Reported :Jul 12, 2023
Report Number :2699537-1

Sample Number 2374865-1
Sampled Date Jul 06, 2023 10:40 AM
Sample Description Wastewater
Contract ID L_EIE_023_2550 **Plot** G-02-02A-03 **Site** PTT Global Chemical Public Company Limited. (EG Plant)
Date Analysis Commenced Jul 06, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	4.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	784	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	12	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 2374865
Date Received :Jul 06, 2023
Date Reported :Jul 12, 2023
Report Number :2699537-2

Sample Number 2374865-1
Sampled Date Jul 06, 2023 10:40 AM
Sample Description Wastewater
Contract ID L_EIE_023_2550 **Plot** G-02-02A-03 **Site** PTT Global Chemical Public Company Limited. (EG Plant)
Date Analysis Commenced Jul 08, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Chloride as Cl2	mg/L	0.5	1	178	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (B)	Rayong

Sampling By : Sansoen Khuiyoksui

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Approved by
Narumon Banchongkit
Supervisor

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374867
Date Received : Jul 04, 2023
Date Reported : Jul 10, 2023
Report Number : 2699543-1

Sample Number 2374867-1
Sampled Date Jul 04, 2023 3:26 PM
Sample Description Wastewater
Contract ID L_EIE_001_2553 **Plot** H-29 **Site** PTT Global Chemical Public Company Limited.
Date Analysis Commenced Jul 04, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	41.4	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	140	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	200	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	19	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Surawit Narapong ทะเบียนเลขที่ ว-323-จ-0011

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report
TESTING
No.0042
Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE
Lot ID: 2374867
Date Received : Jul 04, 2023
Date Reported : Jul 10, 2023
Report Number : 2699543-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445
Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442
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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374845
Date Received : Jul 05, 2023
Date Reported : Jul 12, 2023
Report Number : 2699527-1

Sample Number 2374845-1
Sampled Date Jul 05, 2023 2:14 PM
Sample Description Wastewater
Contract ID L_WHA EIE_002_2563 **Plot** G.18/2, G.20/1, H.28/1, H.34/1, PW18/1, PW.19, PW.20 **Site** PTT Global Chemical Public Company Limited
Location จุดที่ 1
Date Analysis Commenced Jul 05, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	42	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	944	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445
Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442
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Analysis / Test Report
TESTING
No.0042
Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE
Lot ID: 2374845
Date Received : Jul 05, 2023
Date Reported : Jul 12, 2023
Report Number : 2699527-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445
Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442
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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374863
Date Received : Jul 05, 2023
Date Reported : Jul 12, 2023
Report Number : 2699530-1

Sample Number 2374863-1
Sampled Date Jul 05, 2023 2:20 PM
Sample Description Wastewater
Contract ID L_WHA EIE_003_2563 **Plot** G.18/2, G.20/1, H.28/1, H.34/1, PW18/1, PW.19, PW.20 **Site** PTT Global Chemical Public Company Limited
Location จุดที่ 2
Date Analysis Commenced Jul 05, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	16480	(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	22	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
- LOD : Limit of Detection

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report
TESTING
No.0042
Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE
Lot ID: 2374863
Date Received : Jul 05, 2023
Date Reported : Jul 12, 2023
Report Number : 2699530-1

- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445
Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442
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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374852
Date Received : Jul 06, 2023
Date Reported : Jul 12, 2023
Report Number : 2699494-1

Sample Number 2374852-1
Sampled Date Jul 06, 2023 10:00 AM
Sample Description Wastewater
Contract ID L_EIE_001_2552 **Plot** H-20-22 **Site** PTT Global Chemical Public Company Limited
Location Station-1 (Admin)
Date Analysis Commenced Jul 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	56.1	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	161	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	404	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	20	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445
Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442
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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374869
Date Received : Jul 06, 2023
Date Reported : Jul 12, 2023
Report Number : 2699546-1

Sample Number 2374869-1
Sampled Date Jul 06, 2023 9:45 AM
Sample Description Wastewater
Contract ID L_EIE_002_2552 **Plot** H-20-22 **Site** PTT Global Chemical Public Company Limited
Location Station-2 (Factory)
Date Analysis Commenced Jul 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	3.4	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	59	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol	mg/L	0.005	0.01	<0.010	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	10520	(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	28	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445
Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442
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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374869
Date Received : Jul 06, 2023
Date Reported : Jul 12, 2023
Report Number : 2699546-1

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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374851
Date Received : Jul 06, 2023
Date Reported : Jul 12, 2023
Report Number : 2699493-1

Sample Number	2374851-1
Sampled Date	Jul 06, 2023 2:15 PM
Sample Description	Wastewater
Contract ID	L_EIE_004_2553 **Plot** H-23A,H-31 **Site** PTT Global Chemical Public Company Limited
Location	Bis-Phenol A
Date Analysis Commenced	Jul 06, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, a lot of solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	28	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	704	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	12	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374875
Date Received : Jul 05, 2023
Date Reported : Jul 12, 2023
Report Number : 2699554-1

Sample Number	2374875-1
Sampled Date	Jul 05, 2023 11:10 AM
Sample Description	Wastewater
Contract ID	L_EIE_001_2558 **Plot** H-15 **Site** S and L Specialty Polymers Co.,Ltd.
Location	Station 1
Date Analysis Commenced	Jul 05, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	43.9	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	172	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374875
Date Received : Jul 05, 2023
Date Reported : Jul 12, 2023
Report Number : 2699554-1

- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374877
Date Received : Jul 05, 2023
Date Reported : Jul 12, 2023
Report Number : 2699556-1

Sample Number 2374877-1
Sampled Date Jul 05, 2023 11:15 AM
Sample Description Wastewater
Contract ID L_EIE_002_2558 **Plot** H-15 **Site** S and L Specialty Polymers Co.,Ltd.
Location Station 2
Date Analysis Commenced Jul 05, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	2.7	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD *	mg/L	-	40	52	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	39.2	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	25820	(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	17	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374877
Date Received : Jul 05, 2023
Date Reported : Jul 12, 2023
Report Number : 2699556-1

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374876
Date Received : Jul 05, 2023
Date Reported : Jul 12, 2023
Report Number : 2699557-1

Sample Number 2374876-1
Sampled Date Jul 05, 2023 9:50 AM
Sample Description Wastewater
Contract ID L_EIE_003_2558 **Plot** H-45 **Site** SEKISUI SPECIALTY CHEMICALS (THAILAND) Co.,Ltd.
Date Analysis Commenced Jul 05, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	5.1	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	27	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	36.3	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	268	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374876
Date Received : Jul 05, 2023
Date Reported : Jul 12, 2023
Report Number : 2699557-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374824
Date Received : Jul 04, 2023
Date Reported : Jul 10, 2023
Report Number : 2699476-1

Sample Number 2374824-1
Sampled Date Jul 04, 2023 1:56 PM
Sample Description Wastewater
Contract ID L_EIE_013_2550 **Plot** G-10 **Site** Siam Stabilizers & Chemicals Co.,Ltd.
Date Analysis Commenced Jul 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	48.3	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	183	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	7	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	448	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	53	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Surawit Narapong ทะเบียนเลขที่ ว-323-จ-0011

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374844
Date Received : Jul 05, 2023
Date Reported : Jul 12, 2023
Report Number : 2699517-1

Sample Number 2374844-1
Sampled Date Jul 05, 2023 1:55 PM
Sample Description Wastewater
Contract ID L_EIE_001_2561 **Plot** G.34/1 **Site** Solvay (Thailand) Limited.
Date Analysis Commenced Jul 05, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	2.8	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	43	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	432	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374868
Date Received : Jul 04, 2023
Date Reported : Jul 10, 2023
Report Number : 2699511-1

Sample Number 2374868-1
Sampled Date Jul 04, 2023 3:06 PM
Sample Description Wastewater
Contract ID L_EIE_026_2550 **Plot** G-05 **Site** Thai Ethoxylate Co.,Ltd.
Date Analysis Commenced Jul 04, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	64.8	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	188	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	9	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	356	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	25	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Surawit Narapong ทะเบียนเลขที่ ว-323-จ-0011

Remark :
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Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374868
Date Received : Jul 04, 2023
Date Reported : Jul 10, 2023
Report Number : 2699511-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374838
Date Received : Jul 07, 2023
Date Reported : Jul 14, 2023
Report Number : 2699498-1

Sample Number	2374838-1
Sampled Date	Jul 07, 2023 3:05 PM
Sample Description	Wastewater
Contract ID	L_EIE_016_2550 **Plot** G-51 **Site** Thai Pet Resin Co.,Ltd.
Location	Station-1
Date Analysis Commenced	Jul 07, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, a lot of solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	7.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	44	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1016	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374866
Date Received : Jul 04, 2023
Date Reported : Jul 10, 2023
Report Number : 2699540-1

Sample Number	2374866-1
Sampled Date	Jul 04, 2023 2:48 PM
Sample Description	Wastewater
Contract ID	L_EIE_021_2550 **Plot** G-04 **Site** Vanachai Chemical Industries Co.,Ltd.
Date Analysis Commenced	Jul 04, 2023
Condition of Sample	Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	160	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Sampling By : Surawit Narapong ทะเบียนเลขที่ ว-323-จ-0011

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374866
Date Received : Jul 04, 2023
Date Reported : Jul 10, 2023
Report Number : 2699540-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
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Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2374843
Date Received : Jul 04, 2023
Date Reported : Jul 10, 2023
Report Number : 2699507-1

Sample Number	2374843-1
Sampled Date	Jul 04, 2023 10:37 AM
Sample Description	Wastewater
Contract ID	L_EIE_004_2558 **Plot** G.18 G.19 P.7 **Site** Vencorex (Thailand) Co.,Ltd.
Date Analysis Commenced	Jul 04, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	136	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Sampling By : Surawit Narapong ทะเบียนเลขที่ ว-323-จ-0011

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 2374850
Date Received : Jul 06, 2023
Date Reported : Jul 12, 2023
Report Number : 2699471-1

Sample Number 2374850-1
Sampled Date Jul 06, 2023 10:22 AM
Sample Description Wastewater
Contract ID L_EIE_022_2550 **Plot** G-01 **Site** Zeon Chemical (Thailand) Co.,Ltd.
Date Analysis Commenced Jul 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	58	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2392	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 2389820
Date Received : Aug 08, 2023
Date Reported : Aug 15, 2023
Report Number : 2734087-1

Sample Number 2389820-1
Sampled Date Aug 08, 2023 10:05 AM
Sample Description Wastewater
Contract ID L_EIE_001_2556 **Plot** G-69,G-70 **Site** Aditya Birla Chemicals (Thailand) Ltd. (Advanced Materials)
Date Analysis Commenced Aug 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	34.3	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	104	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	8	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	432	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	20	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 2389816
Date Received : Aug 11, 2023
Date Reported : Aug 17, 2023
Report Number : 2734071-1

Sample Number 2389816-1
Sampled Date Aug 11, 2023 9:55 AM
Sample Description Wastewater
Contract ID L_EIE_018_2550 **Plot** G-08 **Site** AGC Vinythai Public Company Limited
Date Analysis Commenced Aug 11, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and a lot of turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	37.7	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	77	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	468	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Approved by
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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 2389808
Date Received : Aug 10, 2023
Date Reported : Aug 17, 2023
Report Number : 2734054-1

Sample Number 2389808-1
Sampled Date Aug 09, 2023 11:15 AM
Sample Description Wastewater
Contract ID L_EIE_014_2550 **Plot** G-35 **Site** Allnex (Thailand) Ltd.
Date Analysis Commenced Aug 10, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, some solid and a lot of turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	96.3	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	218	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	388	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	32	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
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Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389809
Date Received : Aug 08, 2023
Date Reported : Aug 15, 2023
Report Number : 2734055-1

Sample Number 2389809-1
Sampled Date Aug 08, 2023 10:25 AM
Sample Description Wastewater
Contract ID L_EIE_001_2550 **Plot** G-29 **Site** Arakawa Chemical (Thailand) Ltd.
Date Analysis Commenced Aug 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	64.8	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	158	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	9	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	412	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	22	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389810
Date Received : Aug 08, 2023
Date Reported : Aug 15, 2023
Report Number : 2734059-1

Sample Number 2389810-1
Sampled Date Aug 08, 2023 2:00 PM
Sample Description Wastewater
Contract ID L_EIE_002_2550 **Plot** G-09 **Site** Asia Petroleum Thailand Co.,Ltd.
Date Analysis Commenced Aug 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	196	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
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Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389826
Date Received : Aug 07, 2023
Date Reported : Aug 15, 2023
Report Number : 2734145-1

Sample Number 2389826-1
Sampled Date Aug 07, 2023 10:35 AM
Sample Description Wastewater
Contract ID L_EIE_002_2556 **Plot** H-37 **Site** Bangkok Industrial Gas Company Limited.
Date Analysis Commenced Aug 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	30	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	672	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Chainusorn Lertnanthakunchai ทะเบียนเลขที่ ว-323-จ-9461

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Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389828
Date Received : Aug 11, 2023
Date Reported : Aug 17, 2023
Report Number : 2734155-1

Sample Number 2389828-1
Sampled Date Aug 11, 2023 10:25 AM
Sample Description Wastewater
Contract ID L_EIE_004_2550 **Plot** G-37 **Site** Carbide Chemical (Thailand) Ltd.
Location Inspection manhole
Date Analysis Commenced Aug 11, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Colorless, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	43.8	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	297	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1416	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389833
Date Received : Aug 08, 2023
Date Reported : Aug 15, 2023
Report Number : 2734278-1

Sample Number 2389833-1
Sampled Date Aug 08, 2023 1:50 PM
Sample Description Wastewater
Contract ID L_EIE_001_2566 **Plot** G-1/1 **Site** E-COATINGS ASIA COMPANY LIMITED
Date Analysis Commenced Aug 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid, and a lot of turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	26.2	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	52	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	308	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	62	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389832
Date Received : Aug 11, 2023
Date Reported : Aug 17, 2023
Report Number : 2734171-1

Sample Number 2389832-1
Sampled Date Aug 11, 2023 9:40 AM
Sample Description Wastewater
Contract ID L_WHA EIE_006_2563 **Plot** G.77, G.77/1, H.42, H.44 **Site** GC Polyols Company Limited
Date Analysis Commenced Aug 11, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	516	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389822
Date Received : Aug 11, 2023
Date Reported : Aug 17, 2023
Report Number : 2734092-1

Sample Number 2389822-1
Sampled Date Aug 11, 2023 2:55 PM
Sample Description Wastewater
Contract ID L_EIE_001_2551 **Plot** G-06A **Site** Global Green Chemicals Co.,Ltd.
Date Analysis Commenced Aug 11, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	3.8	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	436	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389818
Date Received : Aug 09, 2023
Date Reported : Aug 16, 2023
Report Number : 2734079-1

Sample Number 2389818-1
Sampled Date Aug 09, 2023 2:05 PM
Sample Description Wastewater
Contract ID L_EIE_024_2550 **Plot** G-76 **Site** Global Power Synergy Co.,Ltd.
Location CUP-1
Date Analysis Commenced Aug 09, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	436	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	40	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389817
Date Received : Aug 09, 2023
Date Reported : Aug 16, 2023
Report Number : 2734075-1

Sample Number 2389817-1
Sampled Date Aug 09, 2023 2:45 PM
Sample Description Wastewater
Contract ID L_EIE_002_2553 **Plot** H-17 **Site** Global Power Synergy Co.,Ltd.
Location CUP-3
Date Analysis Commenced Aug 09, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	800	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389821
Date Received : Aug 11, 2023
Date Reported : Aug 17, 2023
Report Number : 2734090-1

Sample Number 2389821-1
Sampled Date Aug 11, 2023 1:55 PM
Sample Description Wastewater
Contract ID L_EIE_003_2553 **Plot** G-06 **Site** HMC Polymers Co.,Ltd.
Date Analysis Commenced Aug 11, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	232	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
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ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389845
Date Received : Aug 09, 2023
Date Reported : Aug 16, 2023
Report Number : 2734159-1

Sample Number 2389845-1
Sampled Date Aug 09, 2023 10:25 AM
Sample Description Wastewater
Contract ID L_EIE_002_2561 **Plot** H.52A **Site** Iharanikkei Chemical (Thailand) Co.,Ltd.
Date Analysis Commenced Aug 09, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤400	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	168	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563 (Expansion)
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
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Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389805
Date Received : Aug 08, 2023
Date Reported : Aug 15, 2023
Report Number : 2734045-1

Sample Number 2389805-1
Sampled Date Aug 08, 2023 10:20 AM
Sample Description Wastewater
Contract ID L_EIE_005_2552 **Plot** G-30 **Site** KLJ Organic (Thailand) Ltd.
Date Analysis Commenced Aug 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	136	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
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Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389850
Date Received : Aug 10, 2023
Date Reported : Aug 17, 2023
Report Number : 2734276-1

Sample Number 2389850-1
Sampled Date Aug 10, 2023 2:50 PM
Sample Description Wastewater
Contract ID L_EIE_002_2565 **Plot** H.13a, H.13e, PW.27-1, H.47b **Site** Kuraray Advanced chemicals(Thailand) Co.,Ltd.
Date Analysis Commenced Aug 10, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤400	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	59	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	18	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563 (Expansion)
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Approved by
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Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389849
Date Received : Aug 10, 2023
Date Reported : Aug 17, 2023
Report Number : 2734269-1

Sample Number 2389849-1
Sampled Date Aug 10, 2023 2:35 PM
Sample Description Wastewater
Contract ID L_EIE_001_2565 **Plot** PW.28, PW.31, H.47a, H.47c, H.51 **Site** Kuraray GC Advanced Materials Co.,Ltd. (North)
Date Analysis Commenced Aug 10, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	17.5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	88	≤400	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	820	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563 (Expansion)
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
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ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389815
Date Received : Aug 08, 2023
Date Reported : Aug 15, 2023
Report Number : 2734067-1

Sample Number 2389815-1
Sampled Date Aug 08, 2023 2:25 PM
Sample Description Wastewater
Contract ID L_EIE_015_2550 **Plot** G-14 **Site** Linde (Thailand) PLC.
Date Analysis Commenced Aug 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	17.1	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	47	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	212	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	12	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
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ทะเบียนเลขที่ ว-323-จ-9445

Approved by
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Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389827
Date Received : Aug 11, 2023
Date Reported : Aug 17, 2023
Report Number : 2734154-1

Sample Number 2389827-1
Sampled Date Aug 11, 2023 11:00 AM
Sample Description Wastewater
Contract ID L_EIE_004_2556 **Plot** H-10 , H-11 **Site** Linde (Thailand) Public Company Limited.
Date Analysis Commenced Aug 11, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	2.4	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	788	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	8	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389806
Date Received : Aug 08, 2023
Date Reported : Aug 15, 2023
Report Number : 2734047-1

Sample Number 2389806-1
Sampled Date Aug 08, 2023 10:50 AM
Sample Description Wastewater
Contract ID L_EIE_002_2551 **Plot** G-23 **Site** MARC (Thailand) Co.,Ltd.
Date Analysis Commenced Aug 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	88.6	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	260	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	7	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	388	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	45	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389823
Date Received : Aug 09, 2023
Date Reported : Aug 16, 2023
Report Number : 2734093-1

Sample Number 2389823-1
Sampled Date Aug 09, 2023 11:35 AM
Sample Description Wastewater
Contract ID L_EIE_010_2550 **Plot** G-03 **Site** MCLS Asia Co.,Ltd.
Date Analysis Commenced Aug 09, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, a lot of solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	70.1	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	172	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1464	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	38	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389812
Date Received : Aug 08, 2023
Date Reported : Aug 15, 2023
Report Number : 2734061-1

Sample Number 2389812-1
Sampled Date Aug 08, 2023 2:15 PM
Sample Description Wastewater
Contract ID L_EIE_011_2550 **Plot** G-12 **Site** Mechema Chemical Co.,Ltd.
Date Analysis Commenced Aug 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	176	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389804
Date Received : Aug 08, 2023
Date Reported : Aug 15, 2023
Report Number : 2734044-1

Sample Number 2389804-1
Sampled Date Aug 08, 2023 11:15 AM
Sample Description Wastewater
Contract ID L_EIE_025_2550 **Plot** G-43 **Site** MIG Production Co.,Ltd.
Date Analysis Commenced Aug 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, a lot of solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	40	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	508	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	33	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389865
Date Received : Aug 08, 2023
Date Reported : Aug 16, 2023
Report Number : 2734193-1

Sample Number 2389865-1
Sampled Date Aug 08, 2023 9:45 AM
Sample Description Wastewater
Contract ID L_EIE_003_2550 **Plot** G-72 **Site** NS BlueScope (Thailand) Limited.
Date Analysis Commenced Aug 08, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	8.5	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	37	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1724	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Samart Khumphlee ทะเบียนเลขที่ ว-204-จ-7830

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389865
Date Received : Aug 08, 2023
Date Reported : Aug 16, 2023
Report Number : 2734193-2

Sample Number 2389865-1
Sampled Date Aug 08, 2023 9:45 AM
Sample Description Wastewater
Contract ID L_EIE_003_2550 **Plot** G-72 **Site** NS BlueScope (Thailand) Limited.
Date Analysis Commenced Aug 09, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Zinc	mg/L	0.003	0.005	0.01	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Samart Khumphlee ทะเบียนเลขที่ ว-204-จ-7830

Remark :
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Technical Management
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709

Approved by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389865
Date Received : Aug 08, 2023
Date Reported : Aug 16, 2023
Report Number : 2734193-3

Sample Number 2389865-1
Sampled Date Aug 08, 2023 9:45 AM
Sample Description Wastewater
Contract ID L_EIE_003_2550 **Plot** G-72 **Site** NS BlueScope (Thailand) Limited.
Date Analysis Commenced Aug 09, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	1.34	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui , Samart Khumphlee

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Approved by
Sawitree Noisangiam
Manager

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389863
Date Received : Aug 10, 2023
Date Reported : Aug 17, 2023
Report Number : 2734185-1

Sample Number 2389863-1
Sampled Date Aug 10, 2023 10:45 AM
Sample Description Wastewater
Contract ID L_EIE_020_2550 **Plot** G-56 - G-66,68 **Site** NS-Siam United Steel Co.,Ltd.
Location Factory 1
Date Analysis Commenced Aug 10, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	2.5	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	35.7	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	432	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	11	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Samart Khumphlee ทะเบียนเลขที่ ว-204-จ-7830

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389863
Date Received : Aug 10, 2023
Date Reported : Aug 17, 2023
Report Number : 2734185-1

- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389863
Date Received : Aug 10, 2023
Date Reported : Aug 17, 2023
Report Number : 2734185-2

Sample Number 2389863-1
Sampled Date Aug 10, 2023 10:45 AM
Sample Description Wastewater
Contract ID L_EIE_020_2550 **Plot** G-56 - G-66,68 **Site** NS-Siam United Steel Co.,Ltd.
Location Factory 1
Date Analysis Commenced Aug 11, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.45	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui , Samart Khumphlee

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Approved by
Chanattagarn Imchom
Section Head

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389864
Date Received : Aug 10, 2023
Date Reported : Aug 17, 2023
Report Number : 2734191-1

Sample Number 2389864-1
Sampled Date Aug 10, 2023 11:00 AM
Sample Description Wastewater
Contract ID L_EIE_003_2556 **Plot** G-67 **Site** Ns-Siam United Steel Co.,Ltd.
Location Factory 2
Date Analysis Commenced Aug 10, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	316	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Samart Khumphlee ทะเบียนเลขที่ ว-204-จ-7830

Remark :
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389864
Date Received : Aug 10, 2023
Date Reported : Aug 17, 2023
Report Number : 2734191-2

Sample Number 2389864-1
Sampled Date Aug 10, 2023 11:00 AM
Sample Description Wastewater
Contract ID L_EIE_003_2556 **Plot** G-67 **Site** Ns-Siam United Steel Co.,Ltd.
Location Factory 2
Date Analysis Commenced Aug 11, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Zinc	mg/L	0.003	0.005	0.46	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Samart Khumphlee ทะเบียนเลขที่ ว-204-จ-7830

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Technical Management
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709

Approved by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 2389825
Date Received : Aug 10, 2023
Date Reported : Aug 17, 2023
Report Number : 2734144-1

Sample Number 2389825-1
Sampled Date Aug 10, 2023 2:00 PM
Sample Description Wastewater
Contract ID L_EIE_002_2554 **Plot** H-12 **Site** PTT Asahi Chemical Co.,Ltd.
Date Analysis Commenced Aug 10, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	14.7	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	34	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1756	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	10	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

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P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 2389814
Date Received : Aug 11, 2023
Date Reported : Aug 17, 2023
Report Number : 2734065-1

Sample Number 2389814-1
Sampled Date Aug 11, 2023 2:35 PM
Sample Description Wastewater
Contract ID L_EIE_003_2554 **Plot** G-02,03 **Site** PTT Global Chemical Public Company Limited. (EA Plant)
Date Analysis Commenced Aug 11, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	190	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	437	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	592	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	26	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 2389858
Date Received :Aug 11, 2023
Date Reported :Aug 17, 2023
Report Number :2734173-1

Sample Number 2389858-1
Sampled Date Aug 11, 2023 2:25 PM
Sample Description Wastewater
Contract ID L_EIE_023_2550 **Plot** G-02-02A-03 **Site** PTT Global Chemical Public Company Limited. (EG Plant)
Date Analysis Commenced Aug 11, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	5.9	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	640	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 2389858
Date Received :Aug 11, 2023
Date Reported :Aug 17, 2023
Report Number :2734173-2

Sample Number 2389858-1
Sampled Date Aug 11, 2023 2:25 PM
Sample Description Wastewater
Contract ID L_EIE_023_2550 **Plot** G-02-02A-03 **Site** PTT Global Chemical Public Company Limited. (EG Plant)
Date Analysis Commenced Aug 15, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Chloride as Cl2	mg/L	0.5	1	147	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (B)	Rayong

Sampling By : Sansoen Khuiyoksui

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Approved by
Narumon Banchongkit
Supervisor

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Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 2389858
Date Received : Aug 11, 2023
Date Reported : Aug 17, 2023
Report Number : 2734173-2

Sample Number 2389858-1
Sampled Date Aug 11, 2023 2:25 PM
Sample Description Wastewater
Contract ID L_EIE_023_2550 **Plot** G-02-02A-03 **Site** PTT Global Chemical Public Company Limited. (EG Plant)
Date Analysis Commenced Aug 15, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Chloride as Cl	mg/L	0.5	1	147	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (B)	Rayong

Sampling By : Sansoen Khuiyoksui

Remark :
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Narumon Banchongkit
Supervisor

Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 2389860
Date Received : Aug 08, 2023
Date Reported : Aug 15, 2023
Report Number : 2734180-1

Sample Number 2389860-1
Sampled Date Aug 08, 2023 3:20 PM
Sample Description Wastewater
Contract ID L_EIE_001_2553 **Plot** H-29 **Site** PTT Global Chemical Public Company Limited.
Date Analysis Commenced Aug 08, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	93.2	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	169	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	220	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	13	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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Technical Management
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Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 2389860
Date Received : Aug 08, 2023
Date Reported : Aug 15, 2023
Report Number : 2734180-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 2389831
Date Received : Aug 10, 2023
Date Reported : Aug 17, 2023
Report Number : 2734162-1

Sample Number 2389831-1
Sampled Date Aug 10, 2023 10:05 AM
Sample Description Wastewater
Contract ID L_WHA EIE_002_2563 **Plot** G.18/2, G.20/1, H.28/1, H.34/1, PW18/1, PW.19, PW.20 **Site** PTT Global Chemical Public Company Limited
Location จุดที่ 1
Date Analysis Commenced Aug 10, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	4.2	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	45	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	928	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389831
Date Received : Aug 10, 2023
Date Reported : Aug 17, 2023
Report Number : 2734162-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389856
Date Received : Aug 10, 2023
Date Reported : Aug 17, 2023
Report Number : 2734164-1

Sample Number 2389856-1
Sampled Date Aug 10, 2023 10:15 AM
Sample Description Wastewater
Contract ID L_WHA EIE_003_2563 **Plot** G.18/2, G.20/1, H.28/1, H.34/1, PW18/1, PW.19, PW.20 **Site** PTT Global Chemical Public Company Limited
Location จุดที่ 2
Date Analysis Commenced Aug 10, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	4.1	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	36	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2788	(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
- LOD : Limit of Detection

Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389856
Date Received : Aug 10, 2023
Date Reported : Aug 17, 2023
Report Number : 2734164-1

- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389843
Date Received : Aug 10, 2023
Date Reported : Aug 17, 2023
Report Number : 2734088-1

Sample Number 2389843-1
Sampled Date Aug 10, 2023 10:30 AM
Sample Description Wastewater
Contract ID L_EIE_004_2553 **Plot** H-23A,H-31 **Site** PTT Global Chemical Public Company Limited
Location Bis-Phenol A
Date Analysis Commenced Aug 10, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	17.3	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	75	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	644	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	12	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389819
Date Received : Aug 08, 2023
Date Reported : Aug 15, 2023
Report Number : 2734081-1

Sample Number 2389819-1
Sampled Date Aug 08, 2023 10:00 AM
Sample Description Wastewater
Contract ID L_EIE_005_2550 **Plot** G-71 **Site** Rockwool (Thailand) Limited.
Date Analysis Commenced Aug 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	145	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	307	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	7	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	444	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	63	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389867
Date Received : Aug 09, 2023
Date Reported : Aug 15, 2023
Report Number : 2734248-1

Sample Number 2389867-1
Sampled Date Aug 09, 2023 11:05 AM
Sample Description Wastewater
Contract ID L_EIE_001_2558 **Plot** H-15 **Site** S and L Specialty Polymers Co.,Ltd.
Location Station 1
Date Analysis Commenced Aug 09, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	40.8	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	<5	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389867
Date Received : Aug 09, 2023
Date Reported : Aug 15, 2023
Report Number : 2734248-1

- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389868
Date Received : Aug 09, 2023
Date Reported : Aug 16, 2023
Report Number : 2734260-1

Sample Number 2389868-1
Sampled Date Aug 09, 2023 10:15 AM
Sample Description Wastewater
Contract ID L_EIE_002_2558 **Plot** H-15 **Site** S and L Specialty Polymers Co.,Ltd.
Location Station 2
Date Analysis Commenced Aug 09, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	5.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD *	mg/L	-	40	<40	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 C	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	37.5	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	25920	(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	11	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389868
Date Received : Aug 09, 2023
Date Reported : Aug 16, 2023
Report Number : 2734260-1

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389866
Date Received : Aug 09, 2023
Date Reported : Aug 15, 2023
Report Number : 2734267-1

Sample Number 2389866-1
Sampled Date Aug 09, 2023 9:40 AM
Sample Description Wastewater
Contract ID L_EIE_003_2558 **Plot** H-45 **Site** SEKISUI SPECIALTY CHEMICALS (THAILAND) Co.,Ltd.
Date Analysis Commenced Aug 09, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	11.8	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	33	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	33.0	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	188	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	8	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389866
Date Received : Aug 09, 2023
Date Reported : Aug 15, 2023
Report Number : 2734267-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389811
Date Received : Aug 08, 2023
Date Reported : Aug 15, 2023
Report Number : 2734060-1

Sample Number 2389811-1
Sampled Date Aug 08, 2023 2:10 PM
Sample Description Wastewater
Contract ID L_EIE_013_2550 **Plot** G-10 **Site** Siam Stabilizers & Chemicals Co.,Ltd.
Date Analysis Commenced Aug 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	34.7	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	101	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	912	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	28	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389830
Date Received : Aug 10, 2023
Date Reported : Aug 17, 2023
Report Number : 2734158-1

Sample Number 2389830-1
Sampled Date Aug 10, 2023 11:25 AM
Sample Description Wastewater
Contract ID L_EIE_001_2561 **Plot** G.34/1 **Site** Solvay (Thailand) Limited.
Date Analysis Commenced Aug 10, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	9.4	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	55	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	176	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389861
Date Received : Aug 08, 2023
Date Reported : Aug 15, 2023
Report Number : 2734160-1

Sample Number 2389861-1
Sampled Date Aug 08, 2023 2:55 PM
Sample Description Wastewater
Contract ID L_EIE_026_2550 **Plot** G-05 **Site** Thai Ethoxylate Co.,Ltd.
Date Analysis Commenced Aug 08, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	34.3	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	99	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	300	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	20	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389861
Date Received : Aug 08, 2023
Date Reported : Aug 15, 2023
Report Number : 2734160-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389824
Date Received : Aug 10, 2023
Date Reported : Aug 17, 2023
Report Number : 2734143-1

Sample Number 2389824-1
Sampled Date Aug 10, 2023 3:35 PM
Sample Description Wastewater
Contract ID L_EIE_016_2550 **Plot** G-51 **Site** Thai Pet Resin Co.,Ltd.
Location Station-1
Date Analysis Commenced Aug 10, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, a lot of solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	7.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	59	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	916	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	38	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389859
Date Received : Aug 08, 2023
Date Reported : Aug 15, 2023
Report Number : 2734175-1

Sample Number 2389859-1
Sampled Date Aug 08, 2023 2:45 PM
Sample Description Wastewater
Contract ID L_EIE_021_2550 **Plot** G-04 **Site** Vanachai Chemical Industries Co.,Ltd.
Date Analysis Commenced Aug 08, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	176	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report
TESTING
No.0042
Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE
Lot ID: 2389859
Date Received : Aug 08, 2023
Date Reported : Aug 15, 2023
Report Number : 2734175-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445
Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442
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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389829
Date Received : Aug 08, 2023
Date Reported : Aug 15, 2023
Report Number : 2734157-1

Sample Number 2389829-1
Sampled Date Aug 08, 2023 10:40 AM
Sample Description Wastewater
Contract ID L_EIE_004_2558 **Plot** G.18 G.19 P.7 **Site** Vencorex (Thailand) Co.,Ltd.
Date Analysis Commenced Aug 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	37.1	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	105	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	5	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	276	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	32	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445
Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442
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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 2389842
Date Received :Aug 08, 2023
Date Reported :Aug 15, 2023
Report Number :2734049-1

Sample Number 2389842-1
Sampled Date Aug 08, 2023 1:52 PM
Sample Description Wastewater
Contract ID L_EIE_022_2550 **Plot** G-01 **Site** Zeon Chemical (Thailand) Co.,Ltd.
Date Analysis Commenced Aug 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	7.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	36	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1444	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445
Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442
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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 2389847
Date Received : Aug 11, 2023
Date Reported : Aug 17, 2023
Report Number : 2734161-1

Sample Number 2389847-1
Sampled Date Aug 11, 2023 3:30 PM
Sample Description Wastewater
Contract ID L_WHA EIE_001_2563 **Plot** H-49 **Site** Zeon Chemicals Asia Co.,Ltd.
Date Analysis Commenced Aug 11, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	12.6	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	166	≤400	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1464	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	11	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563 (Expansion)
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101622
Date Received : Sep 04, 2023
Date Reported : Sep 11, 2023
Report Number : 2760747-1

Sample Number 23101622-1
Sampled Date Sep 04, 2023 10:00 AM
Sample Description Wastewater
Contract ID L_EIE_001_2556 **Plot** G-69,G-70 **Site** Aditya Birla Chemicals (Thailand) Ltd. (Advanced Materials)
Date Analysis Commenced Sep 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	22.5	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	121	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	6	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	464	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	15	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

Remark :
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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101618
Date Received : Sep 08, 2023
Date Reported : Sep 14, 2023
Report Number : 2760743-1

Sample Number 23101618-1
Sampled Date Sep 08, 2023 10:20 AM
Sample Description Wastewater
Contract ID L_EIE_018_2550 **Plot** G-08 **Site** AGC Vinythai Public Company Limited
Date Analysis Commenced Sep 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	14.3	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	62	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	392	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101610
Date Received : Sep 04, 2023
Date Reported : Sep 11, 2023
Report Number : 2760705-1

Sample Number 23101610-1
Sampled Date Sep 04, 2023 2:00 PM
Sample Description Wastewater
Contract ID L_EIE_014_2550 **Plot** G-35 **Site** Allnex (Thailand) Ltd.
Date Analysis Commenced Sep 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	17.6	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	78	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	5	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	312	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	15	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101611
Date Received : Sep 04, 2023
Date Reported : Sep 11, 2023
Report Number : 2760706-1

Sample Number 23101611-1
Sampled Date Sep 04, 2023 10:30 AM
Sample Description Wastewater
Contract ID L_EIE_001_2550 **Plot** G-29 **Site** Arakawa Chemical (Thailand) Ltd.
Date Analysis Commenced Sep 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	93.2	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	238	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	8	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2432	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	10	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101612
Date Received : Sep 04, 2023
Date Reported : Sep 11, 2023
Report Number : 2760707-1

Sample Number 23101612-1
Sampled Date Sep 04, 2023 2:25 PM
Sample Description Wastewater
Contract ID L_EIE_002_2550 **Plot** G-09 **Site** Asia Petroleum Thailand Co.,Ltd.
Date Analysis Commenced Sep 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	268	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101628
Date Received : Sep 11, 2023
Date Reported : Sep 18, 2023
Report Number : 2760757-1

Sample Number 23101628-1
Sampled Date Sep 11, 2023 11:18 AM
Sample Description Wastewater
Contract ID L_EIE_002_2556 **Plot** H-37 **Site** Bangkok Industrial Gas Company Limited.
Date Analysis Commenced Sep 11, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	544	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Chainusorn Lertnanthakunchai ทะเบียนเลขที่ ว-323-จ-9461

Remark :
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101630
Date Received : Sep 08, 2023
Date Reported : Sep 14, 2023
Report Number : 2760761-1

Sample Number 23101630-1
Sampled Date Sep 08, 2023 10:45 AM
Sample Description Wastewater
Contract ID L_EIE_004_2550 **Plot** G-37 **Site** Carbide Chemical (Thailand) Ltd.
Location Inspection manhole
Date Analysis Commenced Sep 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Colorless, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	43.4	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	202	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1590	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	13	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101635
Date Received : Sep 05, 2023
Date Reported : Sep 11, 2023
Report Number : 2760797-1

Sample Number 23101635-1
Sampled Date Sep 05, 2023 1:40 PM
Sample Description Wastewater
Contract ID L_EIE_001_2566 **Plot** G-1/1 **Site** E-COATINGS ASIA COMPANY LIMITED
Date Analysis Commenced Sep 05, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	31.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	113	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	508	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	21	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101634
Date Received : Sep 08, 2023
Date Reported : Sep 14, 2023
Report Number : 2760784-1

Sample Number 23101634-1
Sampled Date Sep 08, 2023 9:55 AM
Sample Description Wastewater
Contract ID L_WHA EIE_006_2563 **Plot** G.77, G.77/1, H.42, H.44 **Site** GC Polyols Company Limited
Date Analysis Commenced Sep 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	548	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101624
Date Received : Sep 08, 2023
Date Reported : Sep 14, 2023
Report Number : 2760751-1

Sample Number 23101624-1
Sampled Date Sep 08, 2023 2:55 PM
Sample Description Wastewater
Contract ID L_EIE_001_2551 **Plot** G-06A **Site** Global Green Chemicals Co.,Ltd.
Date Analysis Commenced Sep 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, a lot of solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	16.8	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	62	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	360	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	16	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101620
Date Received : Sep 07, 2023
Date Reported : Sep 13, 2023
Report Number : 2760745-1

Sample Number 23101620-1
Sampled Date Sep 07, 2023 11:00 AM
Sample Description Wastewater
Contract ID L_EIE_024_2550 **Plot** G-76 **Site** Global Power Synergy Co.,Ltd.
Location CUP-1
Date Analysis Commenced Sep 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	336	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	16	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101619
Date Received : Sep 07, 2023
Date Reported : Sep 13, 2023
Report Number : 2760744-1

Sample Number 23101619-1
Sampled Date Sep 07, 2023 3:10 PM
Sample Description Wastewater
Contract ID L_EIE_002_2553 **Plot** H-17 **Site** Global Power Synergy Co.,Ltd.
Location CUP-3
Date Analysis Commenced Sep 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	47	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1124	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	10	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101623
Date Received : Sep 08, 2023
Date Reported : Sep 14, 2023
Report Number : 2760750-1

Sample Number 23101623-1
Sampled Date Sep 08, 2023 3:30 PM
Sample Description Wastewater
Contract ID L_EIE_003_2553 **Plot** G-06 **Site** HMC Polymers Co.,Ltd.
Date Analysis Commenced Sep 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	202	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101643
Date Received : Sep 05, 2023
Date Reported : Sep 11, 2023
Report Number : 2760765-1

Sample Number 23101643-1
Sampled Date Sep 05, 2023 9:55 AM
Sample Description Wastewater
Contract ID L_EIE_002_2561 **Plot** H.52A **Site** Iharanikkei Chemical (Thailand) Co.,Ltd.
Date Analysis Commenced Sep 05, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	16.8	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	41	≤400	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	832	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563 (Expansion)
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101607
Date Received : Sep 04, 2023
Date Reported : Sep 11, 2023
Report Number : 2760671-1

Sample Number 23101607-1
Sampled Date Sep 04, 2023 10:15 AM
Sample Description Wastewater
Contract ID L_EIE_005_2552 **Plot** G-30 **Site** KLJ Organic (Thailand) Ltd.
Date Analysis Commenced Sep 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	184	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101647
Date Received : Sep 07, 2023
Date Reported : Sep 13, 2023
Report Number : 2760796-1

Sample Number 23101647-1
Sampled Date Sep 07, 2023 2:45 PM
Sample Description Wastewater
Contract ID L_EIE_002_2565 **Plot** H.13a, H.13e, PW.27-1, H.47b **Site** Kuraray Advanced chemicals(Thailand) Co.,Ltd.
Date Analysis Commenced Sep 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤400	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563 (Expansion)
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101646
Date Received : Sep 07, 2023
Date Reported : Sep 13, 2023
Report Number : 2760795-1

Sample Number 23101646-1
Sampled Date Sep 07, 2023 2:30 PM
Sample Description Wastewater
Contract ID L_EIE_001_2565 **Plot** PW.28, PW.31, H.47a, H.47c, H.51 **Site** Kuraray GC Advanced Materials Co.,Ltd. (North)
Date Analysis Commenced Sep 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤400	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1124	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563 (Expansion)
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101617
Date Received : Sep 04, 2023
Date Reported : Sep 11, 2023
Report Number : 2760741-1

Sample Number 23101617-1
Sampled Date Sep 04, 2023 3:10 PM
Sample Description Wastewater
Contract ID L_EIE_015_2550 **Plot** G-14 **Site** Linde (Thailand) PLC.
Date Analysis Commenced Sep 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	13.2	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	58	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	248	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	16	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101629
Date Received : Sep 05, 2023
Date Reported : Sep 11, 2023
Report Number : 2760760-1

Sample Number 23101629-1
Sampled Date Sep 05, 2023 2:47 PM
Sample Description Wastewater
Contract ID L_EIE_004_2556 **Plot** H-10 , H-11 **Site** Linde (Thailand) Public Company Limited.
Date Analysis Commenced Sep 05, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	31	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	968	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	9	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101608
Date Received : Sep 04, 2023
Date Reported : Sep 11, 2023
Report Number : 2760672-1

Sample Number 23101608-1
Sampled Date Sep 04, 2023 11:20 AM
Sample Description Wastewater
Contract ID L_EIE_002_2551 **Plot** G-23 **Site** MARC (Thailand) Co.,Ltd.
Date Analysis Commenced Sep 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property White, a lot of odour, some solid and a lot of turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	107	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	425	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	6	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	384	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	44	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101625
Date Received : Sep 05, 2023
Date Reported : Sep 11, 2023
Report Number : 2760753-1

Sample Number 23101625-1
Sampled Date Sep 05, 2023 11:15 AM
Sample Description Wastewater
Contract ID L_EIE_010_2550 **Plot** G-03 **Site** MCLS Asia Co.,Ltd.
Date Analysis Commenced Sep 05, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	40.4	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	128	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1908	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	32	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101614
Date Received : Sep 04, 2023
Date Reported : Sep 11, 2023
Report Number : 2760727-1

Sample Number 23101614-1
Sampled Date Sep 04, 2023 2:55 PM
Sample Description Wastewater
Contract ID L_EIE_011_2550 **Plot** G-12 **Site** Mechema Chemical Co.,Ltd.
Date Analysis Commenced Sep 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	228	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101606
Date Received : Sep 04, 2023
Date Reported : Sep 11, 2023
Report Number : 2760669-1

Sample Number 23101606-1
Sampled Date Sep 04, 2023 11:35 AM
Sample Description Wastewater
Contract ID L_EIE_025_2550 **Plot** G-43 **Site** MIG Production Co.,Ltd.
Date Analysis Commenced Sep 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	2.7	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	43	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1040	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101665
Date Received : Sep 04, 2023
Date Reported : Sep 11, 2023
Report Number : 2760791-1

Sample Number 23101665-1
Sampled Date Sep 04, 2023 9:35 AM
Sample Description Wastewater
Contract ID L_EIE_003_2550 **Plot** G-72 **Site** NS BlueScope (Thailand) Limited.
Date Analysis Commenced Sep 04, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	14.7	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	65	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	8	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1592	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	14	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101665
Date Received : Sep 04, 2023
Date Reported : Sep 11, 2023
Report Number : 2760791-2

Sample Number 23101665-1
Sampled Date Sep 04, 2023 9:35 AM
Sample Description Wastewater
Contract ID L_EIE_003_2550 **Plot** G-72 **Site** NS BlueScope (Thailand) Limited.
Date Analysis Commenced Sep 05, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Zinc	mg/L	0.003	0.005	0.03	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709

Approved by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101665
Date Received : Sep 04, 2023
Date Reported : Sep 11, 2023
Report Number : 2760791-3

Sample Number 23101665-1
Sampled Date Sep 04, 2023 9:35 AM
Sample Description Wastewater
Contract ID L_EIE_003_2550 **Plot** G-72 **Site** NS BlueScope (Thailand) Limited.
Date Analysis Commenced Sep 05, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	3.32	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun , Pattarapol Sawangjaitam

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Approved by
Sawitree Noisangiam
Manager

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101663
Date Received : Sep 07, 2023
Date Reported : Sep 13, 2023
Report Number : 2760789-1

Sample Number 23101663-1
Sampled Date Sep 07, 2023 11:30 AM
Sample Description Wastewater
Contract ID L_EIE_020_2550 **Plot** G-56 - G-66,68 **Site** NS-Siam United Steel Co.,Ltd.
Location Factory 1
Date Analysis Commenced Sep 07, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	6.6	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	36	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	36.4	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	684	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	14	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Samart Khumphlee ทะเบียนเลขที่ ว-204-จ-7830

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101663
Date Received : Sep 07, 2023
Date Reported : Sep 13, 2023
Report Number : 2760789-1

- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101663
Date Received : Sep 07, 2023
Date Reported : Sep 14, 2023
Report Number : 2760789-2

Sample Number 23101663-1
Sampled Date Sep 07, 2023 11:30 AM
Sample Description Wastewater
Contract ID L_EIE_020_2550 **Plot** G-56 - G-66,68 **Site** NS-Siam United Steel Co.,Ltd.
Location Factory 1
Date Analysis Commenced Sep 11, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.69	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui , Samart Khumphlee

Remark :
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Approved by
Sawitree Noisangiam
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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101664
Date Received : Sep 07, 2023
Date Reported : Sep 13, 2023
Report Number : 2760790-1

Sample Number 23101664-1
Sampled Date Sep 07, 2023 11:10 AM
Sample Description Wastewater
Contract ID L_EIE_003_2556 **Plot** G-67 **Site** Ns-Siam United Steel Co.,Ltd.
Location Factory 2
Date Analysis Commenced Sep 07, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	332	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Samart Khumphlee ทะเบียนเลขที่ ว-204-จ-7830

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101664
Date Received : Sep 07, 2023
Date Reported : Sep 14, 2023
Report Number : 2760790-2

Sample Number 23101664-1
Sampled Date Sep 07, 2023 11:10 AM
Sample Description Wastewater
Contract ID L_EIE_003_2556 **Plot** G-67 **Site** Ns-Siam United Steel Co.,Ltd.
Location Factory 2
Date Analysis Commenced Sep 11, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Zinc	mg/L	0.003	0.005	0.64	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Samart Khumphlee ทะเบียนเลขที่ ว-204-จ-7830

Remark :
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- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709

Approved by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 23101627
Date Received : Sep 07, 2023
Date Reported : Sep 13, 2023
Report Number : 2760756-1

Sample Number 23101627-1
Sampled Date Sep 07, 2023 1:55 PM
Sample Description Wastewater
Contract ID L_EIE_002_2554 **Plot** H-12 **Site** PTT Asahi Chemical Co.,Ltd.
Date Analysis Commenced Sep 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	31	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	5	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1980	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 23101616
Date Received : Sep 08, 2023
Date Reported : Sep 14, 2023
Report Number : 2760739-1

Sample Number 23101616-1
Sampled Date Sep 08, 2023 2:20 PM
Sample Description Wastewater
Contract ID L_EIE_003_2554 **Plot** G-02,03 **Site** PTT Global Chemical Public Company Limited. (EA Plant)
Date Analysis Commenced Sep 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	90.8	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	172	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	244	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	15	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 23101657
Date Received :Sep 08, 2023
Date Reported :Sep 14, 2023
Report Number :2760785-1

Sample Number 23101657-1
Sampled Date Sep 08, 2023 2:15 PM
Sample Description Wastewater
Contract ID L_EIE_023_2550 **Plot** G-02-02A-03 **Site** PTT Global Chemical Public Company Limited. (EG Plant)
Date Analysis Commenced Sep 08, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	7.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	72	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	708	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 23101657
Date Received :Sep 08, 2023
Date Reported :Sep 14, 2023
Report Number :2760785-2

Sample Number 23101657-1
Sampled Date Sep 08, 2023 2:15 PM
Sample Description Wastewater
Contract ID L_EIE_023_2550 **Plot** G-02-02A-03 **Site** PTT Global Chemical Public Company Limited. (EG Plant)
Date Analysis Commenced Sep 09, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Chloride as Cl2	mg/L	0.5	1	163	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (B)	Rayong

Sampling By : Sansoen Khuiyoksui

Remark :
- LOD : Limit of Detection
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Approved by
Narumon Banchongkit
Supervisor

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101660
Date Received : Sep 05, 2023
Date Reported : Sep 11, 2023
Report Number : 2760787-1

Sample Number 23101660-1
Sampled Date Sep 05, 2023 2:30 PM
Sample Description Wastewater
Contract ID L_EIE_001_2553 **Plot** H-29 **Site** PTT Global Chemical Public Company Limited.
Date Analysis Commenced Sep 05, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	104	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	214	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	5	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	464	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	29	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report
TESTING
No.0042
Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE
Lot ID: 23101660
Date Received : Sep 05, 2023
Date Reported : Sep 11, 2023
Report Number : 2760787-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445
Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442
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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101633
Date Received : Sep 07, 2023
Date Reported : Sep 13, 2023
Report Number : 2760774-1

Sample Number 23101633-1
Sampled Date Sep 07, 2023 10:20 AM
Sample Description Wastewater
Contract ID L_WHA EIE_002_2563 **Plot** G.18/2, G.20/1, H.28/1, H.34/1, PW18/1, PW.19, PW.20 **Site** PTT Global Chemical Public Company Limited
Location จุดที่ 1
Date Analysis Commenced Sep 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	46	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1176	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report
TESTING
No.0042
Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE
Lot ID: 23101633
Date Received : Sep 07, 2023
Date Reported : Sep 13, 2023
Report Number : 2760774-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445
Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442
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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101641
Date Received : Sep 07, 2023
Date Reported : Sep 13, 2023
Report Number : 2760749-1

Sample Number 23101641-1
Sampled Date Sep 07, 2023 9:55 AM
Sample Description Wastewater
Contract ID L_EIE_001_2552 **Plot** H-20-22 **Site** PTT Global Chemical Public Company Limited
Location Station-1 (Admin)
Date Analysis Commenced Sep 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	104	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	261	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	6	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	444	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	34	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101662
Date Received : Sep 07, 2023
Date Reported : Sep 14, 2023
Report Number : 2760788-1

Sample Number 23101662-1
Sampled Date Sep 07, 2023 9:45 AM
Sample Description Wastewater
Contract ID L_EIE_002_2552 **Plot** H-20-22 **Site** PTT Global Chemical Public Company Limited
Location Station-2 (Factory)
Date Analysis Commenced Sep 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	9.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	70	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol *	mg/L	0.005	0.01	Not Detected	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	7256	(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	27	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :

Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101662
Date Received : Sep 07, 2023
Date Reported : Sep 14, 2023
Report Number : 2760788-1

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101640
Date Received : Sep 07, 2023
Date Reported : Sep 13, 2023
Report Number : 2760748-1

Sample Number 23101640-1
Sampled Date Sep 07, 2023 10:25 AM
Sample Description Wastewater
Contract ID L_EIE_004_2553 **Plot** H-23A,H-31 **Site** PTT Global Chemical Public Company Limited
Location Bis-Phenol A
Date Analysis Commenced Sep 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	33	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	696	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101621
Date Received : Sep 04, 2023
Date Reported : Sep 11, 2023
Report Number : 2760746-1

Sample Number	23101621-1
Sampled Date	Sep 04, 2023 9:50 AM
Sample Description	Wastewater
Contract ID	L_EIE_005_2550 **Plot** G-71 **Site** Rockwool (Thailand) Limited.
Date Analysis Commenced	Sep 04, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, a lot of odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	152	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	380	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	10	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	524	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	62	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101666
Date Received : Sep 05, 2023
Date Reported : Sep 11, 2023
Report Number : 2760792-1

Sample Number	23101666-1
Sampled Date	Sep 05, 2023 10:30 AM
Sample Description	Wastewater
Contract ID	L_EIE_001_2558 **Plot** H-15 **Site** S and L Specialty Polymers Co.,Ltd.
Location	Station 1
Date Analysis Commenced	Sep 05, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	39.0	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	340	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101666
Date Received : Sep 05, 2023
Date Reported : Sep 11, 2023
Report Number : 2760792-1

- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101668
Date Received : Sep 05, 2023
Date Reported : Sep 13, 2023
Report Number : 2760793-1

Sample Number	23101668-1
Sampled Date	Sep 05, 2023 10:35 AM
Sample Description	Wastewater
Contract ID	L_EIE_002_2558 **Plot** H-15 **Site** S and L Specialty Polymers Co.,Ltd.
Location	Station 2
Date Analysis Commenced	Sep 05, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	5.9	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD *	mg/L	-	40	46	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 C	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	37.5	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	27516	(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	10	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

Remark :

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101668
Date Received : Sep 05, 2023
Date Reported : Sep 13, 2023
Report Number : 2760793-1

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Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101667
Date Received : Sep 05, 2023
Date Reported : Sep 11, 2023
Report Number : 2760794-1

Sample Number 23101667-1
Sampled Date Sep 05, 2023 9:35 AM
Sample Description Wastewater
Contract ID L_EIE_003_2558 **Plot** H-45 **Site** SEKISUI SPECIALTY CHEMICALS (THAILAND) Co.,Ltd.
Date Analysis Commenced Sep 05, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	13.8	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	36	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	34.0	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	332	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	10	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

Remark :
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Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101667
Date Received : Sep 05, 2023
Date Reported : Sep 11, 2023
Report Number : 2760794-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101613
Date Received : Sep 04, 2023
Date Reported : Sep 11, 2023
Report Number : 2760708-1

Sample Number 23101613-1
Sampled Date Sep 04, 2023 2:40 PM
Sample Description Wastewater
Contract ID L_EIE_013_2550 **Plot** G-10 **Site** Siam Stabilizers & Chemicals Co.,Ltd.
Date Analysis Commenced Sep 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	50.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	153	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	5	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	568	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	38	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101632
Date Received : Sep 04, 2023
Date Reported : Sep 11, 2023
Report Number : 2760764-1

Sample Number 23101632-1
Sampled Date Sep 04, 2023 2:05 PM
Sample Description Wastewater
Contract ID L_EIE_001_2561 **Plot** G.34/1 **Site** Solvay (Thailand) Limited.
Date Analysis Commenced Sep 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	10.5	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	33	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	492	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	29	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101661
Date Received : Sep 05, 2023
Date Reported : Sep 11, 2023
Report Number : 2760770-1

Sample Number 23101661-1
Sampled Date Sep 05, 2023 2:10 PM
Sample Description Wastewater
Contract ID L_EIE_026_2550 **Plot** G-05 **Site** Thai Ethoxylate Co.,Ltd.
Date Analysis Commenced Sep 05, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	48.8	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	140	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	400	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	25	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

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Technical Management
Narumon Banchongkit
Supervisor
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Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101661
Date Received : Sep 05, 2023
Date Reported : Sep 11, 2023
Report Number : 2760770-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101626
Date Received : Sep 05, 2023
Date Reported : Sep 11, 2023
Report Number : 2760755-1

Sample Number 23101626-1
Sampled Date Sep 05, 2023 3:05 PM
Sample Description Wastewater
Contract ID L_EIE_016_2550 **Plot** G-51 **Site** Thai Pet Resin Co.,Ltd.
Location Station-1
Date Analysis Commenced Sep 05, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	9.9	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	45	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	968	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	9	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101659
Date Received : Sep 04, 2023
Date Reported : Sep 11, 2023
Report Number : 2760786-1

Sample Number 23101659-1
Sampled Date Sep 04, 2023 3:30 PM
Sample Description Wastewater
Contract ID L_EIE_021_2550 **Plot** G-04 **Site** Vanachai Chemical Industries Co.,Ltd.
Date Analysis Commenced Sep 04, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	236	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101659
Date Received : Sep 04, 2023
Date Reported : Sep 11, 2023
Report Number : 2760786-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
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Senior Manager
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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101631
Date Received : Sep 04, 2023
Date Reported : Sep 11, 2023
Report Number : 2760762-1

Sample Number 23101631-1
Sampled Date Sep 04, 2023 10:55 AM
Sample Description Wastewater
Contract ID L_EIE_004_2558 **Plot** G.18 G.19 P.7 **Site** Vencorex (Thailand) Co.,Ltd.
Date Analysis Commenced Sep 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	33.1	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	132	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	5	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	432	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	34	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

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Technical Management
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Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 23101638
Date Received :Sep 05, 2023
Date Reported :Sep 11, 2023
Report Number :2760704-1

Sample Number 23101638-1
Sampled Date Sep 05, 2023 2:45 PM
Sample Description Wastewater
Contract ID L_EIE_022_2550 **Plot** G-01 **Site** Zeon Chemical (Thailand) Co.,Ltd.
Date Analysis Commenced Sep 05, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	10.8	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	55	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2644	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	21	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
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Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23101644
Date Received : Sep 07, 2023
Date Reported : Sep 13, 2023
Report Number : 2760772-1

Sample Number 23101644-1
Sampled Date Sep 07, 2023 2:10 PM
Sample Description Wastewater
Contract ID L_WHA EIE_001_2563 **Plot** H-49 **Site** Zeon Chemicals Asia Co.,Ltd.
Date Analysis Commenced Sep 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	47	≤400	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1780	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	11	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563 (Expansion)
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113929
Date Received : Oct 03, 2023
Date Reported : Oct 10, 2023
Report Number : 2792155-1

Sample Number 23113929-1
Sampled Date Oct 03, 2023 9:50 AM
Sample Description Wastewater
Contract ID L_EIE_001_2556 **Plot** G-69,G-70 **Site** Aditya Birla Chemicals (Thailand) Ltd. (Advanced Materials)
Date Analysis Commenced Oct 03, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	15.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	99	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	356	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	16	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113925
Date Received : Oct 06, 2023
Date Reported : Oct 12, 2023
Report Number : 2792149-1

Sample Number 23113925-1
Sampled Date Oct 06, 2023 10:30 AM
Sample Description Wastewater
Contract ID L_EIE_018_2550 **Plot** G-08 **Site** AGC Vinythai Public Company Limited
Date Analysis Commenced Oct 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	11.1	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	55	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	396	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113917
Date Received : Oct 05, 2023
Date Reported : Oct 12, 2023
Report Number : 2792134-1

Sample Number 23113917-1
Sampled Date Oct 05, 2023 10:30 AM
Sample Description Wastewater
Contract ID L_EIE_014_2550 **Plot** G-35 **Site** Allnex (Thailand) Ltd.
Date Analysis Commenced Oct 05, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	83.7	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	207	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	9	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	380	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	30	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113918
Date Received : Oct 03, 2023
Date Reported : Oct 10, 2023
Report Number : 2792135-1

Sample Number 23113918-1
Sampled Date Oct 03, 2023 10:26 AM
Sample Description Wastewater
Contract ID L_EIE_001_2550 **Plot** G-29 **Site** Arakawa Chemical (Thailand) Ltd.
Date Analysis Commenced Oct 03, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	47.3	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	118	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	8	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	436	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	29	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113919
Date Received : Oct 04, 2023
Date Reported : Oct 10, 2023
Report Number : 2792136-1

Sample Number 23113919-1
Sampled Date Oct 04, 2023 10:48 AM
Sample Description Wastewater
Contract ID L_EIE_002_2550 **Plot** G-09 **Site** Asia Petroleum Thailand Co.,Ltd.
Date Analysis Commenced Oct 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	248	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113935
Date Received : Oct 09, 2023
Date Reported : Oct 16, 2023
Report Number : 2792167-1

Sample Number 23113935-1
Sampled Date Oct 09, 2023 11:13 AM
Sample Description Wastewater
Contract ID L_EIE_002_2556 **Plot** H-37 **Site** Bangkok Industrial Gas Company Limited.
Date Analysis Commenced Oct 09, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	27	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	5	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	728	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	8	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Chainusorn Lertnanthakunchai ทะเบียนเลขที่ ว-323-จ-9461

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113937
Date Received : Oct 06, 2023
Date Reported : Oct 12, 2023
Report Number : 2792169-1

Sample Number 23113937-1
Sampled Date Oct 06, 2023 2:10 PM
Sample Description Wastewater
Contract ID L_EIE_004_2550 **Plot** G-37 **Site** Carbide Chemical (Thailand) Ltd.
Location Inspection manhole
Date Analysis Commenced Oct 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Colorless, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	11.9	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	54	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1000	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113957
Date Received : Oct 04, 2023
Date Reported : Oct 11, 2023
Report Number : 2792204-1

Sample Number 23113957-1
Sampled Date Oct 04, 2023 11:01 AM
Sample Description Wastewater
Contract ID L_EIE_001_2566 **Plot** G-1/1 **Site** E-COATINGS ASIA COMPANY LIMITED
Date Analysis Commenced Oct 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and a lot of turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	13.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	46	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	388	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	158	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113943
Date Received : Oct 06, 2023
Date Reported : Oct 12, 2023
Report Number : 2792187-1

Sample Number 23113943-1
Sampled Date Oct 06, 2023 9:50 AM
Sample Description Wastewater
Contract ID L_WHA EIE_006_2563 **Plot** G.77, G.77/1, H.42, H.44 **Site** GC Polyols Company Limited
Date Analysis Commenced Oct 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	27	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	684	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113931
Date Received : Oct 05, 2023
Date Reported : Oct 12, 2023
Report Number : 2792161-1

Sample Number 23113931-1
Sampled Date Oct 05, 2023 2:55 PM
Sample Description Wastewater
Contract ID L_EIE_001_2551 **Plot** G-06A **Site** Global Green Chemicals Co.,Ltd.
Date Analysis Commenced Oct 05, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	8.9	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	43	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	5	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	348	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	48	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113927
Date Received : Oct 06, 2023
Date Reported : Oct 12, 2023
Report Number : 2792153-1

Sample Number 23113927-1
Sampled Date Oct 06, 2023 3:20 PM
Sample Description Wastewater
Contract ID L_EIE_024_2550 **Plot** G-76 **Site** Global Power Synergy Co.,Ltd.
Location CUP-1
Date Analysis Commenced Oct 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	640	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	19	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113926
Date Received : Oct 05, 2023
Date Reported : Oct 12, 2023
Report Number : 2792150-1

Sample Number 23113926-1
Sampled Date Oct 05, 2023 3:30 PM
Sample Description Wastewater
Contract ID L_EIE_002_2553 **Plot** H-17 **Site** Global Power Synergy Co.,Ltd.
Location CUP-3
Date Analysis Commenced Oct 05, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	34	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1400	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	14	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113948
Date Received : Oct 04, 2023
Date Reported : Oct 11, 2023
Report Number : 2792176-1

Sample Number 23113948-1
Sampled Date Oct 04, 2023 9:30 AM
Sample Description Wastewater
Contract ID L_EIE_002_2561 **Plot** H.52A **Site** Iharanikkei Chemical (Thailand) Co.,Ltd.
Date Analysis Commenced Oct 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤400	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	424	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563 (Expansion)
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113914
Date Received : Oct 03, 2023
Date Reported : Oct 10, 2023
Report Number : 2792127-1

Sample Number 23113914-1
Sampled Date Oct 03, 2023 10:16 AM
Sample Description Wastewater
Contract ID L_EIE_005_2552 **Plot** G-30 **Site** KLJ Organic (Thailand) Ltd.
Date Analysis Commenced Oct 03, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	196	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113952
Date Received : Oct 04, 2023
Date Reported : Oct 11, 2023
Report Number : 2792202-1

Sample Number 23113952-1
Sampled Date Oct 04, 2023 3:26 PM
Sample Description Wastewater
Contract ID L_EIE_002_2565 **Plot** H.13a, H.13e, PW.27-1, H.47b **Site** Kuraray Advanced chemicals(Thailand) Co.,Ltd.
Date Analysis Commenced Oct 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤400	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	128	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	28	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563 (Expansion)
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113951
Date Received : Oct 04, 2023
Date Reported : Oct 11, 2023
Report Number : 2792201-1

Sample Number 23113951-1
Sampled Date Oct 04, 2023 2:53 PM
Sample Description Wastewater
Contract ID L_EIE_001_2565 **Plot** PW.28, PW.31, H.47a, H.47c, H.51 **Site** Kuraray GC Advanced Materials Co.,Ltd. (North)
Date Analysis Commenced Oct 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	3.3	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤400	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	596	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563 (Expansion)
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113924
Date Received : Oct 05, 2023
Date Reported : Oct 16, 2023
Report Number : 2792147-1

Sample Number 23113924-1
Sampled Date Oct 05, 2023 1:35 PM
Sample Description Wastewater
Contract ID L_EIE_015_2550 **Plot** G-14 **Site** Linde (Thailand) PLC.
Date Analysis Commenced Oct 05, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	36.2	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	135	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	7	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	308	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	18	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113936
Date Received : Oct 04, 2023
Date Reported : Oct 11, 2023
Report Number : 2792168-1

Sample Number 23113936-1
Sampled Date Oct 04, 2023 4:09 PM
Sample Description Wastewater
Contract ID L_EIE_004_2556 **Plot** H-10 , H-11 **Site** Linde (Thailand) Public Company Limited.
Date Analysis Commenced Oct 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	548	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113932
Date Received : Oct 04, 2023
Date Reported : Oct 11, 2023
Report Number : 2792162-1

Sample Number 23113932-1
Sampled Date Oct 04, 2023 10:32 AM
Sample Description Wastewater
Contract ID L_EIE_010_2550 **Plot** G-03 **Site** MCLS Asia Co.,Ltd.
Date Analysis Commenced Oct 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	113	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	241	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1540	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	38	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113913
Date Received : Oct 03, 2023
Date Reported : Oct 10, 2023
Report Number : 2792124-1

Sample Number 23113913-1
Sampled Date Oct 03, 2023 10:57 AM
Sample Description Wastewater
Contract ID L_EIE_025_2550 **Plot** G-43 **Site** MIG Production Co.,Ltd.
Date Analysis Commenced Oct 03, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	3.1	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	39	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1308	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113969
Date Received : Oct 03, 2023
Date Reported : Oct 10, 2023
Report Number : 2792196-1

Sample Number 23113969-1
Sampled Date Oct 03, 2023 9:30 AM
Sample Description Wastewater
Contract ID L_EIE_003_2550 **Plot** G-72 **Site** NS BlueScope (Thailand) Limited.
Date Analysis Commenced Oct 03, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	17.1	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	56	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	7	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1272	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	9	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006 , Kardbundit Kitisupavanit ทะเบียนเลขที่ ว-204-จ-0001

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113969
Date Received : Oct 03, 2023
Date Reported : Oct 10, 2023
Report Number : 2792196-2

Sample Number 23113969-1
Sampled Date Oct 03, 2023 9:30 AM
Sample Description Wastewater
Contract ID L_EIE_003_2550 **Plot** G-72 **Site** NS BlueScope (Thailand) Limited.
Date Analysis Commenced Oct 05, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Zinc	mg/L	0.003	0.005	0.01	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006 , Kardbundit Kitisupavanit ทะเบียนเลขที่ ว-204-จ-0001

Remark :
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Technical Management Sawitree Noisangiam, Manager, ทะเบียนเลขที่ ว-204-จ-4709
Approved by Kanokkorn Anek, Senior Manager, ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113969
Date Received : Oct 03, 2023
Date Reported : Oct 10, 2023
Report Number : 2792196-3

Sample Number 23113969-1
Sampled Date Oct 03, 2023 9:30 AM
Sample Description Wastewater
Contract ID L_EIE_003_2550 **Plot** G-72 **Site** NS BlueScope (Thailand) Limited.
Date Analysis Commenced Oct 05, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	3.23	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat , Kardbundit Kitisupavanit

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by Sawitree Noisangiam, Manager

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113966
Date Received : Oct 05, 2023
Date Reported : Oct 12, 2023
Report Number : 2792194-1

Sample Number	23113966-1
Sampled Date	Oct 05, 2023 11:15 AM
Sample Description	Wastewater
Contract ID	L_EIE_020_2550 **Plot** G-56 - G-66,68 **Site** NS-Siam United Steel Co.,Ltd.
Location	Factory 1
Date Analysis Commenced	Oct 05, 2023
Condition of Sample	Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, a lot of solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	7.2	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	30	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	5	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	32.2	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	400	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	23	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006 , Thanasoun Namakunna ทะเบียนเลขที่ ว-204-จ-8592

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113966
Date Received : Oct 05, 2023
Date Reported : Oct 12, 2023
Report Number : 2792194-1

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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113966
Date Received : Oct 05, 2023
Date Reported : Oct 12, 2023
Report Number : 2792194-2

Sample Number	23113966-1
Sampled Date	Oct 05, 2023 11:15 AM
Sample Description	Wastewater
Contract ID	L_EIE_020_2550 **Plot** G-56 - G-66,68 **Site** NS-Siam United Steel Co.,Ltd.
Location	Factory 1
Date Analysis Commenced	Oct 06, 2023
Condition of Sample	Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, a lot of solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	1.70	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat , Thanasoun Namakunna

Remark :
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Approved by
Sawitree Noisangiam
Manager

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113967
Date Received : Oct 05, 2023
Date Reported : Oct 12, 2023
Report Number : 2792195-1

Sample Number	23113967-1
Sampled Date	Oct 05, 2023 10:55 AM
Sample Description	Wastewater
Contract ID	L_EIE_003_2556 **Plot** G-67 **Site** Ns-Siam United Steel Co.,Ltd.
Location	Factory 2
Date Analysis Commenced	Oct 05, 2023
Condition of Sample	Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	344	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006 , Thanasoun Namakunna ทะเบียนเลขที่ ว-204-จ-8592

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113967
Date Received : Oct 05, 2023
Date Reported : Oct 12, 2023
Report Number : 2792195-2

Sample Number 23113967-1
Sampled Date Oct 05, 2023 10:55 AM
Sample Description Wastewater
Contract ID L_EIE_003_2556 **Plot** G-67 **Site** Ns-Siam United Steel Co.,Ltd.
Location Factory 2
Date Analysis Commenced Oct 06, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Zinc	mg/L	0.003	0.005	0.83	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006 , Thanasoun Namakunna ทะเบียนเลขที่ ว-204-จ-8592

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Technical Management Savitree Noisangiam, Manager, ทะเบียนเลขที่ ว-204-จ-4709

Approved by Kanokkorn Anek, Senior Manager, ทะเบียนเลขที่ ว-204-ค-6111

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113934
Date Received : Oct 06, 2023
Date Reported : Oct 12, 2023
Report Number : 2792164-1

Sample Number 23113934-1
Sampled Date Oct 06, 2023 11:10 AM
Sample Description Wastewater
Contract ID L_EIE_002_2554 **Plot** H-12 **Site** PTT Asahi Chemical Co.,Ltd.
Date Analysis Commenced Oct 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	3.4	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	31	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2220	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	10	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113923
Date Received : Oct 06, 2023
Date Reported : Oct 12, 2023
Report Number : 2792146-1

Sample Number 23113923-1
Sampled Date Oct 06, 2023 10:55 AM
Sample Description Wastewater
Contract ID L_EIE_003_2554 **Plot** G-02,03 **Site** PTT Global Chemical Public Company Limited. (EA Plant)
Date Analysis Commenced Oct 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	80.9	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	203	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	8	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	676	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	29	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 23113963
Date Received :Oct 05, 2023
Date Reported :Oct 12, 2023
Report Number :2792188-1

Sample Number 23113963-1
Sampled Date Oct 05, 2023 2:35 PM
Sample Description Wastewater
Contract ID L_EIE_023_2550 **Plot** G-02-02A-03 **Site** PTT Global Chemical Public Company Limited. (EG Plant)
Date Analysis Commenced Oct 05, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	18.4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	72	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	656	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	18	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 23113963
Date Received : Oct 05, 2023
Date Reported : Oct 12, 2023
Report Number : 2792188-2

Sample Number 23113963-1
Sampled Date Oct 05, 2023 2:35 PM
Sample Description Wastewater
Contract ID L_EIE_023_2550 **Plot** G-02-02A-03 **Site** PTT Global Chemical Public Company Limited. (EG Plant)
Date Analysis Commenced Oct 06, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Chloride as Cl	mg/L	0.5	1	157	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (B)	Rayong

Sampling By : Nattawut Athomprommarat

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Approved by
Narumon Banchongkit
Supervisor

Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 23113959
Date Received : Oct 06, 2023
Date Reported : Oct 12, 2023
Report Number : 2792192-1

Sample Number 23113959-1
Sampled Date Oct 06, 2023 1:50 PM
Sample Description Wastewater
Contract ID L_EIE_001_2553 **Plot** H-29 **Site** PTT Global Chemical Public Company Limited.
Date Analysis Commenced Oct 06, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	104	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	266	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	0.1	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	256	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	12	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 23113959
Date Received : Oct 06, 2023
Date Reported : Oct 12, 2023
Report Number : 2792192-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 23113942
Date Received : Oct 06, 2023
Date Reported : Oct 12, 2023
Report Number : 2792179-1

Sample Number 23113942-1
Sampled Date Oct 06, 2023 10:10 AM
Sample Description Wastewater
Contract ID L_WHA EIE_002_2563 **Plot** G.18/2, G.20/1, H.28/1, H.34/1, PW18/1, PW.19, PW.20 **Site** PTT Global Chemical Public Company Limited
Location จุดที่ 1
Date Analysis Commenced Oct 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	41	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1104	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113942
Date Received : Oct 06, 2023
Date Reported : Oct 12, 2023
Report Number : 2792179-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113954
Date Received : Oct 06, 2023
Date Reported : Oct 12, 2023
Report Number : 2792182-1

Sample Number 23113954-1
Sampled Date Oct 06, 2023 10:15 AM
Sample Description Wastewater
Contract ID L_WHA EIE_003_2563 **Plot** G.18/2, G.20/1, H.28/1, H.34/1, PW18/1, PW.19, PW.20 **Site** PTT Global Chemical Public Company Limited
Location จุดที่ 2
Date Analysis Commenced Oct 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, a lot of solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	14672	(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	13	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
- LOD : Limit of Detection

Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113954
Date Received : Oct 06, 2023
Date Reported : Oct 12, 2023
Report Number : 2792182-1

- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113945
Date Received : Oct 05, 2023
Date Reported : Oct 12, 2023
Report Number : 2792158-1

Sample Number 23113945-1
Sampled Date Oct 05, 2023 9:35 AM
Sample Description Wastewater
Contract ID L_EIE_001_2552 **Plot** H-20-22 **Site** PTT Global Chemical Public Company Limited
Location Station-1 (Admin)
Date Analysis Commenced Oct 05, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	149	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	345	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	10	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	540	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	44	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113964
Date Received : Oct 05, 2023
Date Reported : Oct 12, 2023
Report Number : 2792193-1

Sample Number	23113964-1
Sampled Date	Oct 05, 2023 9:20 AM
Sample Description	Wastewater
Contract ID	L_EIE_002_2552 **Plot** H-20-22 **Site** PTT Global Chemical Public Company Limited
Location	Station-2 (Factory)
Date Analysis Commenced	Oct 05, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	14.8	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	60	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	6192	(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	30	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113964
Date Received : Oct 05, 2023
Date Reported : Oct 12, 2023
Report Number : 2792193-1

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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S317-142/ EMAIL S:\Reports_All_GL.rpt (9:45AM)

Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113944
Date Received : Oct 05, 2023
Date Reported : Oct 12, 2023
Report Number : 2792156-1

Sample Number	23113944-1
Sampled Date	Oct 05, 2023 10:15 AM
Sample Description	Wastewater
Contract ID	L_EIE_004_2553 **Plot** H-23A,H-31 **Site** PTT Global Chemical Public Company Limited
Location	Bis-Phenol A
Date Analysis Commenced	Oct 05, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	5.8	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	36	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	572	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113970
Date Received : Oct 04, 2023
Date Reported : Oct 11, 2023
Report Number : 2792198-1

Sample Number	23113970-1
Sampled Date	Oct 04, 2023 10:08 AM
Sample Description	Wastewater
Contract ID	L_EIE_001_2558 **Plot** H-15 **Site** S and L Specialty Polymers Co.,Ltd.
Location	Station 1
Date Analysis Commenced	Oct 04, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	37.8	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	304	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113970
Date Received : Oct 04, 2023
Date Reported : Oct 11, 2023
Report Number : 2792198-1

- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113972
Date Received : Oct 04, 2023
Date Reported : Oct 11, 2023
Report Number : 2792199-1

Sample Number 23113972-1
Sampled Date Oct 04, 2023 10:12 AM
Sample Description Wastewater
Contract ID L_EIE_002_2558 **Plot** H-15 **Site** S and L Specialty Polymers Co.,Ltd.
Location Station 2
Date Analysis Commenced Oct 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD *	mg/L	-	40	51	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	36.4	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	24950	(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	22	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113972
Date Received : Oct 04, 2023
Date Reported : Oct 11, 2023
Report Number : 2792199-1

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113971
Date Received : Oct 04, 2023
Date Reported : Oct 11, 2023
Report Number : 2792200-1

Sample Number 23113971-1
Sampled Date Oct 04, 2023 9:16 AM
Sample Description Wastewater
Contract ID L_EIE_003_2558 **Plot** H-45 **Site** SEKISUI SPECIALTY CHEMICALS (THAILAND) Co.,Ltd.
Date Analysis Commenced Oct 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, some solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	31.4	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	232	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113971
Date Received : Oct 04, 2023
Date Reported : Oct 11, 2023
Report Number : 2792200-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113920
Date Received : Oct 04, 2023
Date Reported : Oct 11, 2023
Report Number : 2792138-1

Sample Number 23113920-1
Sampled Date Oct 04, 2023 11:13 AM
Sample Description Wastewater
Contract ID L_EIE_013_2550 **Plot** G-10 **Site** Siam Stabilizers & Chemicals Co.,Ltd.
Date Analysis Commenced Oct 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	44.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	180	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	8	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	484	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	40	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113941
Date Received : Oct 05, 2023
Date Reported : Oct 12, 2023
Report Number : 2792175-1

Sample Number 23113941-1
Sampled Date Oct 05, 2023 10:40 AM
Sample Description Wastewater
Contract ID L_EIE_001_2561 **Plot** G.34/1 **Site** Solvay (Thailand) Limited.
Date Analysis Commenced Oct 05, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	224	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113960
Date Received : Oct 05, 2023
Date Reported : Oct 12, 2023
Report Number : 2792177-1

Sample Number 23113960-1
Sampled Date Oct 05, 2023 2:10 PM
Sample Description Wastewater
Contract ID L_EIE_026_2550 **Plot** G-05 **Site** Thai Ethoxylate Co.,Ltd.
Date Analysis Commenced Oct 05, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, some solid and a lot of turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	41.1	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	218	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	7	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	376	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	22	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113960
Date Received : Oct 05, 2023
Date Reported : Oct 12, 2023
Report Number : 2792177-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113933
Date Received : Oct 06, 2023
Date Reported : Oct 12, 2023
Report Number : 2792163-1

Sample Number 23113933-1
Sampled Date Oct 06, 2023 2:45 PM
Sample Description Wastewater
Contract ID L_EIE_016_2550 **Plot** G-51 **Site** Thai Pet Resin Co.,Ltd.
Location Station-1
Date Analysis Commenced Oct 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	5.9	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	52	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1016	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	8	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113958
Date Received : Oct 05, 2023
Date Reported : Oct 12, 2023
Report Number : 2792191-1

Sample Number 23113958-1
Sampled Date Oct 05, 2023 1:50 PM
Sample Description Wastewater
Contract ID L_EIE_021_2550 **Plot** G-04 **Site** Vanachai Chemical Industries Co.,Ltd.
Date Analysis Commenced Oct 05, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Colorless, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	156	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23113958
Date Received : Oct 05, 2023
Date Reported : Oct 12, 2023
Report Number : 2792191-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Lot ID: 23113938

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Date Received : Oct 03, 2023
Date Reported : Oct 10, 2023
Report Number : 2792171-1

Sample Number 23113938-1
Sampled Date Oct 03, 2023 10:35 AM
Sample Description Wastewater
Contract ID L_EIE_004_2558 **Plot** G.18 G.19 P.7 **Site** Vencorex (Thailand) Co.,Ltd.
Date Analysis Commenced Oct 03, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	23.8	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	64	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	5	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	564	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	21	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Lot ID: 23113939

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Date Received :Oct 04, 2023
Date Reported :Oct 11, 2023
Report Number :2792131-1

Sample Number 23113939-1
Sampled Date Oct 04, 2023 2:58 PM
Sample Description Wastewater
Contract ID L_EIE_022_2550 **Plot** G-01 **Site** Zeon Chemical (Thailand) Co.,Ltd.
Date Analysis Commenced Oct 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	36	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2392	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	19	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Lot ID: 23113949

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Date Received : Oct 04, 2023
Date Reported : Oct 11, 2023
Report Number : 2792178-1

Sample Number 23113949-1
Sampled Date Oct 04, 2023 3:50 PM
Sample Description Wastewater
Contract ID L_WHA EIE_001_2563 **Plot** H-49 **Site** Zeon Chemicals Asia Co.,Ltd.
Date Analysis Commenced Oct 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	42	≤400	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1592	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	8	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563 (Expansion)
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Lot ID: 23127309

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Date Received : Nov 06, 2023
Date Reported : Nov 13, 2023
Report Number : 2821708-1

Sample Number 23127309-1
Sampled Date Nov 06, 2023 9:45 AM
Sample Description Wastewater
Contract ID L_EIE_001_2556 **Plot** G-69,G-70 **Site** Aditya Birla Chemicals (Thailand) Ltd. (Advanced Materials)
Date Analysis Commenced Nov 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	20.6	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	148	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	508	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	8	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

Remark :
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- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING No.0042

Lot ID: 23127305

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Date Received : Nov 08, 2023
Date Reported : Nov 15, 2023
Report Number : 2821698-1

Sample Number 23127305-1
Sampled Date Nov 08, 2023 2:40 PM
Sample Description Wastewater
Contract ID L_EIE_018_2550 **Plot** G-08 **Site** AGC Vinythai Public Company Limited
Date Analysis Commenced Nov 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	19.4	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	121	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	516	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	12	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING No.0042

Lot ID: 23128821

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Date Received : Nov 08, 2023
Date Reported : Nov 15, 2023
Report Number : 2825337-1

Sample Number 23128821-1
Sampled Date Nov 08, 2023 2:15 PM
Sample Description Wastewater
Contract ID L_EIE_002_2566 **Plot** G-15 to G-17 **Site** AGC Vinythai Public Company Limited
Date Analysis Commenced Nov 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	14.7	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	40	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	400	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	10	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING No.0042

Lot ID: 23127297

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Date Received : Nov 08, 2023
Date Reported : Nov 15, 2023
Report Number : 2821682-1

Sample Number 23127297-1
Sampled Date Nov 08, 2023 10:10 AM
Sample Description Wastewater
Contract ID L_EIE_014_2550 **Plot** G-35 **Site** Allnex (Thailand) Ltd.
Date Analysis Commenced Nov 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	44.7	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	155	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	7	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	380	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	18	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING No.0042

Lot ID: 23127298

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Date Received : Nov 08, 2023
Date Reported : Nov 15, 2023
Report Number : 2821684-1

Sample Number 23127298-1
Sampled Date Nov 08, 2023 10:25 AM
Sample Description Wastewater
Contract ID L_EIE_001_2550 **Plot** G-29 **Site** Arakawa Chemical (Thailand) Ltd.
Date Analysis Commenced Nov 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	36.5	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	181	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	5	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	484	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	19	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127299
Date Received : Nov 06, 2023
Date Reported : Nov 13, 2023
Report Number : 2821686-1

Sample Number 23127299-1
Sampled Date Nov 06, 2023 10:30 AM
Sample Description Wastewater
Contract ID L_EIE_002_2550 **Plot** G-09 **Site** Asia Petroleum Thailand Co.,Ltd.
Date Analysis Commenced Nov 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	11.8	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	35	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	348	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	14	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127316
Date Received : Nov 06, 2023
Date Reported : Nov 13, 2023
Report Number : 2821710-1

Sample Number 23127316-1
Sampled Date Nov 06, 2023 10:35 AM
Sample Description Wastewater
Contract ID L_EIE_002_2556 **Plot** H-37 **Site** Bangkok Industrial Gas Company Limited.
Date Analysis Commenced Nov 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	27	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	796	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Chainusorn Lertnanthakunchai ทะเบียนเลขที่ ว-323-จ-9461

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127318
Date Received : Nov 09, 2023
Date Reported : Nov 16, 2023
Report Number : 2821717-1

Sample Number 23127318-1
Sampled Date Nov 09, 2023 11:15 AM
Sample Description Wastewater
Contract ID L_EIE_004_2550 **Plot** G-37 **Site** Carbide Chemical (Thailand) Ltd.
Location Inspection manhole
Date Analysis Commenced Nov 09, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	324	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127338
Date Received : Nov 07, 2023
Date Reported : Nov 14, 2023
Report Number : 2821739-1

Sample Number 23127338-1
Sampled Date Nov 07, 2023 1:40 PM
Sample Description Wastewater
Contract ID L_EIE_001_2566 **Plot** G-1/1 **Site** E-COATINGS ASIA COMPANY LIMITED
Date Analysis Commenced Nov 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, some solid and a lot of turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	34.4	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	140	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	312	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	128	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127322
Date Received : Nov 09, 2023
Date Reported : Nov 16, 2023
Report Number : 2821756-1

Sample Number 23127322-1
Sampled Date Nov 09, 2023 9:55 AM
Sample Description Wastewater
Contract ID L_WHA EIE_006_2563 **Plot** G.77, G.77/1, H.42, H.44 **Site** GC Polyols Company Limited
Date Analysis Commenced Nov 09, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	616	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127311
Date Received : Nov 08, 2023
Date Reported : Nov 15, 2023
Report Number : 2821720-1

Sample Number 23127311-1
Sampled Date Nov 08, 2023 3:30 PM
Sample Description Wastewater
Contract ID L_EIE_001_2551 **Plot** G-06A **Site** Global Green Chemicals Co.,Ltd.
Date Analysis Commenced Nov 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, a lot of solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	43.5	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	247	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	404	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	58	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127307
Date Received : Nov 07, 2023
Date Reported : Nov 14, 2023
Report Number : 2821703-1

Sample Number 23127307-1
Sampled Date Nov 07, 2023 3:05 PM
Sample Description Wastewater
Contract ID L_EIE_024_2550 **Plot** G-76 **Site** Global Power Synergy Co.,Ltd.
Location CUP-1
Date Analysis Commenced Nov 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	192	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	30	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127306
Date Received : Nov 07, 2023
Date Reported : Nov 14, 2023
Report Number : 2821700-1

Sample Number 23127306-1
Sampled Date Nov 07, 2023 2:20 PM
Sample Description Wastewater
Contract ID L_EIE_002_2553 **Plot** H-17 **Site** Global Power Synergy Co.,Ltd.
Location CUP-3
Date Analysis Commenced Nov 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	844	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127310
Date Received : Nov 09, 2023
Date Reported : Nov 15, 2023
Report Number : 2821716-1

Sample Number 23127310-1
Sampled Date Nov 09, 2023 2:25 PM
Sample Description Wastewater
Contract ID L_EIE_003_2553 **Plot** G-06 **Site** HMC Polymers Co.,Ltd.
Date Analysis Commenced Nov 09, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	27	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	612	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127330
Date Received : Nov 07, 2023
Date Reported : Nov 14, 2023
Report Number : 2821735-1

Sample Number 23127330-1
Sampled Date Nov 07, 2023 10:35 AM
Sample Description Wastewater
Contract ID L_EIE_002_2561 **Plot** H.52A **Site** Iharanikkei Chemical (Thailand) Co.,Ltd.
Date Analysis Commenced Nov 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤400	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1756	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563 (Expansion)
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127293
Date Received : Nov 06, 2023
Date Reported : Nov 13, 2023
Report Number : 2821660-1

Sample Number 23127293-1
Sampled Date Nov 06, 2023 10:05 AM
Sample Description Wastewater
Contract ID L_EIE_005_2552 **Plot** G-30 **Site** KLJ Organic (Thailand) Ltd.
Date Analysis Commenced Nov 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Colorless, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	248	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

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Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127334
Date Received : Nov 07, 2023
Date Reported : Nov 14, 2023
Report Number : 2821738-1

Sample Number 23127334-1
Sampled Date Nov 07, 2023 3:55 PM
Sample Description Wastewater
Contract ID L_EIE_002_2565 **Plot** H.13a, H.13e, PW.27-1, H.47b **Site** Kuraray Advanced chemicals(Thailand) Co.,Ltd.
Date Analysis Commenced Nov 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤400	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	88	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	27	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563 (Expansion)
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127333
Date Received : Nov 07, 2023
Date Reported : Nov 14, 2023
Report Number : 2821736-1

Sample Number 23127333-1
Sampled Date Nov 07, 2023 3:40 PM
Sample Description Wastewater
Contract ID L_EIE_001_2565 **Plot** PW.28, PW.31, H.47a, H.47c, H.51 **Site** Kuraray GC Advanced Materials Co.,Ltd. (North)
Date Analysis Commenced Nov 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	19.4	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	67	≤400	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1012	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	10	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563 (Expansion)
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127304
Date Received : Nov 06, 2023
Date Reported : Nov 13, 2023
Report Number : 2821697-1

Sample Number 23127304-1
Sampled Date Nov 06, 2023 11:05 AM
Sample Description Wastewater
Contract ID L_EIE_015_2550 **Plot** G-14 **Site** Linde (Thailand) PLC.
Date Analysis Commenced Nov 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	33.2	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	178	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	508	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	12	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127317
Date Received : Nov 07, 2023
Date Reported : Nov 14, 2023
Report Number : 2821712-1

Sample Number 23127317-1
Sampled Date Nov 07, 2023 10:50 AM
Sample Description Wastewater
Contract ID L_EIE_004_2556 **Plot** H-10 , H-11 **Site** Linde (Thailand) Public Company Limited.
Date Analysis Commenced Nov 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	776	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127313
Date Received : Nov 06, 2023
Date Reported : Nov 13, 2023
Report Number : 2821722-1

Sample Number 23127313-1
Sampled Date Nov 06, 2023 3:05 PM
Sample Description Wastewater
Contract ID L_EIE_010_2550 **Plot** G-03 **Site** MCLS Asia Co.,Ltd.
Date Analysis Commenced Nov 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, a lot of solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	167	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	286	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1956	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	64	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

Remark :
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127301
Date Received : Nov 06, 2023
Date Reported : Nov 13, 2023
Report Number : 2821689-1

Sample Number 23127301-1
Sampled Date Nov 06, 2023 3:35 PM
Sample Description Wastewater
Contract ID L_EIE_011_2550 **Plot** G-12 **Site** Mechema Chemical Co.,Ltd.
Date Analysis Commenced Nov 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Colorless, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	224	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127292
Date Received : Nov 06, 2023
Date Reported : Nov 13, 2023
Report Number : 2821659-1

Sample Number 23127292-1
Sampled Date Nov 06, 2023 3:50 PM
Sample Description Wastewater
Contract ID L_EIE_025_2550 **Plot** G-43 **Site** MIG Production Co.,Ltd.
Date Analysis Commenced Nov 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Green, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	3.1	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	46	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1456	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	8	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127347
Date Received : Nov 07, 2023
Date Reported : Nov 17, 2023
Report Number : 2821777-1

Sample Number 23127347-1
Sampled Date Nov 07, 2023 9:28 AM
Sample Description Wastewater
Contract ID L_EIE_003_2550 **Plot** G-72 **Site** NS BlueScope (Thailand) Limited.
Date Analysis Commenced Nov 07, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	15.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	55	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	8	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1784	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	10	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Thanasoun Namakunna ทะเบียนเลขที่ ว-204-จ-8592

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127347
Date Received : Nov 07, 2023
Date Reported : Nov 17, 2023
Report Number : 2821777-2

Sample Number 23127347-1
Sampled Date Nov 07, 2023 9:28 AM
Sample Description Wastewater
Contract ID L_EIE_003_2550 **Plot** G-72 **Site** NS BlueScope (Thailand) Limited.
Date Analysis Commenced Nov 09, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Zinc	mg/L	0.003	0.005	0.01	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Thanasoun Namakunna ทะเบียนเลขที่ ว-204-จ-8592

Remark :
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Technical Management
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709

Approved by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127347
Date Received : Nov 07, 2023
Date Reported : Nov 17, 2023
Report Number : 2821777-3

Sample Number	23127347-1
Sampled Date	Nov 07, 2023 9:28 AM
Sample Description	Wastewater
Contract ID	L_EIE_003_2550 **Plot** G-72 **Site** NS BlueScope (Thailand) Limited.
Date Analysis Commenced	Nov 09, 2023
Condition of Sample	Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	2.28	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui , Thanasoun Namakunna

Remark :
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Approved by
Sawitree Noisangiam
Manager

Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127345
Date Received : Nov 08, 2023
Date Reported : Nov 15, 2023
Report Number : 2821797-1

Sample Number	23127345-1
Sampled Date	Nov 08, 2023 11:25 AM
Sample Description	Wastewater
Contract ID	L_EIE_020_2550 **Plot** G-56 - G-66,68 **Site** NS-Siam United Steel Co.,Ltd.
Location	Factory 1
Date Analysis Commenced	Nov 08, 2023
Condition of Sample	Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	8.4	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	30	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	33.4	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	836	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	14	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Panupong Manit ทะเบียนเลขที่ ว-204-จ-8600

Remark :
- LOD : Limit of Detection

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127345
Date Received : Nov 08, 2023
Date Reported : Nov 15, 2023
Report Number : 2821797-1

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127345
Date Received : Nov 08, 2023
Date Reported : Nov 15, 2023
Report Number : 2821797-2

Sample Number	23127345-1
Sampled Date	Nov 08, 2023 11:25 AM
Sample Description	Wastewater
Contract ID	L_EIE_020_2550 **Plot** G-56 - G-66,68 **Site** NS-Siam United Steel Co.,Ltd.
Location	Factory 1
Date Analysis Commenced	Nov 10, 2023
Condition of Sample	Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.54	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui , Panupong Manit

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Approved by
Sawitree Noisangiam
Manager

Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127346
Date Received : Nov 08, 2023
Date Reported : Nov 15, 2023
Report Number : 2821780-1

Sample Number	23127346-1
Sampled Date	Nov 08, 2023 11:05 AM
Sample Description	Wastewater
Contract ID	L_EIE_003_2556 **Plot** G-67 **Site** Ns-Siam United Steel Co.,Ltd.
Location	Factory 2
Date Analysis Commenced	Nov 08, 2023
Condition of Sample	Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	464	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Panupong Manit ทะเบียนเลขที่ ว-204-จ-8600

Remark :
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127346
Date Received : Nov 08, 2023
Date Reported : Nov 15, 2023
Report Number : 2821780-2

Sample Number	23127346-1
Sampled Date	Nov 08, 2023 11:05 AM
Sample Description	Wastewater
Contract ID	L_EIE_003_2556 **Plot** G-67 **Site** Ns-Siam United Steel Co.,Ltd.
Location	Factory 2
Date Analysis Commenced	Nov 10, 2023
Condition of Sample	Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Zinc	mg/L	0.003	0.005	0.41	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Panupong Manit ทะเบียนเลขที่ ว-204-จ-8600

Remark :
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Technical Management
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709

Approved by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127315
Date Received : Nov 08, 2023
Date Reported : Nov 15, 2023
Report Number : 2821707-1

Sample Number	23127315-1
Sampled Date	Nov 08, 2023 1:50 PM
Sample Description	Wastewater
Contract ID	L_EIE_002_2554 **Plot** H-12 **Site** PTT Asahi Chemical Co.,Ltd.
Date Analysis Commenced	Nov 08, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	28	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1240	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	10	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127303
Date Received : Nov 08, 2023
Date Reported : Nov 15, 2023
Report Number : 2821693-1

Sample Number	23127303-1
Sampled Date	Nov 08, 2023 10:45 AM
Sample Description	Wastewater
Contract ID	L_EIE_003_2554 **Plot** G-02,03 **Site** PTT Global Chemical Public Company Limited. (EA Plant)
Date Analysis Commenced	Nov 08, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and a lot of turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	94.2	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	192	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	9	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	388	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	16	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 23127339
Date Received : Nov 08, 2023
Date Reported : Nov 15, 2023
Report Number : 2822025-1

Sample Number 23127339-1
Sampled Date Nov 08, 2023 3:05 PM
Sample Description Wastewater
Contract ID L_EIE_023_2550 **Plot** G-02-02A-03 **Site** PTT Global Chemical Public Company Limited. (EG Plant)
Date Analysis Commenced Nov 08, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	13.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	64	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.9	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	728	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	17	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management N.Banchongkit

Approved by D.Changchon
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 23127339
Date Received : Nov 08, 2023
Date Reported : Nov 15, 2023
Report Number : 2822025-2

Sample Number 23127339-1
Sampled Date Nov 08, 2023 3:05 PM
Sample Description Wastewater
Contract ID L_EIE_023_2550 **Plot** G-02-02A-03 **Site** PTT Global Chemical Public Company Limited. (EG Plant)
Date Analysis Commenced Nov 09, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Chloride as Cl	mg/L	0.5	1	134	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (B)	Rayong

Sampling By : Sansoen Khuiyoksui

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Approved by N.Banchongkit
Narumon Banchongkit
Supervisor

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 23127341
Date Received : Nov 07, 2023
Date Reported : Nov 14, 2023
Report Number : 2822048-1

Sample Number 23127341-1
Sampled Date Nov 07, 2023 2:35 PM
Sample Description Wastewater
Contract ID L_EIE_001_2553 **Plot** H-29 **Site** PTT Global Chemical Public Company Limited.
Date Analysis Commenced Nov 07, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	60.9	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	176	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	5	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	304	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	21	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management N.Banchongkit
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by D.Changchon
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 23127341
Date Received : Nov 07, 2023
Date Reported : Nov 14, 2023
Report Number : 2822048-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management N.Banchongkit
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by D.Changchon
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127321
Date Received : Nov 09, 2023
Date Reported : Nov 16, 2023
Report Number : 2821746-1

Sample Number 23127321-1
Sampled Date Nov 09, 2023 2:46 PM
Sample Description Wastewater
Contract ID L_WHA EIE_002_2563 **Plot** G.18/2, G.20/1, H.28/1, H.34/1, PW18/1, PW.19, PW.20 **Site** PTT Global Chemical Public Company Limited
Location จุดที่ 1
Date Analysis Commenced Nov 09, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	27	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	256	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	9	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report
TESTING No.0042
Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE
Lot ID: 23127321
Date Received : Nov 09, 2023
Date Reported : Nov 16, 2023
Report Number : 2821746-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445
Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442
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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127325
Date Received : Nov 08, 2023
Date Reported : Nov 15, 2023
Report Number : 2821713-1

Sample Number 23127325-1
Sampled Date Nov 08, 2023 9:45 AM
Sample Description Wastewater
Contract ID L_EIE_001_2552 **Plot** H-20-22 **Site** PTT Global Chemical Public Company Limited
Location Station-1 (Admin)
Date Analysis Commenced Nov 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	147	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	382	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	7	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	588	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	46	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445
Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442
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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127344
Date Received : Nov 08, 2023
Date Reported : Nov 15, 2023
Report Number : 2821793-1

Sample Number 23127344-1
Sampled Date Nov 08, 2023 9:30 AM
Sample Description Wastewater
Contract ID L_EIE_002_2552 **Plot** H-20-22 **Site** PTT Global Chemical Public Company Limited
Location Station-2 (Factory)
Date Analysis Commenced Nov 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	26	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol	mg/L	0.005	0.01	<0.010	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	3420	(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445
Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442
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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127344
Date Received : Nov 08, 2023
Date Reported : Nov 15, 2023
Report Number : 2821793-1

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127323
Date Received : Nov 09, 2023
Date Reported : Nov 16, 2023
Report Number : 2821711-1

Sample Number 23127323-1
Sampled Date Nov 09, 2023 9:35 AM
Sample Description Wastewater
Contract ID L_EIE_004_2553 **Plot** H-23A,H-31 **Site** PTT Global Chemical Public Company Limited
Location Bis-Phenol A
Date Analysis Commenced Nov 09, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	720	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127308
Date Received : Nov 06, 2023
Date Reported : Nov 13, 2023
Report Number : 2821706-1

Sample Number 23127308-1
Sampled Date Nov 06, 2023 9:30 AM
Sample Description Wastewater
Contract ID L_EIE_005_2550 **Plot** G-71 **Site** Rockwool (Thailand) Limited.
Date Analysis Commenced Nov 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	178	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	428	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	5	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	608	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	38	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127348
Date Received : Nov 06, 2023
Date Reported : Nov 13, 2023
Report Number : 2821723-1

Sample Number 23127348-1
Sampled Date Nov 06, 2023 2:40 PM
Sample Description Wastewater
Contract ID L_EIE_001_2558 **Plot** H-15 **Site** S and L Specialty Polymers Co.,Ltd.
Location Station 1
Date Analysis Commenced Nov 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Colorless, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	41.2	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	336	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

Remark :
- LOD : Limit of Detection

Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127348
Date Received : Nov 06, 2023
Date Reported : Nov 13, 2023
Report Number : 2821723-1

- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127350
Date Received : Nov 06, 2023
Date Reported : Nov 16, 2023
Report Number : 2821732-1

Sample Number 23127350-1
Sampled Date Nov 06, 2023 2:50 PM
Sample Description Wastewater
Contract ID L_EIE_002_2558 **Plot** H-15 **Site** S and L Specialty Polymers Co.,Ltd.
Location Station 2
Date Analysis Commenced Nov 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Colorless, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	3.7	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD *	mg/L	-	40	44	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 C	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	38.0	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	26300	(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	25	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127350
Date Received : Nov 06, 2023
Date Reported : Nov 16, 2023
Report Number : 2821732-1

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127349
Date Received : Nov 06, 2023
Date Reported : Nov 13, 2023
Report Number : 2821734-1

Sample Number 23127349-1
Sampled Date Nov 06, 2023 2:00 PM
Sample Description Wastewater
Contract ID L_EIE_003_2558 **Plot** H-45 **Site** SEKISUI SPECIALTY CHEMICALS (THAILAND) Co.,Ltd.
Date Analysis Commenced Nov 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	33.4	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	156	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	32.7	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	348	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	48	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127349
Date Received : Nov 06, 2023
Date Reported : Nov 13, 2023
Report Number : 2821734-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127300
Date Received : Nov 06, 2023
Date Reported : Nov 13, 2023
Report Number : 2821688-1

Sample Number 23127300-1
Sampled Date Nov 06, 2023 10:45 AM
Sample Description Wastewater
Contract ID L_EIE_013_2550 **Plot** G-10 **Site** Siam Stabilizers & Chemicals Co.,Ltd.
Date Analysis Commenced Nov 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	65.5	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	233	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	576	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	46	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

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Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127320
Date Received : Nov 08, 2023
Date Reported : Nov 15, 2023
Report Number : 2821724-1

Sample Number 23127320-1
Sampled Date Nov 08, 2023 10:15 AM
Sample Description Wastewater
Contract ID L_EIE_001_2561 **Plot** G.34/1 **Site** Solvay (Thailand) Limited.
Date Analysis Commenced Nov 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	300	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127342
Date Received : Nov 07, 2023
Date Reported : Nov 17, 2023
Report Number : 2821737-1

Sample Number 23127342-1
Sampled Date Nov 07, 2023 11:20 AM
Sample Description Wastewater
Contract ID L_EIE_026_2550 **Plot** G-05 **Site** Thai Ethoxylate Co.,Ltd.
Date Analysis Commenced Nov 07, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	27.8	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	162	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	320	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	30	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127342
Date Received : Nov 07, 2023
Date Reported : Nov 17, 2023
Report Number : 2821737-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

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18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127314
Date Received : Nov 09, 2023
Date Reported : Nov 16, 2023
Report Number : 2821702-1

Sample Number 23127314-1
Sampled Date Nov 09, 2023 10:35 AM
Sample Description Wastewater
Contract ID L_EIE_016_2550 **Plot** G-51 **Site** Thai Pet Resin Co.,Ltd.
Location Station-1
Date Analysis Commenced Nov 09, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	6.5	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	30	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	912	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127340
Date Received : Nov 06, 2023
Date Reported : Nov 13, 2023
Report Number : 2822032-1

Sample Number 23127340-1
Sampled Date Nov 06, 2023 11:25 AM
Sample Description Wastewater
Contract ID L_EIE_021_2550 **Plot** G-04 **Site** Vanachai Chemical Industries Co.,Ltd.
Date Analysis Commenced Nov 06, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Colorless, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	276	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127340
Date Received : Nov 06, 2023
Date Reported : Nov 13, 2023
Report Number : 2822032-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management — Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by — Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127319
Date Received : Nov 07, 2023
Date Reported : Nov 14, 2023
Report Number : 2821721-1

Sample Number 23127319-1
Sampled Date Nov 07, 2023 9:50 AM
Sample Description Wastewater
Contract ID L_EIE_004_2558 **Plot** G.18 G.19 P.7 **Site** Vencorex (Thailand) Co.,Ltd.
Date Analysis Commenced Nov 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	18.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	51	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	260	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	14	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127312
Date Received :Nov 08, 2023
Date Reported :Nov 15, 2023
Report Number :2821676-1

Sample Number 23127312-1
Sampled Date Nov 08, 2023 10:35 AM
Sample Description Wastewater
Contract ID L_EIE_022_2550 **Plot** G-01 **Site** Zeon Chemical (Thailand) Co.,Ltd.
Date Analysis Commenced Nov 08, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, a lot of solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	18.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	60	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2260	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	13	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23127331
Date Received : Nov 07, 2023
Date Reported : Nov 14, 2023
Report Number : 2821745-1

Sample Number 23127331-1
Sampled Date Nov 07, 2023 10:15 AM
Sample Description Wastewater
Contract ID L_WHA EIE_001_2563 **Plot** H-49 **Site** Zeon Chemicals Asia Co.,Ltd.
Date Analysis Commenced Nov 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	3.1	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	67	≤400	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1372	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563 (Expansion)
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132643
Date Received : Dec 01, 2023
Date Reported : Dec 07, 2023
Report Number : 2835111-1

Sample Number 23132643-1
Sampled Date Dec 01, 2023 9:55 AM
Sample Description Wastewater
Contract ID L_EIE_001_2556 **Plot** G-69,G-70 **Site** Aditya Birla Chemicals (Thailand) Ltd. (Advanced Materials)
Date Analysis Commenced Dec 01, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and a lot of turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	29.9	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	167	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	5	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	440	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	26	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132639
Date Received : Dec 06, 2023
Date Reported : Dec 12, 2023
Report Number : 2835106-1

Sample Number 23132639-1
Sampled Date Dec 06, 2023 10:06 AM
Sample Description Wastewater
Contract ID L_EIE_018_2550 **Plot** G-08 **Site** AGC Vinythai Public Company Limited
Date Analysis Commenced Dec 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	17.2	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	98	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	436	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132667
Date Received : Dec 06, 2023
Date Reported : Dec 12, 2023
Report Number : 2835204-1

Sample Number 23132667-1
Sampled Date Dec 06, 2023 10:21 AM
Sample Description Wastewater
Contract ID L_EIE_002_2566 **Plot** G-15 to G-17 **Site** AGC Vinythai Public Company Limited
Date Analysis Commenced Dec 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	18.5	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	137	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	296	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	17	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132631
Date Received : Dec 06, 2023
Date Reported : Dec 12, 2023
Report Number : 2835096-1

Sample Number 23132631-1
Sampled Date Dec 06, 2023 3:23 PM
Sample Description Wastewater
Contract ID L_EIE_014_2550 **Plot** G-35 **Site** Allnex (Thailand) Ltd.
Date Analysis Commenced Dec 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	43.5	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	182	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	5	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	332	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	21	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132632
Date Received : Dec 01, 2023
Date Reported : Dec 07, 2023
Report Number : 2835097-1

Sample Number 23132632-1
Sampled Date Dec 01, 2023 10:20 AM
Sample Description Wastewater
Contract ID L_EIE_001_2550 **Plot** G-29 **Site** Arakawa Chemical (Thailand) Ltd.
Date Analysis Commenced Dec 01, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	12.1	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	87	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	448	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	12	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132633
Date Received : Dec 01, 2023
Date Reported : Dec 08, 2023
Report Number : 2835099-1

Sample Number 23132633-1
Sampled Date Dec 01, 2023 11:00 AM
Sample Description Wastewater
Contract ID L_EIE_002_2550 **Plot** G-09 **Site** Asia Petroleum Thailand Co.,Ltd.
Date Analysis Commenced Dec 01, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	192	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui หะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, หะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, หะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132649
Date Received : Dec 06, 2023
Date Reported : Dec 12, 2023
Report Number : 2835124-1

Sample Number 23132649-1
Sampled Date Dec 06, 2023 1:45 PM
Sample Description Wastewater
Contract ID L_EIE_002_2556 **Plot** H-37 **Site** Bangkok Industrial Gas Company Limited.
Date Analysis Commenced Dec 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	40	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	904	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat หะเบียนเลขที่ ว-323-จ-0006

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Technical Management Narumon Banchongkit, Supervisor, หะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, หะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132651
Date Received : Dec 07, 2023
Date Reported : Dec 13, 2023
Report Number : 2835134-1

Sample Number 23132651-1
Sampled Date Dec 07, 2023 10:40 AM
Sample Description Wastewater
Contract ID L_EIE_004_2550 **Plot** G-37 **Site** Carbide Chemical (Thailand) Ltd.
Location Inspection manhole
Date Analysis Commenced Dec 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	5.6	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	42	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	364	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui หะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, หะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, หะเบียนเลขที่ ว-323-ค-9442

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No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132666
Date Received : Dec 01, 2023
Date Reported : Dec 07, 2023
Report Number : 2835202-1

Sample Number 23132666-1
Sampled Date Dec 01, 2023 1:57 PM
Sample Description Wastewater
Contract ID L_EIE_001_2566 **Plot** G-1/1 **Site** E-COATINGS ASIA COMPANY LIMITED
Date Analysis Commenced Dec 01, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, a lot of solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	26.9	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	124	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	456	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	20	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui หะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, หะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, หะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132655
Date Received : Dec 07, 2023
Date Reported : Dec 13, 2023
Report Number : 2835180-1

Sample Number 23132655-1
Sampled Date Dec 07, 2023 9:55 AM
Sample Description Wastewater
Contract ID L_WHA EIE_006_2563 **Plot** G.77, G.77/1, H.42, H.44 **Site** GC Polyols Company Limited
Date Analysis Commenced Dec 07, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	556	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132645
Date Received : Dec 06, 2023
Date Reported : Dec 12, 2023
Report Number : 2835118-1

Sample Number 23132645-1
Sampled Date Dec 06, 2023 11:10 AM
Sample Description Wastewater
Contract ID L_EIE_001_2551 **Plot** G-06A **Site** Global Green Chemicals Co.,Ltd.
Date Analysis Commenced Dec 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	26.3	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	80	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	324	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	23	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

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Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132641
Date Received : Dec 04, 2023
Date Reported : Dec 11, 2023
Report Number : 2835109-1

Sample Number 23132641-1
Sampled Date Dec 04, 2023 4:20 PM
Sample Description Wastewater
Contract ID L_EIE_024_2550 **Plot** G-76 **Site** Global Power Synergy Co.,Ltd.
Location CUP-1
Date Analysis Commenced Dec 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	544	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	11	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132640
Date Received : Dec 06, 2023
Date Reported : Dec 12, 2023
Report Number : 2835108-1

Sample Number 23132640-1
Sampled Date Dec 06, 2023 10:47 AM
Sample Description Wastewater
Contract ID L_EIE_002_2553 **Plot** H-17 **Site** Global Power Synergy Co.,Ltd.
Location CUP-3
Date Analysis Commenced Dec 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1164	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	18	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

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Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132659
Date Received : Dec 04, 2023
Date Reported : Dec 11, 2023
Report Number : 2835165-1

Sample Number 23132659-1
Sampled Date Dec 04, 2023 10:20 AM
Sample Description Wastewater
Contract ID L_EIE_002_2561 **Plot** H.52A **Site** Iharanikkei Chemical (Thailand) Co.,Ltd.
Date Analysis Commenced Dec 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤400	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	184	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563 (Expansion)
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132628
Date Received : Dec 01, 2023
Date Reported : Dec 07, 2023
Report Number : 2835081-1

Sample Number 23132628-1
Sampled Date Dec 01, 2023 10:10 AM
Sample Description Wastewater
Contract ID L_EIE_005_2552 **Plot** G-30 **Site** KLJ Organic (Thailand) Ltd.
Date Analysis Commenced Dec 01, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Colorless, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	180	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132663
Date Received : Dec 04, 2023
Date Reported : Dec 11, 2023
Report Number : 2835200-1

Sample Number 23132663-1
Sampled Date Dec 04, 2023 2:40 PM
Sample Description Wastewater
Contract ID L_EIE_002_2565 **Plot** H.13a, H.13e, PW.27-1, H.47b **Site** Kuraray Advanced chemicals(Thailand) Co.,Ltd.
Date Analysis Commenced Dec 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤400	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	96	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563 (Expansion)
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132662
Date Received : Dec 04, 2023
Date Reported : Dec 11, 2023
Report Number : 2835199-1

Sample Number 23132662-1
Sampled Date Dec 04, 2023 2:26 PM
Sample Description Wastewater
Contract ID L_EIE_001_2565 **Plot** PW.28, PW.31, H.47a, H.47c, H.51 **Site** Kuraray GC Advanced Materials Co.,Ltd. (North)
Date Analysis Commenced Dec 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	2.4	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	51	≤400	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1024	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132638
Date Received : Dec 01, 2023
Date Reported : Dec 07, 2023
Report Number : 2835104-1

Sample Number 23132638-1
Sampled Date Dec 01, 2023 2:10 PM
Sample Description Wastewater
Contract ID L_EIE_015_2550 **Plot** G-14 **Site** Linde (Thailand) PLC.
Date Analysis Commenced Dec 01, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, a lot of solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	44.7	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	192	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	536	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	24	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132650
Date Received : Dec 04, 2023
Date Reported : Dec 11, 2023
Report Number : 2835125-1

Sample Number 23132650-1
Sampled Date Dec 04, 2023 3:00 PM
Sample Description Wastewater
Contract ID L_EIE_004_2556 **Plot** H-10 , H-11 **Site** Linde (Thailand) Public Company Limited.
Date Analysis Commenced Dec 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	36	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	708	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	9	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132629
Date Received : Dec 04, 2023
Date Reported : Dec 11, 2023
Report Number : 2835088-1

Sample Number 23132629-1
Sampled Date Dec 04, 2023 11:35 AM
Sample Description Wastewater
Contract ID L_EIE_002_2551 **Plot** G-23 **Site** MARC (Thailand) Co.,Ltd.
Date Analysis Commenced Dec 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	32.3	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	137	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	424	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	17	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132646
Date Received : Dec 04, 2023
Date Reported : Dec 11, 2023
Report Number : 2835119-1

Sample Number 23132646-1
Sampled Date Dec 04, 2023 11:05 AM
Sample Description Wastewater
Contract ID L_EIE_010_2550 **Plot** G-03 **Site** MCLS Asia Co.,Ltd.
Date Analysis Commenced Dec 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, a lot of solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	100	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	269	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1588	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	62	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

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RIGHT SOLUTIONS RIGHT PARTNER

Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132635
Date Received : Dec 01, 2023
Date Reported : Dec 07, 2023
Report Number : 2835101-1

Sample Number 23132635-1
Sampled Date Dec 01, 2023 2:00 PM
Sample Description Wastewater
Contract ID L_EIE_011_2550 **Plot** G-12 **Site** Mechema Chemical Co.,Ltd.
Date Analysis Commenced Dec 01, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Colorless, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	164	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132627
Date Received : Dec 01, 2023
Date Reported : Dec 07, 2023
Report Number : 2835078-1

Sample Number 23132627-1
Sampled Date Dec 01, 2023 10:45 AM
Sample Description Wastewater
Contract ID L_EIE_025_2550 **Plot** G-43 **Site** MIG Production Co.,Ltd.
Date Analysis Commenced Dec 01, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, a lot of solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	6.5	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	65	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	6	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1244	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	16	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132674
Date Received : Dec 04, 2023
Date Reported : Dec 11, 2023
Report Number : 2835191-1

Sample Number 23132674-1
Sampled Date Dec 04, 2023 9:35 AM
Sample Description Wastewater
Contract ID L_EIE_003_2550 **Plot** G-72 **Site** NS BlueScope (Thailand) Limited.
Date Analysis Commenced Dec 04, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, a lot of solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	10.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	71	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	5	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1772	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	13	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Thanasoun Namakunna ทะเบียนเลขที่ ว-204-จ-8592

Remark :
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132674
Date Received : Dec 04, 2023
Date Reported : Dec 12, 2023
Report Number : 2835191-2

Sample Number 23132674-1
Sampled Date Dec 04, 2023 9:35 AM
Sample Description Wastewater
Contract ID L_EIE_003_2550 **Plot** G-72 **Site** NS BlueScope (Thailand) Limited.
Date Analysis Commenced Dec 06, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, a lot of solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Zinc	mg/L	0.003	0.005	0.02	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Thanasoun Namakunna ทะเบียนเลขที่ ว-204-จ-8592

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Technical Management
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709

Approved by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report 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.

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132674
Date Received : Dec 04, 2023
Date Reported : Dec 12, 2023
Report Number : 2835191-3

Sample Number	23132674-1
Sampled Date	Dec 04, 2023 9:35 AM
Sample Description	Wastewater
Contract ID	L_EIE_003_2550 **Plot** G-72 **Site** NS BlueScope (Thailand) Limited.
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, a lot of solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	2.60	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui , Thanasoun Namakunna

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Approved by
Sawitree Noisangiam
Manager

Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132673
Date Received : Dec 07, 2023
Date Reported : Dec 13, 2023
Report Number : 2835189-2

Sample Number	23132673-1
Sampled Date	Dec 07, 2023 11:10 AM
Sample Description	Wastewater
Contract ID	L_EIE_020_2550 **Plot** G-56 - G-66,68 **Site** NS-Siam United Steel Co.,Ltd.
Location	Factory 1
Date Analysis Commenced	Dec 08, 2023
Condition of Sample	Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.60	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui , Thanasoun Namakunna

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Approved by
Chanattagarn Imchom
Section Head

Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132673
Date Received : Dec 07, 2023
Date Reported : Dec 13, 2023
Report Number : 2835189-1

Sample Number	23132673-1
Sampled Date	Dec 07, 2023 11:10 AM
Sample Description	Wastewater
Contract ID	L_EIE_020_2550 **Plot** G-56 - G-66,68 **Site** NS-Siam United Steel Co.,Ltd.
Location	Factory 1
Date Analysis Commenced	Dec 07, 2023
Condition of Sample	Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	10.1	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	35	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	34.5	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	716	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	13	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Thanasoun Namakunna ทะเบียนเลขที่ ว-204-จ-8592

Remark :
- LOD : Limit of Detection

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132673
Date Received : Dec 07, 2023
Date Reported : Dec 13, 2023
Report Number : 2835189-1

- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132675
Date Received : Dec 07, 2023
Date Reported : Dec 13, 2023
Report Number : 2835190-2

Sample Number 23132675-1
Sampled Date Dec 07, 2023 11:00 AM
Sample Description Wastewater
Contract ID L_EIE_003_2556 **Plot** G-67 **Site** Ns-Siam United Steel Co.,Ltd.
Location Factory 2
Date Analysis Commenced Dec 08, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Zinc	mg/L	0.003	0.005	0.45	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Thanasoun Namakunna ทะเบียนเลขที่ ว-204-จ-8592

Remark :
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Technical Management
Chanattagarn Imchom
Section Head
ทะเบียนเลขที่ ว-204-จ-4710

Approved by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132675
Date Received : Dec 07, 2023
Date Reported : Dec 13, 2023
Report Number : 2835190-1

Sample Number 23132675-1
Sampled Date Dec 07, 2023 11:00 AM
Sample Description Wastewater
Contract ID L_EIE_003_2556 **Plot** G-67 **Site** Ns-Siam United Steel Co.,Ltd.
Location Factory 2
Date Analysis Commenced Dec 07, 2023
Condition of Sample Contained in one amber glass bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	268	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Thanasoun Namakunna ทะเบียนเลขที่ ว-204-จ-8592

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report 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.

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132648
Date Received : Dec 06, 2023
Date Reported : Dec 12, 2023
Report Number : 2835122-1

Sample Number 23132648-1
Sampled Date Dec 06, 2023 2:23 PM
Sample Description Wastewater
Contract ID L_EIE_002_2554 **Plot** H-12 **Site** PTT Asahi Chemical Co.,Ltd.
Date Analysis Commenced Dec 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1952	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	12	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report 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.

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132637
Date Received : Dec 06, 2023
Date Reported : Dec 12, 2023
Report Number : 2835103-1

Sample Number 23132637-1
Sampled Date Dec 06, 2023 3:35 PM
Sample Description Wastewater
Contract ID L_EIE_003_2554 **Plot** G-02,03 **Site** PTT Global Chemical Public Company Limited. (EA Plant)
Date Analysis Commenced Dec 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	108	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 23132668
Date Received : Dec 06, 2023
Date Reported : Dec 12, 2023
Report Number : 2835181-1

Sample Number 23132668-1
Sampled Date Dec 06, 2023 3:46 PM
Sample Description Wastewater
Contract ID L_EIE_023_2550 **Plot** G-02-02A-03 **Site** PTT Global Chemical Public Company Limited. (EG Plant)
Date Analysis Commenced Dec 06, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	16.6	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	72	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	564	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	18	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 23132668
Date Received : Dec 06, 2023
Date Reported : Dec 12, 2023
Report Number : 2835181-2

Sample Number 23132668-1
Sampled Date Dec 06, 2023 3:46 PM
Sample Description Wastewater
Contract ID L_EIE_023_2550 **Plot** G-02-02A-03 **Site** PTT Global Chemical Public Company Limited. (EG Plant)
Date Analysis Commenced Dec 08, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Chloride as Cl	mg/L	0.5	1	130	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (B)	Rayong

Sampling By : Nattawut Athomprommarat

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Approved by
Narumon Banchongkit
Supervisor

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 23132670
Date Received : Dec 04, 2023
Date Reported : Dec 11, 2023
Report Number : 2835185-1

Sample Number 23132670-1
Sampled Date Dec 04, 2023 3:40 PM
Sample Description Wastewater
Contract ID L_EIE_001_2553 **Plot** H-29 **Site** PTT Global Chemical Public Company Limited.
Date Analysis Commenced Dec 04, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, a lot of solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	78.3	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	211	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	240	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	17	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 23132670
Date Received : Dec 04, 2023
Date Reported : Dec 11, 2023
Report Number : 2835185-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132654
Date Received : Dec 04, 2023
Date Reported : Dec 11, 2023
Report Number : 2835170-1

Sample Number 23132654-1
Sampled Date Dec 04, 2023 11:17 AM
Sample Description Wastewater
Contract ID L_WHA EIE_002_2563 **Plot** G.18/2, G.20/1, H.28/1, H.34/1, PW18/1, PW.19, PW.20 **Site** PTT Global Chemical Public Company Limited
Location จุดที่ 1
Date Analysis Commenced Dec 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	41	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	712	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	11	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report
TESTING
No.0042
Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE
Lot ID: 23132654
Date Received : Dec 04, 2023
Date Reported : Dec 11, 2023
Report Number : 2835170-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445
Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442
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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132664
Date Received : Dec 04, 2023
Date Reported : Dec 11, 2023
Report Number : 2835174-1

Sample Number 23132664-1
Sampled Date Dec 04, 2023 11:20 AM
Sample Description Wastewater
Contract ID L_WHA EIE_003_2563 **Plot** G.18/2, G.20/1, H.28/1, H.34/1, PW18/1, PW.19, PW.20 **Site** PTT Global Chemical Public Company Limited
Location จุดที่ 2
Date Analysis Commenced Dec 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, a lot of solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	12940	(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	15	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
- LOD : Limit of Detection

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445
Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442
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Analysis / Test Report
TESTING
No.0042
Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE
Lot ID: 23132664
Date Received : Dec 04, 2023
Date Reported : Dec 11, 2023
Report Number : 2835174-1

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445
Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442
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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132658
Date Received : Dec 06, 2023
Date Reported : Dec 12, 2023
Report Number : 2835115-1

Sample Number	23132658-1
Sampled Date	Dec 06, 2023 9:34 AM
Sample Description	Wastewater
Contract ID	L_EIE_001_2552 **Plot** H-20-22 **Site** PTT Global Chemical Public Company Limited
Location	Station-1 (Admin)
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	93.8	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	303	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	7	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	436	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	46	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132672
Date Received : Dec 06, 2023
Date Reported : Dec 12, 2023
Report Number : 2835187-1

Sample Number	23132672-1
Sampled Date	Dec 06, 2023 9:22 AM
Sample Description	Wastewater
Contract ID	L_EIE_002_2552 **Plot** H-20-22 **Site** PTT Global Chemical Public Company Limited
Location	Station-2 (Factory)
Date Analysis Commenced	Dec 06, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, a lot of solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	5.8	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	69	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	9480	(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	20	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132672
Date Received : Dec 06, 2023
Date Reported : Dec 12, 2023
Report Number : 2835187-1

Remark :
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132657
Date Received : Dec 07, 2023
Date Reported : Dec 13, 2023
Report Number : 2835114-1

Sample Number	23132657-1
Sampled Date	Dec 07, 2023 10:10 AM
Sample Description	Wastewater
Contract ID	L_EIE_004_2553 **Plot** H-23A,H-31 **Site** PTT Global Chemical Public Company Limited
Location	Bis-Phenol A
Date Analysis Commenced	Dec 07, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	5.7	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	32	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	556	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132642
Date Received : Dec 01, 2023
Date Reported : Dec 07, 2023
Report Number : 2835110-1

Sample Number 23132642-1
Sampled Date Dec 01, 2023 9:45 AM
Sample Description Wastewater
Contract ID L_EIE_005_2550 **Plot** G-71 **Site** Rockwool (Thailand) Limited.
Date Analysis Commenced Dec 01, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, a lot of solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	182	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	434	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	520	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	62	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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Technical Management
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Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132676
Date Received : Dec 04, 2023
Date Reported : Dec 11, 2023
Report Number : 2835194-1

Sample Number 23132676-1
Sampled Date Dec 04, 2023 10:32 AM
Sample Description Wastewater
Contract ID L_EIE_001_2558 **Plot** H-15 **Site** S and L Specialty Polymers Co.,Ltd.
Location Station 1
Date Analysis Commenced Dec 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	8.3	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	48	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	29.0	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	532	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	8	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
- LOD : Limit of Detection

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132676
Date Received : Dec 04, 2023
Date Reported : Dec 11, 2023
Report Number : 2835194-1

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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132678
Date Received : Dec 04, 2023
Date Reported : Dec 11, 2023
Report Number : 2835197-1

Sample Number 23132678-1
Sampled Date Dec 04, 2023 10:36 AM
Sample Description Wastewater
Contract ID L_EIE_002_2558 **Plot** H-15 **Site** S and L Specialty Polymers Co.,Ltd.
Location Station 2
Date Analysis Commenced Dec 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	51	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	6.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	31.4	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	12340	(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	13	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132678
Date Received : Dec 04, 2023
Date Reported : Dec 11, 2023
Report Number : 2835197-1

Remark :
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132677
Date Received : Dec 04, 2023
Date Reported : Dec 11, 2023
Report Number : 2835195-1

Sample Number 23132677-1
Sampled Date Dec 04, 2023 9:50 AM
Sample Description Wastewater
Contract ID L_EIE_003_2558 **Plot** H-45 **Site** SEKISUI SPECIALTY CHEMICALS (THAILAND) Co.,Ltd.
Date Analysis Commenced Dec 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	39.8	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	85	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	30.7	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	364	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	15	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132677
Date Received : Dec 04, 2023
Date Reported : Dec 11, 2023
Report Number : 2835195-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132634
Date Received : Dec 01, 2023
Date Reported : Dec 07, 2023
Report Number : 2835100-1

Sample Number 23132634-1
Sampled Date Dec 01, 2023 11:10 AM
Sample Description Wastewater
Contract ID L_EIE_013_2550 **Plot** G-10 **Site** Siam Stabilizers & Chemicals Co.,Ltd.
Date Analysis Commenced Dec 01, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, a lot of odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	54.7	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	243	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	676	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	106	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445

Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132653
Date Received : Dec 06, 2023
Date Reported : Dec 12, 2023
Report Number : 2835163-1

Sample Number 23132653-1
Sampled Date Dec 06, 2023 3:19 PM
Sample Description Wastewater
Contract ID L_EIE_001_2561 **Plot** G.34/1 **Site** Solvay (Thailand) Limited.
Date Analysis Commenced Dec 06, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	5.6	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	100	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	376	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	12	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132671
Date Received : Dec 01, 2023
Date Reported : Dec 07, 2023
Report Number : 2835166-1

Sample Number 23132671-1
Sampled Date Dec 01, 2023 2:45 PM
Sample Description Wastewater
Contract ID L_EIE_026_2550 **Plot** G-05 **Site** Thai Ethoxylate Co.,Ltd.
Date Analysis Commenced Dec 01, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and a lot of turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	220	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	530	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	0.1	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	6	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	412	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	48	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132671
Date Received : Dec 01, 2023
Date Reported : Dec 07, 2023
Report Number : 2835166-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132647
Date Received : Dec 04, 2023
Date Reported : Dec 11, 2023
Report Number : 2835120-1

Sample Number 23132647-1
Sampled Date Dec 04, 2023 3:20 PM
Sample Description Wastewater
Contract ID L_EIE_016_2550 **Plot** G-51 **Site** Thai Pet Resin Co.,Ltd.
Location Station-1
Date Analysis Commenced Dec 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	9.8	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	50	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	760	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132669
Date Received : Dec 06, 2023
Date Reported : Dec 12, 2023
Report Number : 2835183-1

Sample Number 23132669-1
Sampled Date Dec 06, 2023 10:32 AM
Sample Description Wastewater
Contract ID L_EIE_021_2550 **Plot** G-04 **Site** Vanachai Chemical Industries Co.,Ltd.
Date Analysis Commenced Dec 06, 2023
Condition of Sample Contained in two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	112	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :
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- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report
TESTING
No.0042
Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE
Lot ID: 23132669
Date Received : Dec 06, 2023
Date Reported : Dec 12, 2023
Report Number : 2835183-1

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445
Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442
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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132652
Date Received : Dec 01, 2023
Date Reported : Dec 07, 2023
Report Number : 2835135-1

Sample Number 23132652-1
Sampled Date Dec 01, 2023 10:25 AM
Sample Description Wastewater
Contract ID L_EIE_004_2558 **Plot** G.18 G.19 P.7 **Site** Vencorex (Thailand) Co.,Ltd.
Date Analysis Commenced Dec 01, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	576	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445
Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442
Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report 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.
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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location: WHA EIE

Lot ID: 23132656
Date Received :Dec 01, 2023
Date Reported :Dec 07, 2023
Report Number :2835095-1

Sample Number 23132656-1
Sampled Date Dec 01, 2023 1:55 PM
Sample Description Wastewater
Contract ID L_EIE_022_2550 **Plot** G-01 **Site** Zeon Chemical (Thailand) Co.,Ltd.
Date Analysis Commenced Dec 01, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, a lot of solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	11.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	66	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.6	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	3276	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	19	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445
Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442
Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report 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.
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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name : Factory I Monthly
Project Location : WHA EIE

Lot ID: 23132660
Date Received : Dec 04, 2023
Date Reported : Dec 11, 2023
Report Number : 2835169-1

Sample Number 23132660-1
Sampled Date Dec 04, 2023 10:02 AM
Sample Description Wastewater
Contract ID L_WHA EIE_001_2563 **Plot** H-49 **Site** Zeon Chemicals Asia Co.,Ltd.
Date Analysis Commenced Dec 04, 2023
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	22.0	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	133	≤400	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2060	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	23	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Amendment details report of Environmental Health Impact Assessment Report of WHA Eastern Industrial Estate (Map Ta Put), 4th edition 2020, B.E. 2563 (Expansion)
Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report 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.

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ภาคผนวก ค-7

ระดับเสียงโดยทั่วไป

Analysis / Test Report

TESTING
No.0042

Lot ID: 23124044
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 2834998-1

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Sample Number	23124044-1
Parameter	Noise (Leq 24 hrs)
Location	ริมรั้วนิคมฯ ทางด้านทิศเหนือ (บริเวณที่อยู่ใกล้เคียงพื้นที่ชุมชนมากที่สุด)(N1) (GPS 47P 729363, 1405578)
Measurement Date	Nov 03 - Nov 04, 2023
Measurement by	Nantawat Sarin
Sound Level meter	Serial No. 472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	47.7	64.9	45.0
11:00 AM - 12:00 PM	51.2	77.7	45.4
12:00 PM - 01:00 PM	49.5	76.0	46.0
01:00 PM - 02:00 PM	50.5	77.5	46.8
02:00 PM - 03:00 PM	52.2	76.9	47.7
03:00 PM - 04:00 PM	50.8	73.1	48.1
04:00 PM - 05:00 PM	50.1	72.0	46.6
05:00 PM - 06:00 PM	49.3	71.5	46.1
06:00 PM - 07:00 PM	51.7	73.2	47.0
07:00 PM - 08:00 PM	56.9	75.6	48.5
08:00 PM - 09:00 PM	57.0	84.4	48.8
09:00 PM - 10:00 PM	49.0	58.1	47.6
10:00 PM - 11:00 PM	48.7	60.2	47.7
11:00 PM - 12:00 AM	48.9	62.4	47.9
12:00 AM - 01:00 AM	49.1	69.4	48.2
01:00 AM - 02:00 AM	48.7	64.5	47.8
02:00 AM - 03:00 AM	48.7	59.1	48.0
03:00 AM - 04:00 AM	50.0	54.4	48.4
04:00 AM - 05:00 AM	49.2	71.7	47.8
05:00 AM - 06:00 AM	49.1	65.7	47.8
06:00 AM - 07:00 AM	51.0	69.2	48.0
07:00 AM - 08:00 AM	50.1	68.2	45.6
08:00 AM - 09:00 AM	46.8	64.6	44.8
09:00 AM - 10:00 AM	48.0	65.3	45.8
Leq Average 24 hrs. (dB(A))	51.1		
Lmax (dB(A))		84.4	
L90 (dB(A))			47.7
Ldn (dB(A))	56.2		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita K.
Thanita Kulsuriwong
Scientist (4)

Approved by Supot S.
Supot Salamteh
Section Head

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Analysis / Test Report

TESTING
No.0042

Lot ID: 23124044
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 2834999-1

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Sample Number	23124044-2
Parameter	Noise (Leq 24 hrs)
Location	ริมรั้วนิคมฯ ทางด้านทิศเหนือ (บริเวณที่อยู่ใกล้เคียงพื้นที่ชุมชนมากที่สุด)(N1) (GPS 47P 729363, 1405578)
Measurement Date	Nov 04 - Nov 05, 2023
Measurement by	Nantawat Sarin
Sound Level meter	Serial No. 472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	48.0	67.8	44.4
11:00 AM - 12:00 PM	52.8	79.3	46.1
12:00 PM - 01:00 PM	51.4	78.0	46.8
01:00 PM - 02:00 PM	54.1	80.4	47.4
02:00 PM - 03:00 PM	50.2	67.5	47.1
03:00 PM - 04:00 PM	51.8	76.7	47.9
04:00 PM - 05:00 PM	50.3	72.7	48.4
05:00 PM - 06:00 PM	50.7	73.3	48.3
06:00 PM - 07:00 PM	51.3	68.7	48.7
07:00 PM - 08:00 PM	49.5	67.6	48.3
08:00 PM - 09:00 PM	49.1	60.8	48.3
09:00 PM - 10:00 PM	49.3	70.9	48.1
10:00 PM - 11:00 PM	49.1	61.4	48.4
11:00 PM - 12:00 AM	48.7	59.7	47.9
12:00 AM - 01:00 AM	49.1	59.9	48.4
01:00 AM - 02:00 AM	49.1	58.1	47.9
02:00 AM - 03:00 AM	48.8	54.1	47.9
03:00 AM - 04:00 AM	48.7	62.5	47.8
04:00 AM - 05:00 AM	48.6	58.9	47.7
05:00 AM - 06:00 AM	49.4	69.0	48.1
06:00 AM - 07:00 AM	50.7	74.6	47.9
07:00 AM - 08:00 AM	52.2	78.7	47.5
08:00 AM - 09:00 AM	48.2	68.6	46.2
09:00 AM - 10:00 AM	46.8	63.3	45.5
Leq Average 24 hrs. (dB(A))	50.3		
Lmax (dB(A))		80.4	
L90 (dB(A))			47.9
Ldn (dB(A))	55.9		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita K.
Thanita Kulsuriwong
Scientist (4)

Approved by Supot S.
Supot Salamteh
Section Head

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Analysis / Test Report

TESTING
No.0042

Lot ID: 23124044
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 283500091

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Sample Number	2312404493
Parameter	Noise fLe(24 hrsq
Location	ริมรั้วนิคมฯ ทางด้านทิศเหนือ f บริเวณที่อยู่ใกล้เคียงพื้นที่ชุมชนมากที่สุดqfN1q f) PG 4SP S27363, 14055S8q
Measurement Date	Nov 05 9 Nov 06, 2023
Measurement by	Nantawat Garin
Sound Level meter	Gerial No. 4S2126

Time	Le(fdBfAqq	Lmax fdBfAqq	L70 fdBfAqq
10:00 AM 9 11:00 AM	46.7	64.5	45.1
11:00 AM 9 12:00 PM	4S.8	61.S	46.5
12:00 PM 9 01:00 PM	50.3	S8.4	46.6
01:00 PM 9 02:00 PM	48.3	64.5	46.5
02:00 PM 9 03:00 PM	48.7	S2.2	46.7
03:00 PM 9 04:00 PM	47.7	67.4	46.2
04:00 PM 9 05:00 PM	63.6	100.2	46.0
05:00 PM 9 06:00 PM	48.7	62.1	46.7
06:00 PM 9 0S:00 PM	47.1	60.1	4S.4
0S:00 PM 9 08:00 PM	47.8	S2.2	4S.8
08:00 PM 9 07:00 PM	47.2	6S.1	48.0
07:00 PM 9 10:00 PM	47.S	62.S	48.3
10:00 PM 9 11:00 PM	48.7	63.7	4S.7
11:00 PM 9 12:00 AM	47.2	62.7	48.0
12:00 AM 9 01:00 AM	48.5	52.1	4S.5
01:00 AM 9 02:00 AM	48.3	64.3	4S.5
02:00 AM 9 03:00 AM	48.0	56.4	4S.3
03:00 AM 9 04:00 AM	48.1	68.5	4S.0
04:00 AM 9 05:00 AM	48.0	60.7	4S.1
05:00 AM 9 06:00 AM	50.1	67.0	48.2
06:00 AM 9 0S:00 AM	51.7	S3.8	48.7
0S:00 AM 9 08:00 AM	50.5	68.S	45.4
08:00 AM 9 07:00 AM	47.5	SS.1	44.3
07:00 AM 9 10:00 AM	48.2	67.0	44.0
Le(Average 24 hrs. fdBfAqq	52.4		
Lmax fdBfAqq		100.2	
L70 fdBfAqq			4S.0
Ldn fdBfAqq	56.6		
Gtandard fdBfAqq	S0	115	

Re-erence Method : IGO177691 and 177692
Gtandard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 f พ.ศ. 2540q เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark : The laboratory has been accepted as an accredited laboratory complying with the IGO/IEC 1S025.

Technical Management ThanitaK.
Thanita Kulsuriwong
Gcientist f4q

Approved by Supt S.
Gupot Galamteh
Gection Head

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Analysis / Test Report
TESTING
No.0042
Lot ID: 23124044
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 283500191
Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE
Page 1 o- 1

Sample Number	2312404494
Parameter	Noise fLe(24 hrsq
Location	ริมรั้วนิคมฯ ทางด้านทิศเหนือ f บริเวณที่อยู่ใกล้เคียงพื้นที่ชุมชนมากที่สุดqfN1q f) PG 4SP S27363, 14055S8q
Measurement Date	Nov 06 9 Nov 0S, 2023
Measurement by	Nantawat Garin
Sound Level meter	Gerial No. 4S2126

Time	Le(fdBfAqq	Lmax fdBfAqq	L70 fdBfAqq
10:00 AM 9 11:00 AM	56.0	S8.S	44.0
11:00 AM 9 12:00 PM	50.7	S2.5	4S.0
12:00 PM 9 01:00 PM	50.5	6S.6	4S.6
01:00 PM 9 02:00 PM	53.0	87.S	43.3
02:00 PM 9 03:00 PM	48.4	S1.2	44.0
03:00 PM 9 04:00 PM	54.1	86.3	45.1
04:00 PM 9 05:00 PM	52.4	83.3	46.2
05:00 PM 9 06:00 PM	47.1	S4.0	46.3
06:00 PM 9 0S:00 PM	47.2	63.S	4S.0
0S:00 PM 9 08:00 PM	51.4	S1.S	4S.6
08:00 PM 9 07:00 PM	51.7	80.1	4S.2
07:00 PM 9 10:00 PM	48.8	S6.5	4S.6
10:00 PM 9 11:00 PM	48.6	62.0	4S.1
11:00 PM 9 12:00 AM	48.S	S3.4	4S.1
12:00 AM 9 01:00 AM	4S.S	64.8	46.3
01:00 AM 9 02:00 AM	4S.5	58.4	46.S
02:00 AM 9 03:00 AM	48.5	60.2	4S.6
03:00 AM 9 04:00 AM	48.0	60.3	4S.2
04:00 AM 9 05:00 AM	48.0	63.7	4S.1
05:00 AM 9 06:00 AM	47.4	66.4	4S.8
06:00 AM 9 0S:00 AM	51.0	S2.4	4S.7
0S:00 AM 9 08:00 AM	51.4	S2.1	46.4
08:00 AM 9 07:00 AM	48.5	64.7	45.8
07:00 AM 9 10:00 AM	48.2	S2.8	46.1
Le(Average 24 hrs. fdBfAqq	50.S		
Lmax fdBfAqq		87.S	
L70 fdBfAqq			4S.0
Ldn fdBfAqq	55.S		
Gtandard fdBfAqq	S0	115	

Re-erence Method : IGO177691 and 177692
Gtandard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 f พ.ศ. 2540q เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark : The laboratory has been accepted as an accredited laboratory complying with the IGO/IEC 1S025.
Technical Management ThanitaK.
Thanita Kulsuriwong
Gcientist f4q
Approved by Supt S.
Gupot Galamteh
Gection Head
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Life Sciences www.alsglobal.com
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4S79101/ EMAIL S:\Reports_Air Noise.rpt (2:03PM)

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124044
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 283500291

Sample Number	2312404495
Parameter	Noise fLe(24 hrsq
Location	ริมรั้วนิคมฯ ทางด้านทิศหั ˜ โอริเวบ ที่ญ่ห่ใ กัเคออล้ หท่ขุมชนมาใ ท่สุดqfN2qf) PG 4SP S302SS, 1403878q
Measurement Date	Nov 03 9 Nov 04, 2023
Measurement by	Nantawat Garin
Sound Level meter	Gerial No. S34218

Time	Le(fdBfAqq	Lmax fdBfAqq	L70 fdBfAqq
10:00 AM 9 11:00 AM	62.3	82.3	51.3
11:00 AM 9 12:00 PM	55.3	SS.5	50.8
12:00 PM 9 01:00 PM	57.S	S7.2	51.3
01:00 PM 9 02:00 PM	55.5	83.1	51.0
02:00 PM 9 03:00 PM	56.S	S5.1	51.6
03:00 PM 9 04:00 PM	56.S	S7.6	51.S
04:00 PM 9 05:00 PM	60.3	83.0	51.7
05:00 PM 9 06:00 PM	5S.3	SS.0	52.7
06:00 PM 9 0S:00 PM	58.4	80.6	53.0
0S:00 PM 9 08:00 PM	5S.6	S8.7	53.2
08:00 PM 9 07:00 PM	60.4	83.4	54.1
07:00 PM 9 10:00 PM	5S.4	80.6	52.8
10:00 PM 9 11:00 PM	54.4	S6.7	52.4
11:00 PM 9 12:00 AM	53.1	S1.5	51.7
12:00 AM 9 01:00 AM	52.S	S2.1	51.6
01:00 AM 9 02:00 AM	58.S	87.3	51.7
02:00 AM 9 03:00 AM	53.0	64.0	52.2
03:00 AM 9 04:00 AM	53.6	SS.6	52.2
04:00 AM 9 05:00 AM	52.8	66.S	52.0
05:00 AM 9 06:00 AM	53.S	66.6	52.1
06:00 AM 9 0S:00 AM	5S.3	S8.1	53.1
0S:00 AM 9 08:00 AM	60.8	72.5	53.8
08:00 AM 9 07:00 AM	58.2	S6.6	51.7
07:00 AM 9 10:00 AM	6S.8	85.8	52.1
Le(Average 24 hrs. fdBfAqq	57.1		
Lmax fdBfAqq		72.5	
L70 fdBfAqq			52.0
Ldn fdBfAqq	62.S		
Gtandard fdBfAqq	S0	115	

Re-erence Method : IGO177691 and 177692
Gtandard : 1. ประใาศคบ ะใรรมใารสังแวดกี มแต่งขาี ˆ ฉอ้อ่ท่ 15 fล.ศ. 2540q เรื่พใาดนดมาี รฐานระด้อเสดงโดยทั่วไป
2. ประใาศใระทรวงวี ˆ สาดใรรม เรื่พใาดนดค่าระด้อเสดงใารรอใวน แกะระด้อเสดงท่เดิดจาใใารประใ อใจใาร โรงงาน ล.ศ. 2548
Remark : The laboratory has been accepted as an accredited laboratory complying with the IGO/IEC 1S025.

Technical Management ThanitaK.
Thanita Kulsuriwong
Gcientist f4q

Approved by Supt S.
Gupot Galamteh
Gection Head

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Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124044
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 283500391

Page 1 o- 1

Sample Number	2312404496
Parameter	Noise fLe(24 hrsq
Location	ริมรั้วนิคมฯ ทางด้านทิศหั ˜ โอริเวบ ที่ญ่ห่ใ กัเคออล้ หท่ขุมชนมาใ ท่สุดqfN2qf) PG 4SP S302SS, 1403878q
Measurement Date	Nov 04 9 Nov 05, 2023
Measurement by	Nantawat Garin
Sound Level meter	Gerial No. S34218

Time	Le(fdBfAqq	Lmax fdBfAqq	L70 fdBfAqq
10:00 AM 9 11:00 AM	64.1	81.4	51.0
11:00 AM 9 12:00 PM	66.6	8S.2	51.6
12:00 PM 9 01:00 PM	62.S	75.1	53.1
01:00 PM 9 02:00 PM	61.3	88.2	53.S
02:00 PM 9 03:00 PM	57.4	82.S	54.0
03:00 PM 9 04:00 PM	58.5	S5.4	53.3
04:00 PM 9 05:00 PM	56.2	S4.3	52.7
05:00 PM 9 06:00 PM	5S.4	S7.6	52.8
06:00 PM 9 0S:00 PM	56.5	S5.0	53.0
0S:00 PM 9 08:00 PM	56.S	80.5	53.4
08:00 PM 9 07:00 PM	56.8	S5.8	52.S
07:00 PM 9 10:00 PM	56.3	S8.4	52.8
10:00 PM 9 11:00 PM	56.7	S5.7	52.3
11:00 PM 9 12:00 AM	53.4	S6.4	52.1
12:00 AM 9 01:00 AM	54.2	S5.0	52.3
01:00 AM 9 02:00 AM	54.3	S5.7	52.1
02:00 AM 9 03:00 AM	56.4	S4.2	52.2
03:00 AM 9 04:00 AM	5S.7	80.7	52.3
04:00 AM 9 05:00 AM	53.1	64.5	52.3
05:00 AM 9 06:00 AM	54.7	S2.2	52.3
06:00 AM 9 0S:00 AM	66.8	87.2	52.6
0S:00 AM 9 08:00 AM	57.2	81.5	53.4
08:00 AM 9 07:00 AM	5S.7	S6.8	52.S
07:00 AM 9 10:00 AM	64.5	70.S	51.6
Le(Average 24 hrs. fdBfAqq	60.4		
Lmax fdBfAqq		75.1	
L70 fdBfAqq			52.6
Ldn fdBfAqq	66.0		
Gtandard fdBfAqq	S0	115	

Re-erence Method : IGO177691 and 177692
Gtandard : 1. ประใาศคบ ะใรรมใารสังแวดกี มแต่งขาี ˆ ฉอ้อ่ท่ 15 fล.ศ. 2540q เรื่พใาดนดมาี รฐานระด้อเสดงโดยทั่วไป
2. ประใาศใระทรวงวี ˆ สาดใรรม เรื่พใาดนดค่าระด้อเสดงใารรอใวน แกะระด้อเสดงท่เดิดจาใใารประใ อใจใาร โรงงาน ล.ศ. 2548
Remark : The laboratory has been accepted as an accredited laboratory complying with the IGO/IEC 1S025.

Technical Management ThanitaK.
Thanita Kulsuriwong
Gcientist f4q

Approved by Supt S.
Gupot Galamteh
Gection Head

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4S79101/ EMAIL S:\Reports_Air Noise.rpt (2:03PM)

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124044
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 283500491

Sample Number	231240449f
Parameter	Noise (Leq 24 hrs)
Location	ริมรั้วนิคมฯ ทางด้านทิศหั ˜ (อริเวบ ที่ญ่าหใ กัเคออล้ำหท่ขุมชนมาใ ท่สุด)(N2) (GPS 4f P f 302f f , 1403878)
Measurement Date	Nov 05 9 Nov 06, 2023
Measurement by	Nantawat Sarin
Sound Level meter	Serial No. f 34218

Time	Leq (dB(A))	Lmax (dB(A))	L70 (dB(A))
10:00 AM 9 11:00 AM	54.3	f 8.1	50.6
11:00 AM 9 12:00 PM	53.7	f 6.0	50.2
12:00 PM 9 01:00 PM	54.5	81.2	50.4
01:00 PM 9 02:00 PM	53.8	f 3.f	50.5
02:00 PM 9 03:00 PM	54.8	f 8.3	50.5
03:00 PM 9 04:00 PM	53.8	67.3	50.f
04:00 PM 9 05:00 PM	55.7	82.3	51.1
05:00 PM 9 06:00 PM	60.4	85.8	52.3
06:00 PM 9 0f :00 PM	56.7	f f .6	52.3
0f :00 PM 9 08:00 PM	56.3	f 5.3	52.3
08:00 PM 9 07:00 PM	62.5	f f .f	56.1
07:00 PM 9 10:00 PM	53.4	67.8	51.f
10:00 PM 9 11:00 PM	52.8	6f .6	51.f
11:00 PM 9 12:00 AM	52.5	64.f	51.f
12:00 AM 9 01:00 AM	52.f	6f .2	51.6
01:00 AM 9 02:00 AM	52.3	64.4	51.5
02:00 AM 9 03:00 AM	52.6	f 0.8	51.6
03:00 AM 9 04:00 AM	52.5	63.6	51.f
04:00 AM 9 05:00 AM	55.2	f 6.3	51.8
05:00 AM 9 06:00 AM	61.0	82.5	51.8
06:00 AM 9 0f :00 AM	56.1	67.6	52.3
0f :00 AM 9 08:00 AM	58.8	f f .f	53.f
08:00 AM 9 07:00 AM	57.2	80.2	51.f
07:00 AM 9 10:00 AM	55.5	f 6.5	51.0
Leq Average 24 hrs. (dB(A))	56.6		
Lmax (dB(A))		85.8	
L70 (dB(A))			51.f
Ldn (dB(A))	62.1		
Standard (dB(A))	f 0	115	

Re-erence Method : ISO177691 and 177692
Standard : 1. ประใาศคบ ะใรรมใารสังแวดกี มแต่งขาี ˆ ฉอ้อาท่ง15 (ล.ศ. 2540) เรื่พใาดนดมาี รฐานระด้อเสยงโดยทั่วไป
2. ประใาศใระทรวงาี ˆ สาดใรรม เรื่พใาดนดค่าระด้อเสยงใารรอใวน แกะระด้อเสยงทเกิดจาใใารประใ อใจใาร โรงงาน ล.ศ. 2548
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 1f 025.

Technical Management ThanitaK.
Thanita Kulsuriwong
Scientist (4)

Approved by Supt S.
Supot Salamteh
Section Head

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Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124044
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 283500591

Page 1 o- 1

Sample Number	2312404498
Parameter	Noise fLe(24 hrsq
Location	ริมรั้วนิคมฯ ทางด้านทิศหั ˜ โอริเวบ ที่ญ่าหใ กัเคออล้ำหท่ขุมชนมาใ ท่สุดfN2q f) PG 4SP S302SS, 1403878q
Measurement Date	Nov 06 9 Nov 0S, 2023
Measurement by	Nantawat Garin
Sound Level meter	Gerial No. S34218

Time	Le(fdBfAqq	Lmax fdBfAqq	L70 fdBfAqq
10:00 AM 9 11:00 AM	54.8	S0.5	50.S
11:00 AM 9 12:00 PM	55.0	S5.5	51.4
12:00 PM 9 01:00 PM	54.7	S6.4	50.6
01:00 PM 9 02:00 PM	54.2	67.5	50.5
02:00 PM 9 03:00 PM	55.S	S5.6	50.5
03:00 PM 9 04:00 PM	54.2	SS.1	50.S
04:00 PM 9 05:00 PM	56.S	83.1	52.1
05:00 PM 9 06:00 PM	58.3	81.4	52.6
06:00 PM 9 0S:00 PM	56.4	S5.2	52.3
0S:00 PM 9 08:00 PM	56.0	S6.8	52.1
08:00 PM 9 07:00 PM	56.S	81.4	52.1
07:00 PM 9 10:00 PM	60.0	83.1	51.6
10:00 PM 9 11:00 PM	53.3	S3.0	51.5
11:00 PM 9 12:00 AM	53.6	S6.2	51.6
12:00 AM 9 01:00 AM	55.2	S4.7	51.6
01:00 AM 9 02:00 AM	56.6	S7.3	52.1
02:00 AM 9 03:00 AM	52.4	65.7	51.4
03:00 AM 9 04:00 AM	52.5	68.0	51.6
04:00 AM 9 05:00 AM	52.5	6S.4	51.4
05:00 AM 9 06:00 AM	61.6	82.S	51.S
06:00 AM 9 0S:00 AM	62.2	S7.S	52.S
0S:00 AM 9 08:00 AM	58.8	S7.2	53.4
08:00 AM 9 07:00 AM	62.S	80.0	52.4
07:00 AM 9 10:00 AM	55.6	S5.3	51.4
Le(Average 24 hrs. fdBfAqq	5S.4		
Lmax fdBfAqq		83.1	
L70 fdBfAqq			51.6
Ldn fdBfAqq	63.S		
Gtandard fdBfAqq	S0	115	

Re-erence Method : IGO177691 and 177692
Gtandard : 1. ประใาศคบ ะใรรมใารสังแวดกี มแต่งขาี ˆ ฉอ้อาท่ง15 f ล.ศ. 2540q เรื่พใาดนดมาี รฐานระด้อเสยงโดยทั่วไป
2. ประใาศใระทรวงาี ˆ สาดใรรม เรื่พใาดนดค่าระด้อเสยงใารรอใวน แกะระด้อเสยงทเกิดจาใใารประใ อใจใาร โรงงาน ล.ศ. 2548
Remark : The laboratory has been accepted as an accredited laboratory complying with the IGO/IEC 1S025.

Technical Management ThanitaK.
Thanita Kulsuriwong
Gcientist f4q

Approved by Supt S.
Gupot Galamteh
Gection Head

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Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124044
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 283500691

Sample Number	231240449f
Parameter	Noise (Leq 24 hrs)
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออก(มาบตาพุด)(N3) (GPS 47P 0730f 10, 1405267)
Measurement Date	Nov 03 9 Nov 04, 2023
Measurement by	Nantawat Sarin
Sound Level meter	Serial No. 472132

Time	Leq (dB(A))	Lmax (dB(A))	Lf 0 (dB(A))
10:00 AM 9 11:00 AM	58.7	7f .5	46.f
11:00 AM 9 12:00 PM	58.1	81.2	53.1
12:00 PM 9 01:00 PM	61.7	82.7	55.2
01:00 PM 9 02:00 PM	62.8	f 2.6	55.3
02:00 PM 9 03:00 PM	61.5	84.8	56.3
03:00 PM 9 04:00 PM	61.3	82.7	56.3
04:00 PM 9 05:00 PM	61.0	82.3	57.8
05:00 PM 9 06:00 PM	5f .2	7f .6	57.3
06:00 PM 9 07:00 PM	5f .1	84.6	55.8
07:00 PM 9 08:00 PM	5f .7	81.3	54.4
08:00 PM 9 0f :00 PM	5f .f	76.6	57.2
0f :00 PM 9 10:00 PM	58.2	70.8	56.7
10:00 PM 9 11:00 PM	57.4	70.f	54.2
11:00 PM 9 12:00 AM	55.0	68.f	52.5
12:00 AM 9 01:00 AM	54.6	68.4	52.f
01:00 AM 9 02:00 AM	56.8	81.7	52.f
02:00 AM 9 03:00 AM	55.0	67.3	53.2
03:00 AM 9 04:00 AM	57.7	81.4	52.7
04:00 AM 9 05:00 AM	58.f	83.6	56.2
05:00 AM 9 06:00 AM	56.3	83.0	50.5
06:00 AM 9 07:00 AM	5f .3	86.0	53.5
07:00 AM 9 08:00 AM	60.0	84.0	54.1
08:00 AM 9 0f :00 AM	61.2	81.2	57.0
0f :00 AM 9 10:00 AM	58.8	71.7	52.2
Leq Average 24 hrs. (dB(A))	5f .4		
Lmax (dB(A))		f 2.6	
Lf 0 (dB(A))			54.2
Ldn (dB(A))	64.1		
Standard (dB(A))	70	115	

Re-erence Method : ISO1f f 691 and 1f f 692

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management — Thanita Kulsuriwong, Scientist (4)

Approved by — Supot Salamteh, Section Head

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Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124044
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 2835009-1

Sample Number	23124044-10
Parameter	Noise (Leq 24 hrs)
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออก(มาบตาพุด)(N3) (GPS 49P 0930710, 1405269)
Measurement Date	Nov 04 - Nov 05, 2023
Measurement by	Nantawat Sarin
Sound Level meter	Serial No. 492132

Time	Leq (dB(A))	Lmax (dB(A))	L70 (dB(A))
10:00 AM - 11:00 AM	61.9	82.5	51.1
11:00 AM - 12:00 PM	60.7	97.7	51.4
12:00 PM - 01:00 PM	62.2	81.7	52.3
01:00 PM - 02:00 PM	60.1	81.7	51.2
02:00 PM - 03:00 PM	59.9	99.1	47.9
03:00 PM - 04:00 PM	59.2	91.1	47.1
04:00 PM - 05:00 PM	60.2	99.3	53.8
05:00 PM - 06:00 PM	57.7	82.7	53.8
06:00 PM - 09:00 PM	60.9	82.0	54.4
09:00 PM - 08:00 PM	59.1	69.9	55.9
08:00 PM - 07:00 PM	58.3	67.6	59.1
07:00 PM - 10:00 PM	59.2	91.4	56.2
10:00 PM - 11:00 PM	59.0	65.1	53.0
11:00 PM - 12:00 AM	56.7	92.7	52.5
12:00 AM - 01:00 AM	59.9	91.8	52.7
01:00 AM - 02:00 AM	58.9	66.3	54.3
02:00 AM - 03:00 AM	58.7	95.0	52.7
03:00 AM - 04:00 AM	58.7	95.3	51.7
04:00 AM - 05:00 AM	58.1	95.3	50.0
05:00 AM - 06:00 AM	56.6	98.9	49.0
06:00 AM - 09:00 AM	60.6	82.9	51.0
09:00 AM - 08:00 AM	62.8	97.6	55.8
08:00 AM - 07:00 AM	61.8	80.2	55.3
07:00 AM - 10:00 AM	61.0	96.6	50.4
Leq Average 24 hrs. (dB(A))	57.9		
Lmax (dB(A))		82.7	
L70 (dB(A))			52.5
Ldn (dB(A))	65.1		
Standard (dB(A))	90	115	

Reference Method : ISO1776-1 and 1776-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 19025.

Technical Management — Thanita Kulsuriwong, Scientist (4)

Approved by — Supot Salamteh, Section Head

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Analysis / Test Report

TESTING
No.0042

Lot ID: 23124044
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 283500891

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Sample Number	231240449 11
Parameter	Noise fLe(24 hrsq
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออกกมาบตาพุดqfN3qf) PG 4SP 0S30710, 140526Sq
Measurement Date	Nov 05 9 Nov 06, 2023
Measurement by	Nantawat Garin
Sound Level meter	Gerial No. 4S2132

Time	Le(fdBfAqq	Lmax fdBfAqq	L70 fdBfAqq
10:00 AM 9 11:00 AM	57.1	S6.3	51.0
11:00 AM 9 12:00 PM	58.0	S6.7	54.1
12:00 PM 9 01:00 PM	57.5	S6.3	55.5
01:00 PM 9 02:00 PM	60.2	82.2	55.7
02:00 PM 9 03:00 PM	60.7	81.1	56.3
03:00 PM 9 04:00 PM	57.S	81.5	55.4
04:00 PM 9 05:00 PM	58.8	81.8	51.7
05:00 PM 9 06:00 PM	60.6	83.5	5S.S
06:00 PM 9 0S:00 PM	60.0	S6.8	58.8
0S:00 PM 9 08:00 PM	58.S	S6.6	55.8
08:00 PM 9 07:00 PM	5S.8	84.0	51.8
07:00 PM 9 10:00 PM	5S.2	S7.2	52.7
10:00 PM 9 11:00 PM	57.6	S4.0	58.6
11:00 PM 9 12:00 AM	58.8	S7.S	54.7
12:00 AM 9 01:00 AM	5S.2	S7.7	54.7
01:00 AM 9 02:00 AM	57.1	SS.S	55.2
02:00 AM 9 03:00 AM	57.0	S8.4	53.S
03:00 AM 9 04:00 AM	5S.3	S2.7	52.1
04:00 AM 9 05:00 AM	57.0	80.2	48.5
05:00 AM 9 06:00 AM	58.S	81.4	56.4
06:00 AM 9 0S:00 AM	61.8	84.8	54.7
0S:00 AM 9 08:00 AM	60.7	81.1	56.3
08:00 AM 9 07:00 AM	57.0	85.4	55.8
07:00 AM 9 10:00 AM	60.S	82.5	56.4
Le(Average 24 hrs. fdBfAqq	57.4		
Lmax fdBfAqq		85.4	
L70 fdBfAqq			55.2
Ldn fdBfAqq	65.6		
Gtandard fdBfAqq	S0	115	

Re-erence Method : IGO177691 and 177692

Gtandard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 fพ.ศ. 2540q เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the IGO/IEC 1S025.

Technical Management ThanitaK.
Thanita Kulsuriwong
Gcientist f4q

Approved by Supt S.
Gupot Galamteh
Gection Head

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Analysis / Test Report

TESTING
No.0042

Lot ID: 23124044
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 2835009-1

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Sample Number	23124044-12
Parameter	Noise (Leq 24 hrs)
Location	สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอตะวันออก(มาบตาพุด)(N3) (GPS 47P 0730910, 1405267)
Measurement Date	Nov 06 - Nov 07, 2023
Measurement by	Nantawat Sarin
Sound Level meter	Serial No. 472132

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	58.7	81.6	54.3
11:00 AM - 12:00 PM	59.1	78.8	55.4
12:00 PM - 01:00 PM	58.2	77.8	55.0
01:00 PM - 02:00 PM	59.3	81.0	55.4
02:00 PM - 03:00 PM	59.1	83.8	55.1
03:00 PM - 04:00 PM	59.0	83.0	55.0
04:00 PM - 05:00 PM	59.0	77.9	55.8
05:00 PM - 06:00 PM	60.4	82.7	55.9
06:00 PM - 07:00 PM	59.6	79.4	55.5
07:00 PM - 08:00 PM	59.6	79.1	55.5
08:00 PM - 09:00 PM	58.2	78.7	55.2
09:00 PM - 10:00 PM	57.8	80.4	55.0
10:00 PM - 11:00 PM	57.6	79.2	55.0
11:00 PM - 12:00 AM	57.0	82.0	54.7
12:00 AM - 01:00 AM	56.1	76.3	54.8
01:00 AM - 02:00 AM	56.0	74.8	54.7
02:00 AM - 03:00 AM	56.9	80.5	54.7
03:00 AM - 04:00 AM	55.8	72.3	54.6
04:00 AM - 05:00 AM	56.5	78.2	54.7
05:00 AM - 06:00 AM	57.1	73.0	55.1
06:00 AM - 07:00 AM	59.8	78.7	56.0
07:00 AM - 08:00 AM	60.8	77.6	56.0
08:00 AM - 09:00 AM	60.1	84.3	54.7
09:00 AM - 10:00 AM	59.0	84.1	54.4
Leq Average 24 hrs. (dB(A))	58.6		
Lmax (dB(A))		84.3	
L90 (dB(A))			55.0
Ldn (dB(A))	63.9		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management ThanitaK.
Thanita Kulsuriwong
Scientist (4)

Approved by Supt S.
Supot Salamteh
Section Head

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Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124044
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 283501091

Sample Number	231240449 13
Parameter	Noise fLe(24 hrsq
Location	วัดหนองแฟบ fN4qf) PG 4SP 0S27830, 1403321q
Measurement Date	Nov 03 9 Nov 04, 2023
Measurement by	Nantawat Garin
Sound Level meter	Gerial No. 4S212S

Time	Le(fdBfAqq	Lmax fdBfAqq	L70 fdBfAqq
10:00 AM 9 11:00 AM	53.2	S3.2	47.0
11:00 AM 9 12:00 PM	50.8	66.S	4S.2
12:00 PM 9 01:00 PM	53.S	SS.5	46.1
01:00 PM 9 02:00 PM	52.7	S4.7	46.4
02:00 PM 9 03:00 PM	54.2	S6.7	4S.3
03:00 PM 9 04:00 PM	52.1	S6.7	46.2
04:00 PM 9 05:00 PM	47.S	S2.1	44.S
05:00 PM 9 06:00 PM	47.2	66.1	44.1
06:00 PM 9 0S:00 PM	48.2	68.3	44.8
0S:00 PM 9 08:00 PM	4S.7	S3.7	44.8
08:00 PM 9 07:00 PM	48.S	S3.0	45.4
07:00 PM 9 10:00 PM	4S.1	5S.S	45.S
10:00 PM 9 11:00 PM	45.3	56.6	44.1
11:00 PM 9 12:00 AM	44.2	58.4	43.2
12:00 AM 9 01:00 AM	46.0	5S.1	45.0
01:00 AM 9 02:00 AM	45.7	64.7	44.5
02:00 AM 9 03:00 AM	46.S	63.8	44.7
03:00 AM 9 04:00 AM	4S.S	58.3	46.3
04:00 AM 9 05:00 AM	50.7	S0.0	4S.7
05:00 AM 9 06:00 AM	54.7	S4.3	50.7
06:00 AM 9 0S:00 AM	56.1	S6.3	51.0
0S:00 AM 9 08:00 AM	60.S	72.6	50.2
08:00 AM 9 07:00 AM	56.6	81.S	50.0
07:00 AM 9 10:00 AM	52.S	S1.3	48.S
Le(Average 24 hrs. fdBfAqq	52.S		
Lmax fdBfAqq		72.6	
L70 fdBfAqq			46.1
Ldn fdBfAqq	5S.S		
Gtandard fdBfAqq	S0	115	

Re-erence Method : IGO177691 and 177692
Gtandard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 fพ.ศ. 2540q เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark : The laboratory has been accepted as an accredited laboratory complying with the IGO/IEC 1S025.

Technical Management — Thanita Kulsuriwong, Gcientist f4q
Approved by — Gupot Galamteh, Gection Head

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Analysis / Test Report
TESTING
No.0042
Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE
Lot ID: 23124044
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 283501191
Page 1 o- 1

Sample Number	231240449 14
Parameter	Noise fLe(24 hrsq
Location	วัดหนองแฟบ fN4qf) PG 4SP 0S27830, 1403321q
Measurement Date	Nov 04 9 Nov 05, 2023
Measurement by	Nantawat Garin
Sound Level meter	Gerial No. 4S212S

Time	Le(fdBfAqq	Lmax fdBfAqq	L70 fdBfAqq
10:00 AM 9 11:00 AM	55.S	84.8	48.3
11:00 AM 9 12:00 PM	54.5	S6.3	46.3
12:00 PM 9 01:00 PM	51.7	S0.4	45.5
01:00 PM 9 02:00 PM	54.8	S8.0	44.4
02:00 PM 9 03:00 PM	47.5	66.7	45.0
03:00 PM 9 04:00 PM	50.1	S5.S	44.7
04:00 PM 9 05:00 PM	47.1	S3.S	44.7
05:00 PM 9 06:00 PM	48.1	64.7	44.1
06:00 PM 9 0S:00 PM	53.4	S5.8	45.S
0S:00 PM 9 08:00 PM	62.8	81.4	47.5
08:00 PM 9 07:00 PM	47.2	S0.3	46.5
07:00 PM 9 10:00 PM	47.3	S0.5	46.2
10:00 PM 9 11:00 PM	46.6	5S.5	45.4
11:00 PM 9 12:00 AM	46.S	S3.2	45.5
12:00 AM 9 01:00 AM	4S.8	63.4	46.6
01:00 AM 9 02:00 AM	48.2	67.6	46.7
02:00 AM 9 03:00 AM	4S.5	55.1	46.2
03:00 AM 9 04:00 AM	48.1	65.S	46.7
04:00 AM 9 05:00 AM	47.7	67.6	46.2
05:00 AM 9 06:00 AM	54.6	S2.8	50.0
06:00 AM 9 0S:00 AM	54.3	S0.8	48.4
0S:00 AM 9 08:00 AM	54.1	80.0	46.1
08:00 AM 9 07:00 AM	55.2	S4.7	46.5
07:00 AM 9 10:00 AM	52.7	68.4	46.1
Le(Average 24 hrs. fdBfAqq	53.6		
Lmax fdBfAqq		84.8	
L70 fdBfAqq			46.2
Ldn fdBfAqq	5S.8		
Gtandard fdBfAqq	S0	115	

Re-erence Method : IGO177691 and 177692
Gtandard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 fพ.ศ. 2540q เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark : The laboratory has been accepted as an accredited laboratory complying with the IGO/IEC 1S025.
Technical Management — Thanita Kulsuriwong, Gcientist f4q
Approved by — Gupot Galamteh, Gection Head
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4S79101/ EMAIL S:\Reports_Air Noise.rpt (2:05PM)

Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124044
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 283501291

Sample Number	231240449 15
Parameter	Noise fLe(24 hrsq
Location	วัดหนองแฟบ fN4qf) PG 4SP 0S27830, 1403321q
Measurement Date	Nov 05 9 Nov 06, 2023
Measurement by	Nantawat Garin
Sound Level meter	Gerial No. 4S212S

Time	Le(fdBfAqq	Lmax fdBfAqq	L70 fdBfAqq
10:00 AM 9 11:00 AM	57.8	72.8	50.3
11:00 AM 9 12:00 PM	64.0	86.4	50.7
12:00 PM 9 01:00 PM	62.1	85.4	52.2
01:00 PM 9 02:00 PM	55.2	SS.8	48.2
02:00 PM 9 03:00 PM	51.5	S0.3	4S.7
03:00 PM 9 04:00 PM	51.8	67.6	47.0
04:00 PM 9 05:00 PM	51.7	S4.5	48.0
05:00 PM 9 06:00 PM	50.6	S0.0	4S.2
06:00 PM 9 0S:00 PM	51.7	S6.5	48.1
0S:00 PM 9 08:00 PM	52.2	66.7	48.8
08:00 PM 9 07:00 PM	50.2	66.1	48.2
07:00 PM 9 10:00 PM	50.2	60.4	48.1
10:00 PM 9 11:00 PM	50.S	67.3	48.6
11:00 PM 9 12:00 AM	50.0	61.5	4S.1
12:00 AM 9 01:00 AM	47.4	64.2	4S.0
01:00 AM 9 02:00 AM	48.8	S0.7	46.3
02:00 AM 9 03:00 AM	47.3	61.5	46.5
03:00 AM 9 04:00 AM	47.4	65.7	48.1
04:00 AM 9 05:00 AM	52.6	S2.6	48.0
05:00 AM 9 06:00 AM	52.7	6S.3	47.5
06:00 AM 9 0S:00 AM	53.5	S1.3	4S.6
0S:00 AM 9 08:00 AM	52.0	S1.5	46.0
08:00 AM 9 07:00 AM	54.3	S6.2	45.7
07:00 AM 9 10:00 AM	48.1	63.6	44.2
Le(Average 24 hrs. fdBfAqq	55.3		
Lmax fdBfAqq		72.8	
L70 fdBfAqq			48.0
Ldn fdBfAqq	58.7		
Gtandard fdBfAqq	S0	115	

Re-erence Method : IGO177691 and 177692
Gtandard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 fพ.ศ. 2540q เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark : The laboratory has been accepted as an accredited laboratory complying with the IGO/IEC 1S025.

Technical Management ThanitaK.
Thanita Kulsuriwong
Gcientist f4q

Approved by Supt S.
Gupot Galamteh
Gection Head

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Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124044
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 283501391

Sample Number	231240449 16
Parameter	Noise fLe(24 hrsq
Location	วัดหนองแฟบ fN4qf) PG 4SP 0S27830, 1403321q
Measurement Date	Nov 06 9 Nov 0S, 2023
Measurement by	Nantawat Garin
Sound Level meter	Gerial No. 4S212S

Time	Le(fdBfAqq	Lmax fdBfAqq	L70 fdBfAqq
10:00 AM 9 11:00 AM	52.0	S2.7	46.0
11:00 AM 9 12:00 PM	54.1	S8.1	46.S
12:00 PM 9 01:00 PM	56.8	SS.7	46.0
01:00 PM 9 02:00 PM	47.2	67.8	43.S
02:00 PM 9 03:00 PM	53.6	S4.7	45.6
03:00 PM 9 04:00 PM	54.3	8S.5	48.2
04:00 PM 9 05:00 PM	54.S	S2.8	47.4
05:00 PM 9 06:00 PM	51.6	S2.2	48.8
06:00 PM 9 0S:00 PM	51.1	67.2	48.6
0S:00 PM 9 08:00 PM	50.2	68.4	48.5
08:00 PM 9 07:00 PM	48.1	63.0	46.7
07:00 PM 9 10:00 PM	48.2	65.5	46.8
10:00 PM 9 11:00 PM	48.3	67.0	46.6
11:00 PM 9 12:00 AM	4S.3	54.8	46.4
12:00 AM 9 01:00 AM	46.8	58.2	45.6
01:00 AM 9 02:00 AM	4S.S	61.7	46.7
02:00 AM 9 03:00 AM	4S.3	5S.4	46.2
03:00 AM 9 04:00 AM	53.0	80.7	4S.3
04:00 AM 9 05:00 AM	53.7	S1.S	4S.7
05:00 AM 9 06:00 AM	60.S	S5.0	54.7
06:00 AM 9 0S:00 AM	56.0	S5.0	48.8
0S:00 AM 9 08:00 AM	54.S	S4.7	46.6
08:00 AM 9 07:00 AM	55.7	S3.S	47.7
07:00 AM 9 10:00 AM	52.1	S0.2	47.6
Le(Average 24 hrs. fdBfAqq	53.5		
Lmax fdBfAqq		8S.5	
L70 fdBfAqq			46.7
Ldn fdBfAqq	60.4		
Gtandard fdBfAqq	S0	115	

Re-erence Method : IGO177691 and 177692
Gtandard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 fพ.ศ. 2540q เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark : The laboratory has been accepted as an accredited laboratory complying with the IGO/IEC 1S025.

Technical Management ThanitaK.
Thanita Kulsuriwong
Gcientist f4q

Approved by Supt S.
Gupot Galamteh
Gection Head

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Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124044
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 283501491

Sample Number	231240449 1f
Parameter	Noise (Leq 24 hrs)
Location	วัดมาบชลูด(N5) (GPS 4f P 0f 30831, 140f 365)
Measurement Date	Nov 03 9 Nov 04, 2023
Measurement by	Nanta7 at Sarin
Sound Level meter	Serial No. 4f 2130

Time	Leq (dw(A))	LmaB (dw(A))	Lx0 (dw(A))
10:00 AM 9 11:00 AM	4f .1	f 5.6	41.f
11:00 AM 9 12:00 PM	45.4	6f .1	40.1
12:00 PM 9 01:00 PM	55.6	f 3.2	40.x
01:00 PM 9 02:00 PM	53.4	6x.0	42.0
02:00 PM 9 03:00 PM	53.5	f 3.2	44.3
03:00 PM 9 04:00 PM	52.1	f 2.x	4f .0
04:00 PM 9 05:00 PM	53.x	f 2.8	4f .1
05:00 PM 9 06:00 PM	52.3	f 0.f	48.f
06:00 PM 9 0f :00 PM	51.8	6x.x	48.f
0f :00 PM 9 08:00 PM	53.1	6f .f	4f .2
08:00 PM 9 0x:00 PM	62.5	84.5	4x.1
0x:00 PM 9 10:00 PM	48.5	66.x	4f .1
10:00 PM 9 11:00 PM	4f .1	62.8	45.5
11:00 PM 9 12:00 AM	4f .1	5f .0	45.4
12:00 AM 9 01:00 AM	4f .f	64.4	46.3
01:00 AM 9 02:00 AM	48.5	55.6	4f .0
02:00 AM 9 03:00 AM	4x.8	58.f	4f .3
03:00 AM 9 04:00 AM	50.2	61.1	4x.3
04:00 AM 9 05:00 AM	50.1	5x.2	4x.0
05:00 AM 9 06:00 AM	50.8	f 0.5	48.f
06:00 AM 9 0f :00 AM	52.0	f 6.4	48.8
0f :00 AM 9 08:00 AM	4x.1	64.f	46.1
08:00 AM 9 0x:00 AM	51.6	82.f	41.f
0x:00 AM 9 10:00 AM	4f .3	66.x	41.0
Leq Average 24 hrs. (dw(A))	53.0		
LmaB (dw(A))		84.5	
Lx0 (dw(A))			4f .0
Ldn (dw(A))	5f .0		
Standard (dw(A))	f 0	115	

Re-erence Method : ISO1xx691 and 1xx692

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying 7 ith the ISO/IEC 1f 025.

Technical Management ThanitaK.
Thanita Kulsuri7 ong
Scientist (4)

Approved by Supt S.
Supot Salamteh
Section Head

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Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124044
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 283501591

Sample Number	231240449 18
Parameter	Noise fLe(24 hrsq
Location	วัดมาบชลูดfN5q f) PG 4SP 0S30831, 140S365q
Measurement Date	Nov 04 9 Nov 05, 2023
Measurement by	Nanta7 at Garin
Sound Level meter	Gerial No. 4S2130

Time	Le(fdwfAqq	LmaB fdwfAqq	Lx0 fdwfAqq
10:00 AM 9 11:00 AM	4S.0	S1.1	40.6
11:00 AM 9 12:00 PM	51.2	82.5	41.S
12:00 PM 9 01:00 PM	65.5	82.2	53.5
01:00 PM 9 02:00 PM	65.0	xS.6	52.1
02:00 PM 9 03:00 PM	53.x	S8.8	4S.3
03:00 PM 9 04:00 PM	61.6	x1.4	46.4
04:00 PM 9 05:00 PM	64.3	82.4	55.6
05:00 PM 9 06:00 PM	61.S	SS.2	56.8
06:00 PM 9 0S:00 PM	58.3	S1.8	53.S
0S:00 PM 9 08:00 PM	63.6	80.3	51.6
08:00 PM 9 0x:00 PM	54.8	Sx.6	48.x
0x:00 PM 9 10:00 PM	50.0	S4.4	46.4
10:00 PM 9 11:00 PM	4S.2	6S.5	45.8
11:00 PM 9 12:00 AM	48.8	5x.S	4S.6
12:00 AM 9 01:00 AM	48.4	55.0	46.3
01:00 AM 9 02:00 AM	4x.6	56.0	48.6
02:00 AM 9 03:00 AM	4x.8	5S.2	48.5
03:00 AM 9 04:00 AM	4x.4	56.x	48.2
04:00 AM 9 05:00 AM	48.3	58.0	4S.4
05:00 AM 9 06:00 AM	4x.x	66.6	48.2
06:00 AM 9 0S:00 AM	52.3	Sx.1	4x.2
0S:00 AM 9 08:00 AM	52.1	83.6	4S.3
08:00 AM 9 0x:00 AM	48.3	S0.5	44.S
0x:00 AM 9 10:00 AM	46.4	S1.2	41.2
Le(Average 24 hrs. fdwfAqq	58.6		
LmaB fdwfAqq		xS.6	
Lx0 fdwfAqq			4S.6
Ldn fdwfAqq	60.1		
Gtandard fdwfAqq	S0	115	

Re-erence Method : IGO1xx691 and 1xx692

Gtandard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 fพ.ศ. 2540q เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying 7 ith the IGO/IEC 1S025.

Technical Management ThanitaK.
Thanita Kulsuri7 ong
Gcientist f4q

Approved by Supt S.
Gupot Galamteh
Gection Head

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Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124044
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 283501691

Sample Number	231240449 1f
Parameter	Noise (Leq 24 hrs)
Location	วัดมาบชลูด(N5) (GPS 47P 0730831, 1407365)
Measurement Date	Nov 05 9 Nov 06, 2023
Measurement by	Nantawat Sarin
Sound Level meter	Serial No. 472130

Time	Leq (dB(A))	Lmax (dB(A))	Lf 0 (dB(A))
10:00 AM 9 11:00 AM	45.0	67.0	3f .5
11:00 AM 9 12:00 PM	46.6	68.7	3f .8
12:00 PM 9 01:00 PM	45.6	71.f	41.0
01:00 PM 9 02:00 PM	46.1	71.4	41.1
02:00 PM 9 03:00 PM	48.3	68.8	44.3
03:00 PM 9 04:00 PM	54.3	78.4	45.4
04:00 PM 9 05:00 PM	65.7	f f .3	46.7
05:00 PM 9 06:00 PM	62.f	75.1	51.4
06:00 PM 9 07:00 PM	63.8	73.2	55.3
07:00 PM 9 08:00 PM	64.0	83.2	54.3
08:00 PM 9 0f :00 PM	51.4	75.4	46.8
0f :00 PM 9 10:00 PM	48.5	80.8	46.4
10:00 PM 9 11:00 PM	46.8	57.0	45.1
11:00 PM 9 12:00 AM	46.f	5f .7	45.0
12:00 AM 9 01:00 AM	47.f	55.6	46.7
01:00 AM 9 02:00 AM	48.2	58.3	47.1
02:00 AM 9 03:00 AM	48.1	73.1	46.2
03:00 AM 9 04:00 AM	47.f	70.6	46.7
04:00 AM 9 05:00 AM	48.5	60.f	47.6
05:00 AM 9 06:00 AM	51.f	74.6	4f .2
06:00 AM 9 07:00 AM	54.5	83.3	4f .f
07:00 AM 9 08:00 AM	56.4	72.8	47.6
08:00 AM 9 0f :00 AM	57.3	72.7	44.3
0f :00 AM 9 10:00 AM	54.5	72.0	46.0
Leq Average 24 hrs. (dB(A))	57.5		
Lmax (dB(A))		f f .3	
Lf 0 (dB(A))			46.4
Ldn (dB(A))	5f .4		
Standard (dB(A))	70	115	

Re-erence Method : ISO1f f 691 and 1f f 692

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management ThanitaK.
Thanita Kulsuriwong
Scientist (4)

Approved by Supt S.
Supot Salamteh
Section Head

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Analysis / Test Report

TESTING
No.0042

Client : WHA Eastern Industrial Estate Co., Ltd.
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O : 54230016
Project Name : Monitoring
Project Location : WHA EIE

Lot ID: 23124044
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 2835019-1

Sample Number	23124044-20
Parameter	Noise (Leq 24 hrs)
Location	วัดมาบชลูด(N5) (GPS 49P 0930831, 1409365)
Measurement Date	Nov 06 - Nov 09, 2023
Measurement by	Nanta7 at Sarin
Sound Level meter	Serial No. 492130

Time	Leq (dw(A))	LmaB (dw(A))	Lx0 (dw(A))
10:00 AM - 11:00 AM	4x.x	6x.0	42.6
11:00 AM - 12:00 PM	4x.x	68.1	43.9
12:00 PM - 01:00 PM	55.4	95.9	44.6
01:00 PM - 02:00 PM	50.8	94.5	44.2
02:00 PM - 03:00 PM	53.0	91.6	46.9
03:00 PM - 04:00 PM	52.4	80.0	45.2
04:00 PM - 05:00 PM	59.9	92.5	45.8
05:00 PM - 06:00 PM	66.2	95.x	61.3
06:00 PM - 09:00 PM	61.6	94.6	55.0
09:00 PM - 08:00 PM	64.3	89.2	53.6
08:00 PM - 0x:00 PM	61.6	83.5	49.6
0x:00 PM - 10:00 PM	4x.3	96.4	46.4
10:00 PM - 11:00 PM	49.2	64.4	46.0
11:00 PM - 12:00 AM	49.9	65.6	46.1
12:00 AM - 01:00 AM	45.6	5x.9	42.0
01:00 AM - 02:00 AM	43.3	59.0	41.3
02:00 AM - 03:00 AM	46.8	59.8	45.0
03:00 AM - 04:00 AM	48.9	6x.4	46.5
04:00 AM - 05:00 AM	4x.9	92.1	44.8
05:00 AM - 06:00 AM	52.0	9x.x	48.2
06:00 AM - 09:00 AM	54.2	94.5	4x.6
09:00 AM - 08:00 AM	56.9	93.4	4x.9
08:00 AM - 0x:00 AM	51.x	93.6	45.x
0x:00 AM - 10:00 AM	60.x	91.0	46.0
Leq Average 24 hrs. (dw(A))	59.9		
LmaB (dw(A))		89.2	
Lx0 (dw(A))			46.0
Ldn (dw(A))	5x.5		
Standard (dw(A))	90	115	

Reference Method : ISO1xx6-1 and 1xx6-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying 7 ith the ISO/IEC 19025.

Technical Management ThanitaK.
Thanita Kulsuri7 ong
Scientist (4)

Approved by Supt S.
Supot Salamteh
Section Head

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ภาคผนวก ค-8

กากตะกอนจากระบบบำบัดน้ำเสียและระบบผลิตน้ำประปา

Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : WHA EIE

Lot ID: 23101534
Date Received : Sep 15, 2023
Date Reported : Sep 29, 2023
Report Number : 2792973-1

Sample Number	23101534-1
Sampled Date	Sep 15, 2023 10:50 AM
Sample Description	Sludge
Location	WHA EIE : ตะกอนจากระบบบำบัดน้ำเสียส่วนกลาง (WWTP)
Date Analysis Commenced	Sep 19, 2023
Condition of Sample	Packed in one plastic bag, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Total Concentration Test (TTLC) : Metals							
Cadmium	mg/kg	-	0.50	<0.50	<100	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Chromium	mg/kg	-	1.00	67.1	<2500	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Hexavalent Chromium	mg/kg	-	1.00	<1.00	<500	United States Environmental Protection Agency, EPA Method 3060A and 7196A	Bangkok
Lead	mg/kg	-	1.00	8.07	<1000	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Mercury	mg/kg	-	0.10	0.67	<20	United States Environmental Protection Agency, EPA Method 7473	Bangkok
Nickel	mg/kg	-	1.00	37.4	<2000	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Selenium	mg/kg	-	0.50	1.20	<100	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Zinc	mg/kg	-	1.00	1002	<5000	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Waste Extraction Test (STLC) : Metals							
Chromium	mg/L	-	0.03	4.52	<5	MOI, B.E.2548	Bangkok
Lead	mg/L	-	0.01	0.51	<5	MOI, B.E.2548	Bangkok
Mercury	mg/L	-	0.001	<0.001	<0.2	MOI, B.E.2548	Bangkok
Nickel	mg/L	-	0.01	1.53	<20	MOI, B.E.2548	Bangkok
Selenium	mg/L	-	0.01	0.02	<1	MOI, B.E.2548	Bangkok
Zinc	mg/L	-	0.01	98.8	<250	MOI, B.E.2548	Bangkok

Guideline : Notification of the Ministry of Industry regarding Waste or Used Material Disposal, published in the Royal Government Gazette, Vol.123, Special Part 11D, dated January 25, B.E. 2549 (2006).

Technical Management
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709

Approved by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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.

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : WHA EIE

Lot ID: 23101534
Date Received : Sep 15, 2023
Date Reported : Sep 29, 2023
Report Number : 2792973-1

Sampling By : Thanasoun Namakunna ทะเบียนเลขที่ ว-204-จ-8592

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Technical Management
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709

Approved by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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5317-131/ EMAIL S:\Reports_All_GL.rpt (3:22PM)

Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : WHA EIE

Lot ID: 23101534
Date Received : Sep 15, 2023
Date Reported : Sep 29, 2023
Report Number : 2792973-2

Sample Number	23101534-1
Sampled Date	Sep 15, 2023 10:50 AM
Sample Description	Sludge
Location	WHA EIE : ตะกอนจากระบบบำบัดน้ำเสียส่วนกลาง (WWTP)
Date Analysis Commenced	Sep 19, 2023
Condition of Sample	Packed in one plastic bag, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Total Concentration Test (TTLC) : Metals							
Iron	mg/kg	-	1.00	6279	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok

Guideline : Notification of the Ministry of Industry regarding Waste or Used Material Disposal, published in the Royal Government Gazette, Vol.123, Special Part 11D, dated January 25, B.E. 2549 (2006).
Sampling By : Thanasoun Namakunna

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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
Sawitree Noisangiam
Manager

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : WHA EIE

Lot ID: 23101534
Date Received : Sep 15, 2023
Date Reported : Sep 29, 2023
Report Number : 2792974-1

Sample Number	23101534-2
Sampled Date	Sep 15, 2023 11:10 AM
Sample Description	Sludge
Location	WHA EIE : ตะกอนจากระบบผลิตน้ำประปา (WTP)
Date Analysis Commenced	Sep 19, 2023
Condition of Sample	Packed in one plastic bag, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Total Concentration Test (TTLC) : Metals							
Cadmium	mg/kg	-	0.50	<0.50	<100	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Chromium	mg/kg	-	1.00	5.07	<2500	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Hexavalent Chromium	mg/kg	-	1.00	<1.00	<500	United States Environmental Protection Agency, EPA Method 3060A and 7196A	Bangkok
Lead	mg/kg	-	1.00	2.63	<1000	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Mercury	mg/kg	-	0.10	<0.10	<20	United States Environmental Protection Agency, EPA Method 7473	Bangkok
Nickel	mg/kg	-	1.00	2.50	<2000	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Selenium	mg/kg	-	0.50	0.68	<100	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Zinc	mg/kg	-	1.00	16.0	<5000	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Waste Extraction Test (STLC) : Metals							
Chromium	mg/L	-	0.03	0.31	<5	MOI, B.E.2548	Bangkok

Guideline : Notification of the Ministry of Industry regarding Waste or Used Material Disposal, published in the Royal Government Gazette, Vol.123, Special Part 11D, dated January 25, B.E. 2549 (2006).
Sampling vy : Thanasoun Namakunna ทะเบียนเลขที่ ว-204-จ-8592

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Technical Management
Sawitree Noisangiam
Manager
ทะเบียนเลขที่ ว-204-จ-4709

ApproBed by
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
18, Pakornsongkrohraj Road, Tambol Huaypong, Amphur Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : WHA EIE

Lot ID: 23101534
Date Received : Sep 15, 2023
Date Reported : Sep 29, 2023
Report Number : 2792974-2

Sample Number	23101534-2
Sampled Date	Sep 15, 2023 11:10 AM
Sample Description	Sludge
Location	WHA EIE : ตะกอนจากระบบผลิตน้ำประปา (WTP)
Date Analysis Commenced	Sep 19, 2023
Condition of Sample	Packed in one plastic bag, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Total Concentration Test (TTLC) : Metals							
Iron	mg/kg	-	1.00	1050	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok

Guideline : Notification of the Ministry of Industry regarding Waste or Used Material Disposal, published in the Royal Government Gazette, Vol.123, Special Part 11D, dated January 25, B.E. 2549 (2006).
Sampling By : Thanasoun Namakunna

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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 Sawitree N.
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Manager

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