

ภาคผนวก ค

เอกสารประกอบมาตรการติดตามตรวจสอบ
ผลกระทบสิ่งแวดล้อม

ภาคผนวก ค-1

ผลการตรวจวัดคุณภาพสิ่งแวดล้อม

คุณภาพอากาศจากแหล่งกำเนิด



Analysis / Test Report

TESTING
No.0042

Client : Nexif Ratch Energy Rayong Co., Ltd.
222 Moo 5, T.Nonglalo, A.Bankhai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :

Lot ID: 2328277
Date Received : Mar 22, 2023
Date Reported : Mar 30, 2023
Report Number: 2592227-1

Page 1 of 2

Sample Number 2328277-1
Sampled Date Mar 22, 2023
Sample Description Emission from Stationary Source
Location HRSG #2
Date Analysis Commenced Mar 23, 2023
Condition of Sample Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle and one amber plastic bottle, refrigerated

Stack Description

Ambient Pressure	757	mmHg	Diameter	2.95	m	Oxygen	12.0	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	5.1	%
Type of Process	Combustion		Stack Temperature	94.0	°C	Gas Velocity	22.1	m/s
Type of Fuel	Natural Gas		Moisture	9.53	%	Flow Rate (Actual O2)	397361	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O ₂	Guideline (1)	Guideline (2)	Method	Testing Location
Air Testing									
Oxides of Nitrogen *	10:30 AM - 10:40 AM	ppm	-	1.06	19.0	60	120	United States Environmental Protection Agency, EPA Method 7	Rayong
Sulfur dioxide *	10:30 AM - 11:00 AM	ppm	-	2.0	<2.0	15	20	United States Environmental Protection Agency, EPA Method 6	Rayong
Total Suspended Particulate	10:30 AM - 11:06 AM	mg/m3	-	0.5	<0.5	40	60	United States Environmental Protection Agency, EPA Method 5	Rayong

Guideline : Guideline (1) Environmental Impact Assessment Report of Nexif Ratch Energy Rayong Co., Ltd.
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)
ทะเบียนเลขที่ ๖-323-๖-9447

Approved by

D. Changchon

Dej Changchon
Senior Manager
ทะเบียนเลขที่ ๖-323-๖-9442

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Analysis / Test Report

TESTING
No.0042

Client : Nexif Ratch Energy Rayong Co., Ltd.
222 Moo 5, T.Nonglalo, A.Bankhai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :

Lot ID: 2328277
Date Received : Mar 22, 2023
Date Reported : Mar 30, 2023
Report Number: 2592227-1

Page 2 of 2

Sample Number 2328277-1
Sampled Date Mar 22, 2023
Sample Description Emission from Stationary Source
Location HRSG #2
Date Analysis Commenced Mar 23, 2023
Condition of Sample Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle and one amber plastic bottle, refrigerated

Stack Description

Ambient Pressure	757	mmHg	Diameter	2.95	m	Oxygen	12.0	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	5.1	%
Type of Process	Combustion		Stack Temperature	94.0	°C	Gas Velocity	22.1	m/s
Type of Fuel	Natural Gas		Moisture	9.53	%	Flow Rate (Actual O2)	397361	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
Air Testing									
Oxides of Nitrogen *	10:30 AM - 10:40 AM	g/s	-	-	2.524	9.97	-	Calculated	Rayong
Sulfur dioxide *	10:30 AM - 11:00 AM	g/s	-	-	<0.552	3.47	-	Calculated	Rayong
Total Suspended Particulate *	10:30 AM - 11:06 AM	g/s	-	-	<0.055	3.53	-	Calculated	Rayong

Guideline : Guideline (1) Environmental Impact Assessment Report of Nexif Ratch Energy Rayong Co., Ltd.
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Sampled By : Tarin Octjinda

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

Thanita K.

Thanita Kulsuriwong
Scientist (4)
ทะเบียนเลขที่ ว-323-จ-9447

Approved by

D. Chamon.

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Analysis / Test Report

Client : Nexif Ratch Energy Rayong Co., Ltd.

222 Moo 5, T.Nonglalo, A.Bankhai, Rayong Thailand 21120

P/O : PO-2302-0003

Project Name :

Project Location :

Lot ID: 2330781

Date Received : Mar 27, 2023

Date Reported : Apr 01, 2023

Report Number: 2611973-1

Page 1 of 1

Sample Description	Air Quality						
Location	A1 : หมู่ 10 บ้านนาหลวง (GPS 47P 0741951, 1416054)						
Parameter	Nitrogen dioxide (ppm)						
Measurement Date	Mar 17, 2023 - Mar 24, 2023						
Measurement by	Sitpawit Suwannarat						
	2330781-1	2330781-2	2330781-3	2330781-4	2330781-5	2330781-6	2330781-7
Time	Mar 17, 2023	Mar 18, 2023	Mar 19, 2023	Mar 20, 2023	Mar 21, 2023	Mar 22, 2023	Mar 23, 2023
09:00 AM - 10:00 AM	0.001	0.001	<0.001	0.007	<0.001	0.004	<0.001
10:00 AM - 11:00 AM	0.001	<0.001	<0.001	0.007	0.002	0.004	<0.001
11:00 AM - 12:00 PM	<0.001	<0.001	<0.001	0.011	0.001	0.005	<0.001
12:00 PM - 01:00 PM	<0.001	<0.001	<0.001	0.011	0.009	0.005	<0.001
01:00 PM - 02:00 PM	<0.001	0.004	<0.001	0.015	0.011	0.003	0.001
02:00 PM - 03:00 PM	0.009	0.016	<0.001	0.014	0.002	0.002	0.001
03:00 PM - 04:00 PM	0.019	0.012	0.013	0.020	<0.001	0.001	0.001
04:00 PM - 05:00 PM	0.009	0.009	0.013	0.007	0.002	0.002	0.003
05:00 PM - 06:00 PM	0.004	0.006	0.006	0.003	0.002	0.003	0.003
06:00 PM - 07:00 PM	0.008	0.006	0.002	0.003	0.002	0.003	0.005
07:00 PM - 08:00 PM	0.008	0.006	0.002	0.002	0.002	0.003	0.005
08:00 PM - 09:00 PM	0.003	0.003	0.004	0.002	0.002	0.003	0.004
09:00 PM - 10:00 PM	0.002	0.002	0.006	0.001	0.002	0.003	0.003
10:00 PM - 11:00 PM	0.002	<0.001	0.003	<0.001	0.002	0.003	0.004
11:00 PM - 12:00 AM	0.002	0.002	0.003	<0.001	0.001	0.003	0.004
12:00 AM - 01:00 AM	0.004	0.001	0.003	0.001	0.002	0.003	0.005
01:00 AM - 02:00 AM	0.005	0.002	0.006	0.002	0.002	0.003	0.005
02:00 AM - 03:00 AM	0.005	0.001	0.005	0.004	0.004	0.002	0.005
03:00 AM - 04:00 AM	0.007	0.002	0.005	0.004	0.006	0.005	0.006
04:00 AM - 05:00 AM	0.006	0.008	0.004	0.004	0.008	0.004	0.009
05:00 AM - 06:00 AM	0.006	0.007	0.006	0.002	0.003	0.002	0.008
06:00 AM - 07:00 AM	0.003	0.001	0.006	<0.001	0.004	<0.001	0.011
07:00 AM - 08:00 AM	0.001	<0.001	0.011	<0.001	0.009	<0.001	0.012
08:00 AM - 09:00 AM	0.001	<0.001	0.008	0.001	0.009	0.001	0.009
Average	0.005	0.004	0.005	0.005	0.004	0.003	0.004
1hr - Maximum	0.019	0.016	0.013	0.020	0.011	0.005	0.012
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 EPA Method Part 50 App. F (Chemiluminescence)

Approved by

Saranya C.

Saranya Chalemthamrong
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Analysis / Test Report

Client : Nexif Ratch Energy Rayong Co., Ltd.

222 Moo 5, T.Nonglalo, A.Bankhai, Rayong Thailand 21120

P/O : PO-2302-0003

Project Name :

Project Location :

Lot ID: 2330781

Date Received : Mar 27, 2023

Date Reported : Apr 01, 2023

Report Number: 2611974-1

Page 1 of 1

Sample Description	Air Quality						
Location	A2 : วัดระฆัง (GPS 47P 0741408, 1411396)						
Parameter	Nitrogen dioxide (ppm)						
Measurement Date	Mar 17, 2023 - Mar 24, 2023						
Measurement by	Sitpawit Suwannarat						
	2330781-8	2330781-9	2330781-10	2330781-11	2330781-12	2330781-13	2330781-14
Time	Mar 17, 2023	Mar 18, 2023	Mar 19, 2023	Mar 20, 2023	Mar 21, 2023	Mar 22, 2023	Mar 23, 2023
11:00 AM - 12:00 PM	0.003	0.003	0.003	0.004	0.004	0.002	0.001
12:00 PM - 01:00 PM	0.012	0.003	0.002	0.002	0.002	0.002	0.002
01:00 PM - 02:00 PM	0.008	0.003	0.002	0.002	0.002	0.001	0.001
02:00 PM - 03:00 PM	0.001	0.002	0.002	0.001	0.001	0.001	0.001
03:00 PM - 04:00 PM	0.002	0.002	0.001	0.001	<0.001	0.001	<0.001
04:00 PM - 05:00 PM	0.002	0.002	0.002	0.001	<0.001	0.001	<0.001
05:00 PM - 06:00 PM	0.002	0.002	0.002	0.001	0.001	0.001	0.001
06:00 PM - 07:00 PM	0.002	0.002	0.002	0.002	0.001	0.001	0.004
07:00 PM - 08:00 PM	0.006	0.002	0.002	0.001	0.002	0.001	0.002
08:00 PM - 09:00 PM	0.003	0.003	0.004	0.002	0.002	0.002	0.002
09:00 PM - 10:00 PM	0.004	0.010	0.002	0.003	0.002	0.003	0.004
10:00 PM - 11:00 PM	0.003	0.008	0.002	0.004	0.002	0.004	0.004
11:00 PM - 12:00 AM	0.002	0.006	0.002	0.003	0.001	0.003	0.003
12:00 AM - 01:00 AM	0.003	0.004	0.002	0.004	0.001	0.003	0.004
01:00 AM - 02:00 AM	0.002	0.002	0.002	0.002	0.002	0.004	0.004
02:00 AM - 03:00 AM	0.002	0.001	0.003	0.001	0.002	0.005	0.004
03:00 AM - 04:00 AM	0.004	0.001	0.004	<0.001	0.004	0.004	0.003
04:00 AM - 05:00 AM	0.003	0.001	0.004	<0.001	0.002	0.003	0.002
05:00 AM - 06:00 AM	0.003	0.001	0.003	0.001	0.003	0.003	0.002
06:00 AM - 07:00 AM	0.003	0.001	0.003	0.002	0.003	0.003	0.002
07:00 AM - 08:00 AM	0.003	0.001	0.003	0.002	0.003	0.002	0.001
08:00 AM - 09:00 AM	0.004	0.003	0.003	0.003	0.003	0.002	0.002
09:00 AM - 10:00 AM	0.004	0.006	0.005	0.006	0.004	0.003	0.003
10:00 AM - 11:00 AM	0.005	0.005	0.004	0.005	0.005	0.003	0.003
Average	0.004	0.003	0.003	0.002	0.002	0.002	0.002
1hr - Maximum	0.012	0.010	0.005	0.006	0.005	0.005	0.004
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 EPA Method Part 50 App. F (Chemiluminescence)

Approved by

Saranya C.

Saranya Chalemthamrong
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Analysis / Test Report

Client : Nexif Ratch Energy Rayong Co., Ltd.

222 Moo 5, T.Nonglailok, A.Bankhai, Rayong Thailand 21120

P/O : PO-2302-0003

Project Name :

Project Location :

Lot ID: 2330781

Date Received : Mar 27, 2023

Date Reported : Apr 01, 2023

Report Number: 2598153-1

Page 1 of 1

Sample Description	Air Quality						
Location	A3 : โรงงานถลุง (GPS 47P 0747563, 1413915)						
Parameter	Nitrogen dioxide (ppm)						
Measurement Date	Mar 17, 2023 - Mar 24, 2023						
Measurement by	Sitpawit Suwannarat						
Time	2330781-15 Mar 17, 2023	2330781-16 Mar 18, 2023	2330781-17 Mar 19, 2023	2330781-18 Mar 20, 2023	2330781-19 Mar 21, 2023	2330781-20 Mar 22, 2023	2330781-21 Mar 23, 2023
10:00 AM - 11:00 AM	0.003	0.008	0.013	0.003	0.006	0.002	0.009
11:00 AM - 12:00 PM	0.005	0.005	0.005	0.003	0.004	0.002	0.007
12:00 PM - 01:00 PM	0.004	0.005	0.008	0.004	0.005	0.002	0.005
01:00 PM - 02:00 PM	0.004	0.005	0.010	0.006	0.005	0.002	0.005
02:00 PM - 03:00 PM	0.004	0.005	0.014	0.010	0.005	0.003	0.004
03:00 PM - 04:00 PM	0.006	0.003	0.015	0.010	0.009	0.003	0.004
04:00 PM - 05:00 PM	0.017	0.005	0.011	0.005	0.004	0.004	0.003
05:00 PM - 06:00 PM	0.015	0.007	0.012	0.003	0.005	0.003	0.003
06:00 PM - 07:00 PM	0.010	0.011	0.005	0.005	0.004	0.003	0.003
07:00 PM - 08:00 PM	0.009	0.011	0.005	0.003	0.005	0.003	0.003
08:00 PM - 09:00 PM	0.010	0.005	0.004	0.003	0.006	0.004	0.003
09:00 PM - 10:00 PM	0.009	0.005	0.003	0.005	0.005	0.007	0.004
10:00 PM - 11:00 PM	0.003	0.005	0.003	0.003	0.005	0.006	0.003
11:00 PM - 12:00 AM	0.002	0.003	0.002	0.002	0.007	0.006	0.003
12:00 AM - 01:00 AM	0.003	0.003	0.002	0.002	0.003	0.004	0.001
01:00 AM - 02:00 AM	0.003	0.004	0.002	0.002	0.002	0.003	0.005
02:00 AM - 03:00 AM	0.002	0.005	0.004	0.004	0.003	0.004	0.003
03:00 AM - 04:00 AM	0.002	0.005	0.006	0.007	0.003	0.003	0.005
04:00 AM - 05:00 AM	0.004	0.005	0.004	0.004	0.004	0.003	0.005
05:00 AM - 06:00 AM	0.005	0.005	0.006	0.004	0.004	0.003	0.004
06:00 AM - 07:00 AM	0.004	0.005	0.009	0.004	0.003	0.002	0.004
07:00 AM - 08:00 AM	0.010	0.007	0.010	0.006	0.004	0.003	0.004
08:00 AM - 09:00 AM	0.007	0.014	0.006	0.004	0.002	0.003	0.002
09:00 AM - 10:00 AM	0.007	0.013	0.007	0.009	0.002	0.008	0.003
Average	0.006	0.006	0.007	0.005	0.004	0.004	0.004
1hr - Maximum	0.017	0.014	0.015	0.010	0.009	0.008	0.009
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 EPA Method Part 50 App. F (Chemiluminescence)



Analysis / Test Report

Client : Nexif Ratch Energy Rayong Co., Ltd.

222 Moo 5, T.Nonglailok, A.Bankhai, Rayong Thailand 21120

P/O : PO-2302-0003

Project Name :

Project Location :

Lot ID: 2330784

Date Received : Mar 27, 2023

Date Reported : Apr 01, 2023

Report Number: 2611976-1

Page 1 of 1

Sample Description	Air Quality						
Location	A1 : โรงงานถลุง (GPS 47P 0741951, 1416054)						
Parameter	Sulfur Dioxide (ppm)						
Measurement Date	Mar 17, 2023 - Mar 24, 2023						
Measurement by	Sitpawit Suwannarat						
Time	2330784-1 Mar 17, 2023	2330784-2 Mar 18, 2023	2330784-3 Mar 19, 2023	2330784-4 Mar 20, 2023	2330784-5 Mar 21, 2023	2330784-6 Mar 22, 2023	2330784-7 Mar 23, 2023
09:00 AM - 10:00 AM	<0.001	<0.001	<0.001	<0.001	0.001	0.002	<0.001
10:00 AM - 11:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001
11:00 AM - 12:00 PM	0.001	<0.001	<0.001	0.001	<0.001	0.002	<0.001
12:00 PM - 01:00 PM	<0.001	<0.001	<0.001	0.001	<0.001	0.001	0.001
01:00 PM - 02:00 PM	<0.001	<0.001	<0.001	0.001	<0.001	0.002	<0.001
02:00 PM - 03:00 PM	<0.001	<0.001	<0.001	0.001	<0.001	0.002	0.001
03:00 PM - 04:00 PM	0.001	<0.001	<0.001	0.001	<0.001	0.002	0.002
04:00 PM - 05:00 PM	0.001	<0.001	0.001	0.001	<0.001	0.002	0.002
05:00 PM - 06:00 PM	0.002	0.001	<0.001	0.001	0.001	0.003	0.002
06:00 PM - 07:00 PM	0.002	0.001	<0.001	0.001	<0.001	0.003	0.002
07:00 PM - 08:00 PM	0.002	0.001	<0.001	0.004	0.002	0.002	0.002
08:00 PM - 09:00 PM	0.002	<0.001	0.004	0.004	0.001	0.002	0.002
09:00 PM - 10:00 PM	0.002	<0.001	0.009	<0.001	0.001	0.003	0.002
10:00 PM - 11:00 PM	0.002	<0.001	<0.001	<0.001	0.007	0.002	0.002
11:00 PM - 12:00 AM	0.002	<0.001	0.002	<0.001	0.004	0.002	0.002
12:00 AM - 01:00 AM	<0.001	<0.001	0.002	<0.001	<0.001	0.002	0.002
01:00 AM - 02:00 AM	<0.001	<0.001	0.002	<0.001	0.006	0.002	0.002
02:00 AM - 03:00 AM	<0.001	<0.001	0.002	<0.001	0.004	0.002	0.002
03:00 AM - 04:00 AM	<0.001	<0.001	0.002	<0.001	0.003	0.002	0.002
04:00 AM - 05:00 AM	<0.001	<0.001	0.002	<0.001	0.007	0.002	0.002
05:00 AM - 06:00 AM	<0.001	<0.001	0.001	<0.001	0.001	0.002	0.002
06:00 AM - 07:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	0.002
07:00 AM - 08:00 AM	<0.001	<0.001	<0.001	0.001	<0.001	0.002	0.002
08:00 AM - 09:00 AM	<0.001	<0.001	<0.001	0.001	<0.001	0.002	0.002
Average	0.001	<0.001	0.001	0.001	0.002	0.002	0.002
1hr - Maximum	0.002	0.001	0.009	0.004	0.007	0.003	0.002
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).

Reference Method : US EPA Method Part 53 and 58

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Saranya C.
Saranya Chalerthamrong
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Approved by

Saranya C.
Saranya Chalerthamrong
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S:\Reports_Air SOxNOx.rpt (5:05PM)

18309-21/EMAIL



Analysis / Test Report

Client : Nexif Ratch Energy Rayong Co., Ltd.

222 Moo 5, T.Nonglaloek, A.Bankhai, Rayong Thailand 21120

P/O : PO-2302-0003

Project Name :

Project Location :

Lot ID: 2330784

Date Received : Mar 27, 2023

Date Reported : Apr 01, 2023

Report Number: 2611979-1

Page 1 of 1

Sample Description	Air Quality						
Location	A2 : หนองเลว (GPS 47P 0741408, 1411396)						
Parameter	Sulfur Dioxide (ppm)						
Measurement Date	Mar 17, 2023 - Mar 24, 2023						
Measurement by	Sitpawit Suwannarat						
Time	2330784-8 Mar 17, 2023	2330784-9 Mar 18, 2023	2330784-10 Mar 19, 2023	2330784-11 Mar 20, 2023	2330784-12 Mar 21, 2023	2330784-13 Mar 22, 2023	2330784-14 Mar 23, 2023
11:00 AM - 12:00 PM	0.001	0.002	0.001	0.002	0.002	0.002	0.002
12:00 PM - 01:00 PM	<0.001	0.002	0.002	0.002	0.002	0.002	0.002
01:00 PM - 02:00 PM	0.001	0.001	0.001	0.002	0.002	0.002	0.002
02:00 PM - 03:00 PM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
03:00 PM - 04:00 PM	0.002	0.002	0.001	0.002	0.002	0.002	0.002
04:00 PM - 05:00 PM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
05:00 PM - 06:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
06:00 PM - 07:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
07:00 PM - 08:00 PM	0.002	0.001	0.002	0.002	0.002	0.002	0.002
08:00 PM - 09:00 PM	0.002	0.008	0.002	0.002	0.002	0.002	0.002
09:00 PM - 10:00 PM	0.002	<0.001	0.002	0.002	0.002	0.002	0.003
10:00 PM - 11:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
11:00 PM - 12:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
12:00 AM - 01:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
01:00 AM - 02:00 AM	0.002	<0.001	0.002	0.002	0.002	0.002	0.002
02:00 AM - 03:00 AM	0.002	0.001	0.002	0.002	0.002	0.002	0.002
03:00 AM - 04:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
04:00 AM - 05:00 AM	0.002	0.001	0.002	0.002	0.002	0.002	0.002
05:00 AM - 06:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.001
06:00 AM - 07:00 AM	0.003	0.001	0.002	0.002	0.002	0.002	0.001
07:00 AM - 08:00 AM	0.003	0.002	0.002	0.002	0.002	0.002	0.001
08:00 AM - 09:00 AM	0.003	0.002	0.002	0.002	0.001	0.002	0.001
09:00 AM - 10:00 AM	0.002	0.002	0.001	0.002	0.002	0.002	0.001
10:00 AM - 11:00 AM	0.002	0.002	0.001	0.002	0.002	0.002	0.002
Average	0.002	0.002	0.002	0.002	0.002	0.002	0.002
1hr - Maximum	0.003	0.008	0.002	0.002	0.002	0.002	0.003
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Standard	: Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).						
Reference Method	: US EPA Method Part 53 and 58						

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Approved by

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S:\Reports\Air SOxNOx rpt (5.05PM)



Analysis / Test Report

Client : Nexif Ratch Energy Rayong Co., Ltd.

222 Moo 5, T.Nonglaloek, A.Bankhai, Rayong Thailand 21120

P/O : PO-2302-0003

Project Name :

Project Location :

Lot ID: 2330784

Date Received : Mar 27, 2023

Date Reported : Apr 01, 2023

Report Number: 2598157-1

Page 1 of 1

Sample Description	Air Quality						
Location	A3 : หนองเลว (GPS 47P 0747563, 1413915)						
Parameter	Sulfur Dioxide (ppm)						
Measurement Date	Mar 17, 2023 - Mar 24, 2023						
Measurement by	Sitpawit Suwannarat						
Time	2330784-15 Mar 17, 2023	2330784-16 Mar 18, 2023	2330784-17 Mar 19, 2023	2330784-18 Mar 20, 2023	2330784-19 Mar 21, 2023	2330784-20 Mar 22, 2023	2330784-21 Mar 23, 2023
10:00 AM - 11:00 AM	<0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001
11:00 AM - 12:00 PM	<0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001
12:00 PM - 01:00 PM	<0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001
01:00 PM - 02:00 PM	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
02:00 PM - 03:00 PM	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001
03:00 PM - 04:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
04:00 PM - 05:00 PM	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001
05:00 PM - 06:00 PM	<0.001	<0.001	0.001	0.001	<0.001	<0.001	<0.001
06:00 PM - 07:00 PM	<0.001	<0.001	0.001	0.001	<0.001	<0.001	<0.001
07:00 PM - 08:00 PM	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001
08:00 PM - 09:00 PM	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001
09:00 PM - 10:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
10:00 PM - 11:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
11:00 PM - 12:00 AM	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12:00 AM - 01:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
01:00 AM - 02:00 AM	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
02:00 AM - 03:00 AM	0.001	<0.001	0.001	0.001	<0.001	<0.001	<0.001
03:00 AM - 04:00 AM	<0.001	<0.001	0.001	0.001	<0.001	<0.001	<0.001
04:00 AM - 05:00 AM	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001
05:00 AM - 06:00 AM	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001
06:00 AM - 07:00 AM	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001
07:00 AM - 08:00 AM	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001
08:00 AM - 09:00 AM	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001
09:00 AM - 10:00 AM	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001
Average	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1hr - Maximum	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Standard	: Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).						
Reference Method	: US EPA Method Part 53 and 58						

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S:\Reports\Air SOxNOx rpt (5.05PM)



Analysis / Test Report



TESTING
No.0042

Lot ID: 2330786

Date Received : Mar 24, 2023

Date Reported : Mar 30, 2023

Report Number: 2598164-1

Client : Nexif Ratch Energy Rayong Co., Ltd.

222 Moo 5, T.Nonglalo, A.Bankhai, Rayong Thailand 21120

P/O : PO-2302-0003

Project Name :

Project Location :

Page 1 of 1

Sample Description	Air Quality				
Location	A1 : หมู่ 10 บ้านนาทอง (GPS 47P 0741951, 1416054)				
Date Analysis Commenced	Mar 25, 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)
2330786-1	Mar 17 - Mar 18, 2023	0.049	0.020	752	32
2330786-2	Mar 18 - Mar 19, 2023	0.048	0.019	752	32
2330786-3	Mar 19 - Mar 20, 2023	0.037	0.020	752	32
2330786-4	Mar 20 - Mar 21, 2023	0.033	0.015	752	32
2330786-5	Mar 21 - Mar 22, 2023	0.034	0.016	752	32
2330786-6	Mar 22 - Mar 23, 2023	0.038	0.015	752	32
2330786-7	Mar 23 - Mar 24, 2023	0.014	0.009	752	32
Guideline		0.33	0.12	-	-

Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B

Particulate Matter (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 : Sitpawit Suwannarat

Remark :

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

Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2330786

Date Received : Mar 24, 2023

Date Reported : Mar 30, 2023

Report Number: 2598164-2

Client : Nexif Ratch Energy Rayong Co., Ltd.

222 Moo 5, T.Nonglalo, A.Bankhai, Rayong Thailand 21120

P/O : PO-2302-0003

Project Name :

Project Location :

Page 1 of 1

Sample Description	Air Quality				
Location	A2 : บ้านนาทอง (GPS 47P 0741408, 1411396)				
Date Analysis Commenced	Mar 25, 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)
2330786-8	Mar 17 - Mar 18, 2023	0.105	0.027	752	32
2330786-9	Mar 18 - Mar 19, 2023	0.174	0.036	752	32
2330786-10	Mar 19 - Mar 20, 2023	0.164	0.048	752	32
2330786-11	Mar 20 - Mar 21, 2023	0.132	0.035	752	32
2330786-12	Mar 21 - Mar 22, 2023	0.129	0.030	752	32
2330786-13	Mar 22 - Mar 23, 2023	0.125	0.026	752	32
2330786-14	Mar 23 - Mar 24, 2023	0.067	0.019	752	32
Guideline		0.33	0.12	-	-

Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B

Particulate Matter (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 : Sitpawit Suwannarat

Remark :

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

Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2330786
Date Received : Mar 24, 2023
Date Reported : Mar 30, 2023
Report Number: 2598164-3

Client : Nexif Ratch Energy Rayong Co., Ltd.
222 Moo 5, T.Nonglajok, A.Bankhai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :

Sample Description	Air Quality				
Location	A3 : วัดนาถกรรณ (GPS 47P 0747563, 1413915)				
Date Analysis Commenced	Mar 25, 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)
2330786-15	Mar 17 - Mar 18, 2023	0.046	0.016	752	32
2330786-16	Mar 18 - Mar 19, 2023	0.055	0.019	752	32
2330786-17	Mar 19 - Mar 20, 2023	0.044	0.022	752	32
2330786-18	Mar 20 - Mar 21, 2023	0.035	0.014	752	32
2330786-19	Mar 21 - Mar 22, 2023	0.030	0.015	752	32
2330786-20	Mar 22 - Mar 23, 2023	0.022	0.013	752	32
2330786-21	Mar 23 - Mar 24, 2023	0.034	0.012	752	32
Guideline		0.33	0.12	-	-

Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B
Particulate Matter (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 : Sitpawit Suwannarat

Remark :

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

Approved by

Thanita K.

Thanita Kulsurwong
Scientist (4)

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Analysis / Test Report

Client : Nexif Ratch Energy Rayong Co., Ltd.
222 Moo 5, T.Nonglajok, A.Bankhai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :

Lot ID : 2330785
Date Received : Mar 27, 2023
Date Reported : Apr 03, 2023
Report Number : 2598161-1

Sample Number 2330785-1 to 7
Parameter Wind Speed / Wind Direction
Location A2 : วัดนาถกรรณ (GPS 47P 0741408, 1411396)
Sampling Date Mar 17 - Mar 24, 2023
Sampling by Sitpawit Suwannarat

Time	Mar 17 - Mar 18, 2023		Mar 18 - Mar 19, 2023		Mar 19 - Mar 20, 2023		Mar 20 - Mar 21, 2023		Mar 21 - Mar 22, 2023		Mar 22 - Mar 23, 2023		Mar 23 - Mar 24, 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)
11:00 AM - 12:00 PM	1.5	186.0	S	0.9	247.0	WSW	1.3	197.0	SSW	0.7	249.0	WSW	2.3	258.0
12:00 PM - 01:00 PM	1.7	197.0	SSW	1.5	214.0	SW	2.5	191.0	S	0.9	246.0	WSW	1.1	230.0
01:00 PM - 02:00 PM	0.7	216.0	SW	2.9	202.0	SSW	1.9	214.0	SW	0.8	286.0	WNW	0.9	242.0
02:00 PM - 03:00 PM	2.0	306.0	NW	0.7	242.0	WSW	0.7	261.0	W	1.2	273.0	W	2.9	201.0
03:00 PM - 04:00 PM	1.7	264.0	W	1.0	274.0	W	1.1	237.0	WSW	1.4	210.0	SSW	1.1	198.0
04:00 PM - 05:00 PM	0.7	213.0	SSW	0.5	220.0	SW	1.3	207.0	SSW	0.5	222.0	SW	0.4	211.0
05:00 PM - 06:00 PM	0.7	259.0	W	0.1	-	-	0.2	-	-	0.5	199.0	SSW	0.8	209.0
06:00 PM - 07:00 PM	0.7	262.0	W	0.4	224.0	SW	0.5	234.0	SW	0.4	199.0	SSW	0.3	200.0
07:00 PM - 08:00 PM	0.6	193.0	SSW	0.0	-	-	0.3	230.0	SW	0.5	225.0	SW	0.6	197.0
08:00 PM - 09:00 PM	0.6	193.0	SSW	0.0	-	-	0.3	263.0	W	0.1	-	-	1.2	254.0
09:00 PM - 10:00 PM	0.3	193.0	SSW	0.2	-	-	0.3	263.0	W	0.6	217.0	SW	0.5	230.0
10:00 PM - 11:00 PM	0.3	193.0	SSW	0.3	202.0	SSW	0.4	242.0	WSW	1.0	219.0	SW	0.5	224.0
11:00 PM - 12:00 AM	0.3	193.0	SSW	0.5	236.0	SW	1.0	242.0	WSW	0.3	263.0	W	0.3	223.0
12:00 AM - 01:00 AM	0.4	193.0	SSW	0.3	228.0	SW	0.6	242.0	WSW	0.5	214.0	SW	0.3	220.0
01:00 AM - 02:00 AM	0.3	193.0	SSW	0.6	264.0	W	0.9	255.0	WSW	0.2	-	-	0.3	220.0
02:00 AM - 03:00 AM	0.3	193.0	SSW	0.6	198.0	SSW	0.3	255.0	WSW	0.0	-	-	0.6	218.0
03:00 AM - 04:00 AM	0.3	193.0	SSW	0.3	254.0	WSW	0.5	37.0	NE	0.0	-	-	0.5	221.0
04:00 AM - 05:00 AM	0.4	193.0	SSW	0.4	254.0	WSW	0.0	-	-	0.3	255.0	WSW	1.2	220.0
05:00 AM - 06:00 AM	0.6	193.0	SSW	0.3	255.0	WSW	0.0	-	-	0.0	-	-	0.3	218.0
06:00 AM - 07:00 AM	0.5	193.0	SSW	0.3	188.0	S	1.2	190.0	S	0.8	257.0	WSW	0.8	231.0
07:00 AM - 08:00 AM	0.3	266.0	W	0.6	195.0	SSW	0.9	217.0	SW	1.3	191.0	S	0.8	186.0
08:00 AM - 09:00 AM	0.2	-	-	1.6	201.0	SSW	1.5	206.0	SSW	1.6	266.0	W	0.9	240.0
09:00 AM - 10:00 AM	1.4	265.0	W	1.0	232.0	SW	1.2	206.0	SSW	0.5	183.0	S	1.2	236.0
10:00 AM - 11:00 AM	2.0	204.0	SSW	0.8	182.0	S	2.0	252.0	WSW	1.8	206.0	SSW	1.1	256.0

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Sarayuht Jitranont

Sarayuth Jitranont
Assistant General Manager

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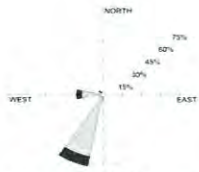
Analysis / Test Report

Client : Nexif Ratch Energy Rayong Co., Ltd.
222 Moo 5, T.Nonglalo, A.Bankhai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :

Lot ID : 2330785
Date Received : Mar 27, 2023
Date Reported : Apr 03, 2023
Report Number : 2598161-1

Page 2 of 2

Wind Rose



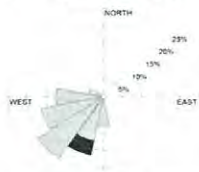
Date : Mar 17-18, 2023



Date : Mar 18-19, 2023



Date : Mar 19-20, 2023



Date : Mar 20-21, 2023



Date : Mar 21-22, 2023



Date : Mar 22-23, 2023



Date : Mar 23-24, 2023



Date : Mar 17-24, 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	7.74
0.3-1.7	82.14
Calms	10.12

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Approved by

Sarayuth Jitranont
Assistant General Manager

ระดับเสียง



Analysis / Test Report



TESTING
No.0042

Client : Nexif Ratch Energy Rayong Co., Ltd.

222 Moo 5, T.Nonglajok, A.Bankhai, Rayong Thailand 21120

P/O : PO-2302-0003

Project Name :

Project Location :

Lot ID: 2328286

Date Received : Mar 27, 2023

Date Reported : Mar 30, 2023

Report Number: 2609151-1

Page 1 of 1

Sample Number 2328286-1
Parameter Noise (Leq 24 hrs.)
Location N1 : หมู่ 10 บ้านนาบดลอง (GPS 47P 0742983, 1415574)
Measurement Date Mar 17 - Mar 18, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 734223

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	54.6	94.3	41.9
01:00 PM - 02:00 PM	47.6	67.7	44.0
02:00 PM - 03:00 PM	49.1	71.2	44.3
03:00 PM - 04:00 PM	48.9	67.4	46.0
04:00 PM - 05:00 PM	50.4	68.1	48.7
05:00 PM - 06:00 PM	54.7	65.2	49.1
06:00 PM - 07:00 PM	51.1	57.8	50.0
07:00 PM - 08:00 PM	50.3	69.6	47.7
08:00 PM - 09:00 PM	50.8	72.0	49.1
09:00 PM - 10:00 PM	51.0	57.1	48.9
10:00 PM - 11:00 PM	48.9	61.0	47.7
11:00 PM - 12:00 AM	49.9	63.3	47.9
12:00 AM - 01:00 AM	49.4	64.1	47.5
01:00 AM - 02:00 AM	50.9	64.5	49.0
02:00 AM - 03:00 AM	51.9	64.7	49.8
03:00 AM - 04:00 AM	52.7	67.6	50.1
04:00 AM - 05:00 AM	54.1	72.1	51.6
05:00 AM - 06:00 AM	58.8	81.4	55.2
06:00 AM - 07:00 AM	55.4	73.8	50.7
07:00 AM - 08:00 AM	51.0	71.1	46.6
08:00 AM - 09:00 AM	49.6	64.8	46.0
09:00 AM - 10:00 AM	49.2	71.7	44.9
10:00 AM - 11:00 AM	48.3	65.1	44.6
11:00 AM - 12:00 PM	48.4	66.6	43.9

Leq Average 24 hrs. (dB(A))

52.1

Lmax (dB(A))

94.3

L90 (dB(A))

47.7

Ldn (dB(A))

59.8

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 Kulsunwong

Scientist (4)

Approved by

Supot Salamteh

Section Head

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Life Sciences

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18309-21/ EMAIL

S:\Reports_Air Noise.rpt (9 45AM)



Analysis / Test Report



TESTING
No.0042

Client : Nexif Ratch Energy Rayong Co., Ltd.

222 Moo 5, T.Nonglajok, A.Bankhai, Rayong Thailand 21120

P/O : PO-2302-0003

Project Name :

Project Location :

Lot ID: 2328286

Date Received : Mar 27, 2023

Date Reported : Mar 30, 2023

Report Number: 2609152-1

Page 1 of 1

Sample Number 2328286-2
Parameter Noise (Leq 24 hrs.)
Location N1 : หมู่ 10 บ้านนาบดลอง (GPS 47P 0742983, 1415574)
Measurement Date Mar 18 - Mar 19, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 734223

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	48.0	60.8	44.9
01:00 PM - 02:00 PM	48.8	66.3	45.5
02:00 PM - 03:00 PM	49.3	72.5	45.2
03:00 PM - 04:00 PM	51.7	77.3	46.2
04:00 PM - 05:00 PM	51.5	65.9	49.0
05:00 PM - 06:00 PM	56.0	66.5	50.9
06:00 PM - 07:00 PM	50.8	63.7	49.5
07:00 PM - 08:00 PM	49.7	59.7	48.5
08:00 PM - 09:00 PM	49.2	61.5	47.8
09:00 PM - 10:00 PM	50.0	60.0	48.6
10:00 PM - 11:00 PM	50.3	60.5	48.7
11:00 PM - 12:00 AM	49.1	71.0	47.4
12:00 AM - 01:00 AM	49.9	60.4	47.6
01:00 AM - 02:00 AM	51.2	58.3	49.3
02:00 AM - 03:00 AM	51.0	60.9	49.0
03:00 AM - 04:00 AM	51.6	65.7	49.2
04:00 AM - 05:00 AM	53.8	66.9	50.7
05:00 AM - 06:00 AM	57.3	77.7	53.9
06:00 AM - 07:00 AM	54.6	67.9	50.4
07:00 AM - 08:00 AM	51.2	68.8	46.6
08:00 AM - 09:00 AM	49.9	66.2	44.6
09:00 AM - 10:00 AM	49.5	66.4	44.3
10:00 AM - 11:00 AM	49.2	66.1	44.5
11:00 AM - 12:00 PM	48.4	66.5	43.2

Leq Average 24 hrs. (dB(A))

51.7

Lmax (dB(A))

77.7

L90 (dB(A))

47.8

Ldn (dB(A))

59.1

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 Kulsunwong

Scientist (4)

Approved by

Supot Salamteh

Section Head

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S:\Reports_Air Noise.rpt (9 45AM)



Analysis / Test Report



TESTING
No.0042

Client : Nexif Ratch Energy Rayong Co., Ltd.
222 Moo 5, T.Nonglajok, A.Bankhai, Rayong Thailand 21120

P/O : PO-2302-0003

Project Name :

Project Location :

Lot ID: 2328286

Date Received : Mar 27, 2023

Date Reported : Mar 30, 2023

Report Number: 2609153-1

Page 1 of 1

Sample Number : 2328286-3
Parameter : Noise (Leq 24 hrs.)
Location : N1 : หมู่ 10 บ้านนาบดอง (GPS 47P 0742983, 1415574)
Measurement Date : Mar 19 - Mar 20, 2023
Measurement by : Sitpawit Suwannarat
Sound Level meter : Serial No. 734223

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	49.6	65.1	44.2
01:00 PM - 02:00 PM	48.1	63.2	45.3
02:00 PM - 03:00 PM	49.8	70.5	45.3
03:00 PM - 04:00 PM	51.0	70.9	46.5
04:00 PM - 05:00 PM	50.9	65.4	49.0
05:00 PM - 06:00 PM	55.9	70.0	51.2
06:00 PM - 07:00 PM	52.7	72.3	50.9
07:00 PM - 08:00 PM	51.4	69.6	49.3
08:00 PM - 09:00 PM	50.9	58.8	48.8
09:00 PM - 10:00 PM	49.9	58.3	48.1
10:00 PM - 11:00 PM	49.8	54.9	48.3
11:00 PM - 12:00 AM	49.8	60.7	48.1
12:00 AM - 01:00 AM	49.2	58.9	47.5
01:00 AM - 02:00 AM	48.6	61.5	45.9
02:00 AM - 03:00 AM	49.5	65.3	46.1
03:00 AM - 04:00 AM	51.6	66.1	48.3
04:00 AM - 05:00 AM	53.1	67.3	49.7
05:00 AM - 06:00 AM	56.9	71.9	52.0
06:00 AM - 07:00 AM	52.9	71.1	48.4
07:00 AM - 08:00 AM	50.1	62.9	45.3
08:00 AM - 09:00 AM	47.1	62.2	42.8
09:00 AM - 10:00 AM	48.6	69.6	42.5
10:00 AM - 11:00 AM	46.9	67.9	40.4
11:00 AM - 12:00 PM	47.0	66.4	40.9

Leq Average 24 hrs. (dB(A)) : 51.3
Lmax (dB(A)) : 72.3
L90 (dB(A)) : 47.5
Ldn (dB(A)) : 58.4
Standard (dB(A)) : 70

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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S:\Reports_Air Noise.rpt (9:45AM)

18309-21/ EMAIL



Analysis / Test Report



TESTING
No.0042

Client : Nexif Ratch Energy Rayong Co., Ltd.
222 Moo 5, T.Nonglajok, A.Bankhai, Rayong Thailand 21120

P/O : PO-2302-0003

Project Name :

Project Location :

Lot ID: 2328286

Date Received : Mar 27, 2023

Date Reported : Mar 30, 2023

Report Number: 2609154-1

Page 1 of 1

Sample Number : 2328286-4
Parameter : Noise (Leq 24 hrs.)
Location : N1 : หมู่ 10 บ้านนาบดอง (GPS 47P 0742983, 1415574)
Measurement Date : Mar 20 - Mar 21, 2023
Measurement by : Sitpawit Suwannarat
Sound Level meter : Serial No. 734223

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	45.9	61.3	41.2
01:00 PM - 02:00 PM	46.9	65.4	42.1
02:00 PM - 03:00 PM	48.4	67.4	42.8
03:00 PM - 04:00 PM	50.2	75.5	44.8
04:00 PM - 05:00 PM	51.5	77.7	47.9
05:00 PM - 06:00 PM	56.0	72.0	49.9
06:00 PM - 07:00 PM	50.1	62.7	47.5
07:00 PM - 08:00 PM	48.9	56.9	47.5
08:00 PM - 09:00 PM	49.5	57.5	48.0
09:00 PM - 10:00 PM	50.2	57.2	48.6
10:00 PM - 11:00 PM	49.6	56.8	48.1
11:00 PM - 12:00 AM	49.9	71.8	47.6
12:00 AM - 01:00 AM	49.2	55.7	47.8
01:00 AM - 02:00 AM	50.3	68.6	47.9
02:00 AM - 03:00 AM	51.1	64.3	48.9
03:00 AM - 04:00 AM	50.9	65.2	48.1
04:00 AM - 05:00 AM	54.1	71.6	49.8
05:00 AM - 06:00 AM	59.3	76.5	53.3
06:00 AM - 07:00 AM	53.6	76.2	49.5
07:00 AM - 08:00 AM	50.1	68.6	45.0
08:00 AM - 09:00 AM	46.7	60.9	40.7
09:00 AM - 10:00 AM	44.7	62.3	39.6
10:00 AM - 11:00 AM	47.3	81.4	40.9
11:00 AM - 12:00 PM	46.4	68.9	41.3

Leq Average 24 hrs. (dB(A)) : 51.5
Lmax (dB(A)) : 81.4
L90 (dB(A)) : 47.6
Ldn (dB(A)) : 59.4
Standard (dB(A)) : 70

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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S:\Reports_Air Noise.rpt (9:45AM)



Analysis / Test Report



TESTING
No.0042

Client : Nexif Ratch Energy Rayong Co., Ltd.

222 Moo 5, T.Nonglalo, A.Bankhai, Rayong Thailand 21120

P/O : PO-2302-0003

Project Name :

Project Location :

Lot ID: 2328286

Date Received : Mar 27, 2023

Date Reported : Mar 30, 2023

Report Number: 2609155-1

Page 1 of 1

Sample Number 2328286-5
Parameter Noise (Leq 24 hrs.)
Location N1 : หมู่ 10 บ้านนาแดง (GPS 47P 0742983, 1415574)
Measurement Date Mar 21 - Mar 22, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 734223

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	46.1	64.6	42.0
01:00 PM - 02:00 PM	47.4	68.3	42.1
02:00 PM - 03:00 PM	46.9	72.2	43.9
03:00 PM - 04:00 PM	51.0	66.4	48.8
04:00 PM - 05:00 PM	56.1	69.3	50.6
05:00 PM - 06:00 PM	53.1	69.3	48.9
06:00 PM - 07:00 PM	49.7	69.8	47.7
07:00 PM - 08:00 PM	49.4	58.7	48.1
08:00 PM - 09:00 PM	50.3	59.6	49.0
09:00 PM - 10:00 PM	50.0	62.2	48.2
10:00 PM - 11:00 PM	49.3	61.9	47.7
11:00 PM - 12:00 AM	49.0	65.5	47.3
12:00 AM - 01:00 AM	48.1	63.4	46.3
01:00 AM - 02:00 AM	48.7	65.3	46.8
02:00 AM - 03:00 AM	51.0	64.8	47.6
03:00 AM - 04:00 AM	53.1	71.1	50.5
04:00 AM - 05:00 AM	58.6	76.2	52.6
05:00 AM - 06:00 AM	53.6	67.1	49.6
06:00 AM - 07:00 AM	50.3	66.2	45.4
07:00 AM - 08:00 AM	50.8	71.6	44.1
08:00 AM - 09:00 AM	47.7	64.2	43.0
09:00 AM - 10:00 AM	46.2	63.3	40.9
10:00 AM - 11:00 AM	44.0	66.3	38.4
11:00 AM - 12:00 PM	44.8	62.1	39.7

Leq Average 24 hrs. (dB(A))

51.3

Lmax (dB(A))

76.2

L90 (dB(A))

47.3

Ldn (dB(A))

58.9

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 Kulsunwong
Scientist (4)

Approved by

Supt S.

Supot Salamteh
Section Head

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S:\Reports\Air Noise rpt (9.45AM)



Analysis / Test Report



TESTING
No.0042

Client : Nexif Ratch Energy Rayong Co., Ltd.

222 Moo 5, T.Nonglalo, A.Bankhai, Rayong Thailand 21120

P/O : PO-2302-0003

Project Name :

Project Location :

Lot ID: 2328286

Date Received : Mar 27, 2023

Date Reported : Mar 30, 2023

Report Number: 2609156-1

Page 1 of 1

Sample Number 2328286-6
Parameter Noise (Leq 24 hrs.)
Location N1 : หมู่ 10 บ้านนาแดง (GPS 47P 0742983, 1415574)
Measurement Date Mar 22 - Mar 23, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 734223

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	45.1	66.7	39.6
01:00 PM - 02:00 PM	47.6	63.3	42.6
02:00 PM - 03:00 PM	50.7	68.3	44.4
03:00 PM - 04:00 PM	50.4	74.6	47.1
04:00 PM - 05:00 PM	56.9	74.8	48.0
05:00 PM - 06:00 PM	55.1	68.3	48.5
06:00 PM - 07:00 PM	49.1	66.3	47.5
07:00 PM - 08:00 PM	48.6	58.4	47.1
08:00 PM - 09:00 PM	51.3	60.6	49.8
09:00 PM - 10:00 PM	50.0	60.9	48.5
10:00 PM - 11:00 PM	49.7	62.8	48.2
11:00 PM - 12:00 AM	48.9	67.6	46.8
12:00 AM - 01:00 AM	48.7	63.2	46.2
01:00 AM - 02:00 AM	49.7	63.3	47.4
02:00 AM - 03:00 AM	50.8	65.0	48.4
03:00 AM - 04:00 AM	53.6	67.0	50.0
04:00 AM - 05:00 AM	60.3	74.6	51.7
05:00 AM - 06:00 AM	53.3	65.0	49.9
06:00 AM - 07:00 AM	50.8	69.7	46.5
07:00 AM - 08:00 AM	49.5	64.1	45.0
08:00 AM - 09:00 AM	48.4	67.2	44.5
09:00 AM - 10:00 AM	48.6	68.7	44.6
10:00 AM - 11:00 AM	49.5	73.2	42.1
11:00 AM - 12:00 PM	47.8	65.1	41.7

Leq Average 24 hrs. (dB(A))

52.2

Lmax (dB(A))

74.8

L90 (dB(A))

47.1

Ldn (dB(A))

59.8

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 Kulsunwong
Scientist (4)

Approved by

Supt S.

Supot Salamteh
Section Head

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Life Sciences

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RIGHT SOLUTIONS RIGHT PARTNER

18309-21/ EMAIL

S:\Reports\Air Noise rpt (9.45AM)



Analysis / Test Report



TESTING
No.0042

Client : Nexif Ratch Energy Rayong Co., Ltd.
222 Moo 5, T.Nonglajok, A.Bankhai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :

Lot ID: 2328286
Date Received : Mar 27, 2023
Date Reported : Mar 30, 2023
Report Number: 2609157-1

Page 1 of 1

Sample Number	2328286-7
Parameter	Noise (Leq 24 hrs.)
Location	N1 : หมู่ 10 บ้านนาทอง (GPS 47P 0742983, 1415574)
Measurement Date	Mar 23 - Mar 24, 2023
Measurement by	Sitpawit Suwannarat
Sound Level meter	Serial No. 734223

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	46.3	66.0	41.5
01:00 PM - 02:00 PM	49.0	71.1	42.2
02:00 PM - 03:00 PM	51.5	74.4	43.2
03:00 PM - 04:00 PM	49.1	67.4	45.2
04:00 PM - 05:00 PM	60.3	74.7	47.5
05:00 PM - 06:00 PM	56.9	70.6	49.2
06:00 PM - 07:00 PM	53.3	60.6	48.5
07:00 PM - 08:00 PM	52.1	60.4	47.4
08:00 PM - 09:00 PM	51.1	66.0	48.9
09:00 PM - 10:00 PM	51.2	71.7	48.6
10:00 PM - 11:00 PM	49.3	63.5	47.1
11:00 PM - 12:00 AM	49.4	64.5	47.1
12:00 AM - 01:00 AM	50.3	65.0	47.8
01:00 AM - 02:00 AM	50.2	67.5	47.5
02:00 AM - 03:00 AM	51.7	70.8	47.8
03:00 AM - 04:00 AM	52.8	67.4	49.2
04:00 AM - 05:00 AM	60.8	72.5	53.2
05:00 AM - 06:00 AM	54.3	67.8	50.9
06:00 AM - 07:00 AM	50.5	66.7	46.4
07:00 AM - 08:00 AM	49.6	65.8	44.7
08:00 AM - 09:00 AM	48.2	67.9	41.1
09:00 AM - 10:00 AM	46.8	63.6	41.9
10:00 AM - 11:00 AM	46.2	65.9	39.1
11:00 AM - 12:00 PM	46.3	60.5	44.1

Leq Average 24 hrs. (dB(A))	53.3		
Lmax (dB(A))		74.7	
L90 (dB(A))			47.1
Ldn (dB(A))	60.3		
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 Kulsunwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Life Sciences

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S:\Reports_Air Noise rpt (9 46AM)

18309-21/ EMAIL



Analysis / Test Report



TESTING
No.0042

Client : Nexif Ratch Energy Rayong Co., Ltd.
222 Moo 5, T.Nonglajok, A.Bankhai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :

Lot ID: 2328286
Date Received : Mar 27, 2023
Date Reported : Mar 30, 2023
Report Number: 2609158-1

Page 1 of 1

Sample Number	2328286-8
Parameter	Noise (Leq 24 hrs.)
Location	N2 : ริมรั้วโครงการระยะที่ 2 ทางด้านทิศใต้ (GPS 47P 0743692, 1414836)
Measurement Date	Mar 17 - Mar 18, 2023
Measurement by	Sitpawit Suwannarat
Sound Level meter	Serial No. 734221

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	57.2	80.6	55.1
12:00 PM - 01:00 PM	57.3	83.6	55.0
01:00 PM - 02:00 PM	58.0	86.0	54.9
02:00 PM - 03:00 PM	57.2	78.6	55.1
03:00 PM - 04:00 PM	57.3	79.6	55.4
04:00 PM - 05:00 PM	57.4	72.5	55.8
05:00 PM - 06:00 PM	58.8	82.1	56.3
06:00 PM - 07:00 PM	59.1	80.3	56.7
07:00 PM - 08:00 PM	57.7	81.7	56.5
08:00 PM - 09:00 PM	57.7	78.6	56.8
09:00 PM - 10:00 PM	57.5	73.8	56.9
10:00 PM - 11:00 PM	57.3	67.5	56.6
11:00 PM - 12:00 AM	56.8	68.2	56.2
12:00 AM - 01:00 AM	56.7	63.7	56.3
01:00 AM - 02:00 AM	56.8	67.6	56.3
02:00 AM - 03:00 AM	56.7	59.0	56.3
03:00 AM - 04:00 AM	56.6	61.2	56.2
04:00 AM - 05:00 AM	56.9	69.9	56.4
05:00 AM - 06:00 AM	58.9	81.0	56.5
06:00 AM - 07:00 AM	59.7	78.6	56.5
07:00 AM - 08:00 AM	57.7	73.5	56.1
08:00 AM - 09:00 AM	57.5	77.0	56.0
09:00 AM - 10:00 AM	57.7	70.0	56.1
10:00 AM - 11:00 AM	57.7	76.5	56.0

Leq Average 24 hrs. (dB(A))	57.7		
Lmax (dB(A))		86.0	
L90 (dB(A))			56.2
Ldn (dB(A))	64.0		
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 Kulsunwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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S:\Reports_Air Noise rpt (9 51AM)



Analysis / Test Report



TESTING
No.0042

Client : Nexif Ratch Energy Rayong Co., Ltd.

222 Moo 5, T.Nonglailok, A.Bankhai, Rayong Thailand 21120

P/O : PO-2302-0003

Project Name :

Project Location :

Lot ID: 2328286

Date Received : Mar 27, 2023

Date Reported : Mar 30, 2023

Report Number: 2609159-1

Page 1 of 1

Sample Number 2328286-9
Parameter Noise (Leq 24 hrs.)
Location N2 : รั้วโรงการระยะที่ 2 ทางด้านทิศใต้ (GPS 47P 0743692, 1414836)
Measurement Date Mar 18 - Mar 19, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 734221

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	58.3	85.2	56.4
12:00 PM - 01:00 PM	58.4	81.9	56.3
01:00 PM - 02:00 PM	58.7	81.8	57.0
02:00 PM - 03:00 PM	60.0	82.8	57.7
03:00 PM - 04:00 PM	58.8	77.9	57.8
04:00 PM - 05:00 PM	58.7	77.8	57.7
05:00 PM - 06:00 PM	58.6	72.5	57.8
06:00 PM - 07:00 PM	58.3	65.2	57.8
07:00 PM - 08:00 PM	57.9	64.8	57.3
08:00 PM - 09:00 PM	57.8	71.7	57.3
09:00 PM - 10:00 PM	57.9	69.5	57.4
10:00 PM - 11:00 PM	57.8	66.6	57.4
11:00 PM - 12:00 AM	57.7	66.5	57.3
12:00 AM - 01:00 AM	57.9	72.1	57.5
01:00 AM - 02:00 AM	59.3	82.6	57.5
02:00 AM - 03:00 AM	62.2	85.6	57.5
03:00 AM - 04:00 AM	59.0	78.0	57.3
04:00 AM - 05:00 AM	58.2	74.1	56.7
05:00 AM - 06:00 AM	59.6	82.8	56.8
06:00 AM - 07:00 AM	58.3	78.0	56.7
07:00 AM - 08:00 AM	58.1	77.8	56.5
08:00 AM - 09:00 AM	58.1	72.0	57.3
09:00 AM - 10:00 AM	58.4	65.3	57.8
10:00 AM - 11:00 AM	58.4	75.7	57.0

Leq Average 24 hrs. (dB(A))

58.7

Lmax (dB(A))

85.6

L90 (dB(A))

57.3

Ldn (dB(A))

65.4

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ
โรงงาน 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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S\Reports_Air Noise rpt (9:51AM)



Analysis / Test Report



TESTING
No.0042

Client : Nexif Ratch Energy Rayong Co., Ltd.

222 Moo 5, T.Nonglailok, A.Bankhai, Rayong Thailand 21120

P/O : PO-2302-0003

Project Name :

Project Location :

Lot ID: 2328286

Date Received : Mar 27, 2023

Date Reported : Mar 30, 2023

Report Number: 2609160-1

Page 1 of 1

Sample Number 2328286-10
Parameter Noise (Leq 24 hrs.)
Location N2 : รั้วโรงการระยะที่ 2 ทางด้านทิศใต้ (GPS 47P 0743692, 1414836)
Measurement Date Mar 19 - Mar 20, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 734221

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	57.9	75.3	56.6
12:00 PM - 01:00 PM	60.0	89.1	56.8
01:00 PM - 02:00 PM	57.9	79.0	56.6
02:00 PM - 03:00 PM	58.7	77.9	56.8
03:00 PM - 04:00 PM	57.9	77.3	56.5
04:00 PM - 05:00 PM	57.9	71.0	56.6
05:00 PM - 06:00 PM	58.4	74.9	56.6
06:00 PM - 07:00 PM	59.1	82.7	57.0
07:00 PM - 08:00 PM	59.4	79.8	57.5
08:00 PM - 09:00 PM	59.7	79.2	58.0
09:00 PM - 10:00 PM	60.3	79.3	58.3
10:00 PM - 11:00 PM	59.3	76.5	58.2
11:00 PM - 12:00 AM	58.9	72.8	58.2
12:00 AM - 01:00 AM	58.6	65.7	58.2
01:00 AM - 02:00 AM	58.7	67.6	58.2
02:00 AM - 03:00 AM	58.4	78.1	57.8
03:00 AM - 04:00 AM	58.3	67.3	57.7
04:00 AM - 05:00 AM	58.2	75.7	57.7
05:00 AM - 06:00 AM	58.1	69.2	57.7
06:00 AM - 07:00 AM	58.1	61.1	57.7
07:00 AM - 08:00 AM	58.1	70.5	57.7
08:00 AM - 09:00 AM	60.0	79.1	58.0
09:00 AM - 10:00 AM	61.5	83.3	58.1
10:00 AM - 11:00 AM	58.1	68.3	57.4

Leq Average 24 hrs. (dB(A))

58.9

Lmax (dB(A))

89.1

L90 (dB(A))

57.7

Ldn (dB(A))

65.0

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ
โรงงาน 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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18309-21/ EMAIL

S\Reports_Air Noise rpt (9:52AM)



Analysis / Test Report



TESTING
No.0042

Client : Nexif Ratch Energy Rayong Co., Ltd.
222 Moo 5, T.Nonglajok, A.Bankhai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :

Lot ID: 2328286
Date Received : Mar 27, 2023
Date Reported : Mar 30, 2023
Report Number: 2609161-1

Page 1 of 1

Sample Number 2328286-11
Parameter Noise (Leq 24 hrs.)
Location N2 : ครัวโครงการระยะที่ 2 ทางด้านทิศใต้ (GPS 47P 0743692, 1414836)
Measurement Date Mar 20 - Mar 21, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 734221

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	57.6	69.0	57.0
12:00 PM - 01:00 PM	57.5	64.5	57.1
01:00 PM - 02:00 PM	57.6	68.4	57.1
02:00 PM - 03:00 PM	57.5	59.8	57.1
03:00 PM - 04:00 PM	57.4	62.0	57.0
04:00 PM - 05:00 PM	57.7	70.7	57.2
05:00 PM - 06:00 PM	59.7	81.8	57.3
06:00 PM - 07:00 PM	60.5	79.4	57.3
07:00 PM - 08:00 PM	57.7	75.0	56.3
08:00 PM - 09:00 PM	57.2	74.6	55.9
09:00 PM - 10:00 PM	59.3	88.4	56.1
10:00 PM - 11:00 PM	57.2	78.3	55.9
11:00 PM - 12:00 AM	58.0	77.2	56.1
12:00 AM - 01:00 AM	57.2	76.6	55.8
01:00 AM - 02:00 AM	57.2	70.3	55.9
02:00 AM - 03:00 AM	57.7	74.2	55.9
03:00 AM - 04:00 AM	58.4	82.0	56.3
04:00 AM - 05:00 AM	58.7	79.1	56.8
05:00 AM - 06:00 AM	59.0	78.5	57.3
06:00 AM - 07:00 AM	59.6	78.6	57.6
07:00 AM - 08:00 AM	58.6	75.8	57.5
08:00 AM - 09:00 AM	58.2	72.1	57.5
09:00 AM - 10:00 AM	57.9	65.0	57.5
10:00 AM - 11:00 AM	58.0	66.9	57.5

Leq Average 24 hrs. (dB(A)) 58.2
Lmax (dB(A)) 88.4
L90 (dB(A)) 57.0
Ldn (dB(A)) 64.6
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 Salamteah
Section Head

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S:\Reports_Air Noise.rpt (9:52AM)

18309-21/ EMAIL



Analysis / Test Report



TESTING
No.0042

Client : Nexif Ratch Energy Rayong Co., Ltd.
222 Moo 5, T.Nonglajok, A.Bankhai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :

Lot ID: 2328286
Date Received : Mar 27, 2023
Date Reported : Mar 30, 2023
Report Number: 2609162-1

Page 1 of 1

Sample Number 2328286-12
Parameter Noise (Leq 24 hrs.)
Location N2 : ครัวโครงการระยะที่ 2 ทางด้านทิศใต้ (GPS 47P 0743692, 1414836)
Measurement Date Mar 21 - Mar 22, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 734221

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	58.4	81.8	56.3
12:00 PM - 01:00 PM	58.5	84.8	56.2
01:00 PM - 02:00 PM	59.2	87.2	56.1
02:00 PM - 03:00 PM	58.4	79.8	56.3
03:00 PM - 04:00 PM	58.5	80.8	56.6
04:00 PM - 05:00 PM	58.6	73.7	57.0
05:00 PM - 06:00 PM	60.0	83.3	57.5
06:00 PM - 07:00 PM	60.3	81.5	57.9
07:00 PM - 08:00 PM	58.9	82.9	57.7
08:00 PM - 09:00 PM	58.9	79.8	58.0
09:00 PM - 10:00 PM	58.7	75.0	58.1
10:00 PM - 11:00 PM	58.5	68.7	57.8
11:00 PM - 12:00 AM	58.0	69.4	57.4
12:00 AM - 01:00 AM	57.9	64.9	57.5
01:00 AM - 02:00 AM	58.0	68.8	57.5
02:00 AM - 03:00 AM	57.9	60.2	57.5
03:00 AM - 04:00 AM	57.8	62.4	57.4
04:00 AM - 05:00 AM	58.1	71.1	57.6
05:00 AM - 06:00 AM	60.1	82.2	57.7
06:00 AM - 07:00 AM	60.9	79.8	57.7
07:00 AM - 08:00 AM	58.1	75.4	56.7
08:00 AM - 09:00 AM	57.6	75.0	56.3
09:00 AM - 10:00 AM	59.7	88.8	56.5
10:00 AM - 11:00 AM	57.6	78.7	56.3

Leq Average 24 hrs. (dB(A)) 58.8
Lmax (dB(A)) 88.8
L90 (dB(A)) 57.4
Ldn (dB(A)) 65.1
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 Salamteah
Section Head

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18309-21/ EMAIL

S:\Reports_Air Noise.rpt (9:52AM)



Analysis / Test Report



TESTING
No.0042

Client : Nexif Ratch Energy Rayong Co., Ltd.

222 Moo 5, T.Nonglalo, A.Bankhai, Rayong Thailand 21120

P/O : PO-2302-0003

Project Name :

Project Location :

Lot ID: 2328286

Date Received : Mar 27, 2023

Date Reported : Mar 30, 2023

Report Number: 2609163-1

Page 1 of 1

Sample Number	2328286-13
Parameter	Noise (Leq 24 hrs.)
Location	N2 : รั้วโครงการระยะที่ 2 ทางด้านทิศใต้ (GPS 47P 0743692, 1414836)
Measurement Date	Mar 22 - Mar 23, 2023
Measurement by	Sitpawit Suwannarat
Sound Level meter	Serial No. 734221

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	58.4	77.6	56.5
12:00 PM - 01:00 PM	57.6	77.0	56.2
01:00 PM - 02:00 PM	57.6	70.7	56.3
02:00 PM - 03:00 PM	58.1	74.6	56.3
03:00 PM - 04:00 PM	58.8	82.4	56.7
04:00 PM - 05:00 PM	59.1	79.5	57.2
05:00 PM - 06:00 PM	59.4	78.9	57.7
06:00 PM - 07:00 PM	60.0	79.0	58.0
07:00 PM - 08:00 PM	59.0	76.2	57.9
08:00 PM - 09:00 PM	58.6	72.5	57.9
09:00 PM - 10:00 PM	58.3	65.4	57.9
10:00 PM - 11:00 PM	58.4	67.3	57.9
11:00 PM - 12:00 AM	58.1	77.8	57.5
12:00 AM - 01:00 AM	58.0	67.0	57.4
01:00 AM - 02:00 AM	57.9	75.4	57.4
02:00 AM - 03:00 AM	57.8	68.9	57.4
03:00 AM - 04:00 AM	57.8	60.8	57.4
04:00 AM - 05:00 AM	57.8	70.2	57.4
05:00 AM - 06:00 AM	59.7	78.8	57.7
06:00 AM - 07:00 AM	61.2	83.0	57.8
07:00 AM - 08:00 AM	57.9	66.7	57.5
08:00 AM - 09:00 AM	57.9	73.7	56.3
09:00 AM - 10:00 AM	57.7	77.2	56.2
10:00 AM - 11:00 AM	57.9	70.2	56.3

Leq Average 24 hrs. (dB(A))

58.6

Lmax (dB(A))

83.0

L90 (dB(A))

57.4

Ldn (dB(A))

65.1

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 Kulsunwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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S:\Reports_Air Noise rpt (9:52AM)



Analysis / Test Report



TESTING
No.0042

Client : Nexif Ratch Energy Rayong Co., Ltd.

222 Moo 5, T.Nonglalo, A.Bankhai, Rayong Thailand 21120

P/O : PO-2302-0003

Project Name :

Project Location :

Lot ID: 2328286

Date Received : Mar 27, 2023

Date Reported : Mar 30, 2023

Report Number: 2609164-1

Page 1 of 1

Sample Number	2328286-14
Parameter	Noise (Leq 24 hrs.)
Location	N2 : รั้วโครงการระยะที่ 2 ทางด้านทิศใต้ (GPS 47P 0743692, 1414836)
Measurement Date	Mar 23 - Mar 24, 2023
Measurement by	Sitpawit Suwannarat
Sound Level meter	Serial No. 734221

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	57.9	76.7	56.2
12:00 PM - 01:00 PM	58.5	85.4	56.6
01:00 PM - 02:00 PM	58.6	82.1	56.5
02:00 PM - 03:00 PM	58.9	82.0	57.2
03:00 PM - 04:00 PM	60.2	83.0	57.9
04:00 PM - 05:00 PM	59.0	78.1	58.0
05:00 PM - 06:00 PM	58.9	78.0	57.9
06:00 PM - 07:00 PM	58.8	72.7	58.0
07:00 PM - 08:00 PM	58.5	65.4	58.0
08:00 PM - 09:00 PM	58.1	65.0	57.5
09:00 PM - 10:00 PM	58.0	71.9	57.5
10:00 PM - 11:00 PM	58.1	69.7	57.6
11:00 PM - 12:00 AM	58.0	66.8	57.6
12:00 AM - 01:00 AM	57.9	66.7	57.5
01:00 AM - 02:00 AM	58.1	72.3	57.7
02:00 AM - 03:00 AM	59.5	82.8	57.7
03:00 AM - 04:00 AM	62.4	85.8	57.7
04:00 AM - 05:00 AM	59.2	78.2	57.5
05:00 AM - 06:00 AM	58.4	74.3	56.9
06:00 AM - 07:00 AM	59.8	83.0	57.0
07:00 AM - 08:00 AM	58.5	78.2	56.9
08:00 AM - 09:00 AM	58.3	78.0	56.7
09:00 AM - 10:00 AM	58.3	72.2	57.5
10:00 AM - 11:00 AM	58.6	65.5	58.0

Leq Average 24 hrs. (dB(A))

58.9

Lmax (dB(A))

85.8

L90 (dB(A))

57.5

Ldn (dB(A))

65.6

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 Kulsunwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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S:\Reports_Air Noise rpt (10:09AM)

คุณภาพน้ำทิ้ง



Analysis / Test Report

Client : Nexif Ratch Energy Rayong Co., Ltd.
222 Moo 5, T.Nonglalek, A.Bankhai, Rayong Thailand 21120

P/O :
Project Name :
Project Location :



TESTING
No.0042
Lot ID: 236051
Date Received : Jan 19, 2023
Date Reported : Jan 26, 2023
Report Number : 2545736-1

Page 1 of 1

Sample Number	236051-1						
Sampled Date	Jan 19, 2023 10:40 AM						
Sample Description	Wastewater						
Location	บ่อกักน้ำทิ้งของโรงการ (Final Pond)						
Date Analysis Commenced	Jan 19, 2023						
Condition of Sample	Contained in one BOD bottle, 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	5.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	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 *		-	-	8.1	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	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Temperature *	Degree C	-	-	24.6	≤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	254	≤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	≤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 7-323-4-9476 , Thanasoun Namakunna ทะเบียนเลขที่ 7-204-4-8592

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

N. Banongkit

Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ 7-323-4-9445

Approved by

D. Chanchon

Dej Chanchon
Senior Manager
ทะเบียนเลขที่ 7-323-4-9442

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Analysis / Test Report

Client : Nexif Ratch Energy Rayong Co., Ltd.
222 Moo 5, T.Nonglalek, A.Bankhai, Rayong Thailand 21120

P/O :
Project Name :
Project Location :



TESTING
No.0009
Lot ID: 236051
Date Received : Jan 19, 2023
Date Reported : Jan 26, 2023
Report Number : 2545736-2

Page 1 of 1

Sample Number	236051-1						
Sampled Date	Jan 19, 2023 10:40 AM						
Sample Description	Wastewater						
Location	บ่อกักน้ำทิ้งของโรงการ (Final Pond)						
Date Analysis Commenced	Jan 19, 2023						
Condition of Sample	Contained in one BOD bottle, 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
Metals Testing							
Calcium	mg/L	0.03	0.05	18.6	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Magnesium	mg/L	0.03	0.05	3.24	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR *		-	0.10	3.28	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Sodium	mg/L	0.03	0.05	58.3	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Water Testing							
Dissolved Oxygen *	mg/L	-	0.1	8.5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-	-	0.013	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.26	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	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 :

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.

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Analysis / Test Report

Client : Nexif Ratch Energy Rayong Co., Ltd.
222 Moo 5, T.Nonglalo, A.Bankhai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :



TESTING
No.0042

Lot ID: 236066
Date Received : Feb 16, 2023
Date Reported : Feb 23, 2023
Report Number : 2545742-1

Page 1 of 1

Sample Number	236066-1
Sampled Date	Feb 16, 2023 9:25 AM
Sample Description	Wastewater
Location	น้ำพักน้ำทิ้งของโครงการ (Final Pond)
Date Analysis Commenced	Feb 16, 2023
Condition of Sample	Contained in one amber glass bottle, one BOD 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	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	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
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
Temperature *	Degree C	-	-	27.5	≤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	1470	≤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	≤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 : Tanasit Wongsachai ทะนันชัย 323-9-9460 , Samart Khumphee ทะนันชัย 204-9-7830

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

N. Banphit

Narumon Banchoangkit
Supervisor
ทะเบียนเลขที่ 323-9-9445

Approved by

D. Chanchon

Dej Changchon
Senior Manager
ทะเบียนเลขที่ 323-9-9442

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S:\Reports\AIL_GL_rpt (11.32AM)



Analysis / Test Report

Client : Nexif Ratch Energy Rayong Co., Ltd.
222 Moo 5, T.Nonglalo, A.Bankhai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :



TESTING
No.0009

Lot ID: 236066
Date Received : Feb 16, 2023
Date Reported : Feb 23, 2023
Report Number : 2545742-2

Page 1 of 1

Sample Number	236066-1
Sampled Date	Feb 16, 2023 9:25 AM
Sample Description	Wastewater
Location	น้ำพักน้ำทิ้งของโครงการ (Final Pond)
Date Analysis Commenced	Feb 16, 2023
Condition of Sample	Contained in one amber glass bottle, one BOD 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
Metals Testing							
Calcium	mg/L	0.03	0.05	115	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Magnesium	mg/L	0.03	0.05	21.6	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR *		-	0.10	7.60	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Sodium	mg/L	0.03	0.05	338	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Water Testing							
Dissolved Oxygen *	mg/L	-	0.1	8.5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-	-	0.000	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	3.34	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	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 : Tanasit Wongsachai , Samart Khumphee

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.

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Approved by

Savitree N.

Savitree Noisangiam
Manager

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18309-21/EMAIL

S:\Reports\AIL_GL_rpt (2:50PM)



Analysis / Test Report

Client : Nexif Ratch Energy Rayong Co., Ltd.
222 Moo 5, T.Nonglaloek, A.Bankhai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :



TESTING
No.0042
Lot ID: 235667
Date Received : Mar 23, 2023
Date Reported : Mar 30, 2023
Report Number : 2545728-1

Page 1 of 1

Sample Number	235667-1						
Sampled Date	Mar 23, 2023 9:45 AM						
Sample Description	Wastewater						
Location	บ่อกักน้ำทิ้งของโครงการ (Final Pond)						
Date Analysis Commenced	Mar 23, 2023						
Condition of Sample	Contained in one BOD bottle, two glass vials, 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	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	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 *		-	-	8.4	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	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Temperature *	Degree C	-	-	30.5	≤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	1490	≤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	≤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 : Wanlop Hunchainaw ทนายณเดช ๖-323-๙-9457 , Samart Khumplee ทนายณเดช ๖-204-๙-7830

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

N. Banongkit

Narumon Banhongkit
Supervisor
หมายเลข ๖-323-๙-9445

Approved by

D. Chanchon

Dej Chanchon
Senior Manager
หมายเลข ๖-323-๙-9442

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Analysis / Test Report

Client : Nexif Ratch Energy Rayong Co., Ltd.
222 Moo 5, T.Nonglaloek, A.Bankhai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :



TESTING
No.0042
Lot ID: 235667
Date Received : Mar 23, 2023
Date Reported : Mar 30, 2023
Report Number : 2545728-2

Page 1 of 2

Sample Number	235667-1						
Sampled Date	Mar 23, 2023 9:45 AM						
Sample Description	Wastewater						
Location	บ่อกักน้ำทิ้งของโครงการ (Final Pond)						
Date Analysis Commenced	Mar 23, 2023						
Condition of Sample	Contained in one BOD bottle, two glass vials, 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
Metals Testing							
Calcium	mg/L	0.03	0.05	123	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Magnesium	mg/L	0.03	0.05	23.3	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR *		-	0.10	5.87	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Sodium	mg/L	0.03	0.05	271	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Volatile Organics Compounds							
Bromodichloromethane *	ug/L	0.2	0.5	Not Detected	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030 B and 8260 D	Bangkok
Bromoform *	ug/L	0.2	0.5	Not Detected	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030 B and 8260 D	Bangkok
Chloroform *	ug/L	0.2	0.5	Not Detected	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030 B and 8260 D	Bangkok
Dibromochloromethane *	ug/L	0.2	0.5	Not Detected	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030 B and 8260 D	Bangkok
Total Trihalomethanes *	ug/L	0.2	1	Not Detected	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030 B and 8260 D	Bangkok

Water Testing

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Approved by

Sawitree N.

Sawitree Noisangiam
Manager



Analysis / Test Report

Client : Nexif Ratch Energy Rayong Co., Ltd.
222 Moo 5, T.Nonglalo, A.Bankhai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :



TESTING
No.0042
Lot ID: 235667
Date Received : Mar 23, 2023
Date Reported : Mar 30, 2023
Report Number : 2545728-2

Page 2 of 2

Sample Number	235667-1						
Sampled Date	Mar 23, 2023 9:45 AM						
Sample Description	Wastewater						
Location	ปลั๊กน้ำทิ้งของโครงการ (Final Pond)						
Date Analysis Commenced	Mar 23, 2023						
Condition of Sample	Contained in one BOD bottle, two glass vials, 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							
Dissolved Oxygen *	mg/L	-	0.1	7.4	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-	-	0.010	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	2.08	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	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 : Wanlop Hunchainaow , Samart Khumpluee

Remark :

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Approved by

Sawitree N.

Sawitree Noisangiam
Manager

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Analysis / Test Report

Client : Nexif Ratch Energy Rayong Co., Ltd.
222 Moo 5, T.Nonglalo, A.Bankhai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :



TESTING
No.0042
Lot ID: 2339428
Date Received : Apr 20, 2023
Date Reported : Apr 27, 2023
Report Number : 2616916-1

Page 1 of 1

Sample Number	2339428-1						
Sampled Date	Apr 20, 2023 10:35 AM						
Sample Description	Wastewater						
Location	ปลั๊กน้ำทิ้งของโครงการ (Final Pond)						
Date Analysis Commenced	Apr 20, 2023						
Condition of Sample	Contained in one amber glass bottle, one BOD 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	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	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 *		-	-	8.4	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	≤1.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Temperature *	Degree C	-	-	30.2	≤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	1550	≤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	≤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 : Narunat thammasaro ทะเบียนเลขที่ 7-323-9-9477 , Pattarapol Sawangjaitam ทะเบียนเลขที่ 7-204-9-0002

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Technical Management

N. Banongkit

Narumon Banchoangkit
Supervisor
ทะเบียนเลขที่ 7-323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
ทะเบียนเลขที่ 7-323-9-9442

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Analysis / Test Report

Client : Nexif Ratch Energy Rayong Co., Ltd.
222 Moo 5, T.Nonglalo, A.Bankhai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :



TESTING
No.0009
Lot ID: 2339428
Date Received : Apr 20, 2023
Date Reported : Apr 27, 2023
Report Number : 2616916-2

Page 1 of 1

Sample Number	2339428-1						
Sampled Date	Apr 20, 2023 10:35 AM						
Sample Description	Wastewater						
Location	ปลอกน้ำทิ้งของโครงการ (Final Pond)						
Date Analysis Commenced	Apr 20, 2023						
Condition of Sample	Contained in one amber glass bottle, one BOD 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
Metals Testing							
Calcium	mg/L	0.03	0.05	123	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Magnesium	mg/L	0.03	0.05	22.2	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR *	-	-	0.10	6.64	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Sodium	mg/L	0.03	0.05	305	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Water Testing							
Dissolved Oxygen *	mg/L	-	0.1	8.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-	-	0.009	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	2.28	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	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 : Narunat thammassaro , Pattarapol Sawangjaitam

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Approved by

Chanatt L.

Chanattagarn Imchom
Supervisor

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Analysis / Test Report

Client : Ratch Energy Rayong Co., Ltd.
222 Moo 5, Tambon Nong Lalok, Amphoe Ban Khai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :



TESTING
No.0042
Lot ID: 2353998
Date Received : May 18, 2023
Date Reported : May 25, 2023
Report Number : 2649702-1

Page 1 of 1

Sample Number	2353998-1						
Sampled Date	May 18, 2023 2:26 PM						
Sample Description	Wastewater						
Location	ปลอกน้ำทิ้งของโครงการ (Final Pond)						
Date Analysis Commenced	May 18, 2023						
Condition of Sample	Contained in one BOD bottle, 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	3.5	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Oil & Grease *	mg/L	-	3	4	≤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 *	-	-	-	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
Residual Free Chlorine *	mg/L	-	0.1	0.4	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Temperature *	Degree C	-	-	33.3	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1660	≤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	≤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 : Narunat thammassaro โทร 09-323-9-9477 , Panupong Manit โทร 09-204-9-8600

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Technical Management

N. Banchongkit

Narunat Banchongkit
Supervisor
โทร 09-323-9-9445

Approved by

D. Chanchon

Dej Chanchon
Senior Manager
โทร 09-323-9-9442

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Analysis / Test Report

Client : Ratch Energy Rayong Co., Ltd.
222 Moo 5, Tambon Nong Lalok, Amphoe Ban Khai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :



TESTING
No.0009
Lot ID: 2353998
Date Received : May 18, 2023
Date Reported : May 25, 2023
Report Number : 2649702-2

Page 1 of 1

Sample Number	2353998-1						
Sampled Date	May 18, 2023 2:26 PM						
Sample Description	Wastewater						
Location	บ่อกักน้ำทิ้งของโครงการ (Final Pond)						
Date Analysis Commenced	May 18, 2023						
Condition of Sample	Contained in one BOD bottle, 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
Metals Testing							
Calcium	mg/L	0.03	0.05	153	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Magnesium	mg/L	0.03	0.05	25.5	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR *	-	-	0.10	7.00	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Sodium	mg/L	0.03	0.05	355	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Water Testing							
Dissolved Oxygen *	mg/L	-	0.1	7.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-	-	0.010	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	2.31	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	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 : Narunat thamasaro , Panupong Manit

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Approved by

Savitree N.

Savitree Noisangiam
Manager

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Analysis / Test Report

Client : Ratch Energy Rayong Co., Ltd.
222 Moo 5, Tambon Nong Lalok, Amphoe Ban Khai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :



TESTING
No.0042
Lot ID: 2354002
Date Received : Jun 26, 2023
Date Reported : Jul 04, 2023
Report Number : 2649704-1

Page 1 of 1

Sample Number	2354002-1						
Sampled Date	Jun 26, 2023 10:05 AM						
Sample Description	Wastewater						
Location	บ่อกักน้ำทิ้งของโครงการ (Final Pond)						
Date Analysis Commenced	Jun 26, 2023						
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD 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	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	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
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
Temperature *	Degree C	-	-	30.7	≤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	1830	≤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	≤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 : Narunat thamasaro ทะเบียนเลขที่ ๖-323-๖-9477 , Kardbundit Kitisupavanit ทะเบียนเลขที่ ๖-204-๖-0001

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Technical Management

N. Banchoangkit

Narumon Banchoangkit
Supervisor

ทะเบียนเลขที่ ๖-323-๖-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ ๖-323-๖-9442

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Analysis / Test Report

Client : Ratch Energy Rayong Co., Ltd.
222 Moo 5, Tambon Nong Lalok, Amphoe Ban Khai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :



TESTING
No.0009
Lot ID: 2354002
Date Received : Jun 26, 2023
Date Reported : Jul 04, 2023
Report Number : 2649704-2

Page 1 of 2

Sample Number	2354002-1
Sampled Date	Jun 26, 2023 10:05 AM
Sample Description	Wastewater
Location	บ่อกักน้ำทิ้งของโครงการ (Final Pond)
Date Analysis Commenced	Jun 26, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD 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
Metals Testing							
Calcium	mg/L	0.03	0.05	140	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Magnesium	mg/L	0.03	0.05	22.7	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR *	-	-	0.10	7.35	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Sodium	mg/L	0.03	0.05	356	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Volatile Organics Compounds							
Bromodichloromethane *	ug/L	0.2	0.5	Not Detected	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030 B and 8260 D	Bangkok
Bromoform *	ug/L	0.2	0.5	Not Detected	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030 B and 8260 D	Bangkok
Chloroform *	ug/L	0.2	0.5	Not Detected	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030 B and 8260 D	Bangkok
Dibromochloromethane *	ug/L	0.2	0.5	Not Detected	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030 B and 8260 D	Bangkok
Total Trihalomethanes *	ug/L	0.2	1	Not Detected	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030 B and 8260 D	Bangkok

Water Testing

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Siriluk P.

Siriluk Puengpang
Section Head

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Analysis / Test Report

Client : Ratch Energy Rayong Co., Ltd.
222 Moo 5, Tambon Nong Lalok, Amphoe Ban Khai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :



TESTING
No.0009
Lot ID: 2354002
Date Received : Jun 26, 2023
Date Reported : Jul 04, 2023
Report Number : 2649704-2

Page 2 of 2

Sample Number	2354002-1
Sampled Date	Jun 26, 2023 10:05 AM
Sample Description	Wastewater
Location	บ่อกักน้ำทิ้งของโครงการ (Final Pond)
Date Analysis Commenced	Jun 26, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD 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							
Dissolved Oxygen *	mg/L	-	0.1	7.2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-	-	0.010	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	3.11	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	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 : Narunat thammasaro , Kadbundit 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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Siriluk Puengpang
Section Head

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Analysis / Test Report

Client : Ratch Energy Rayong Co., Ltd.
222 Moo 5, Tambon Nong Lalok, Amphoe Ban Khai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :



TESTING
No.0042
Lot ID: 2322547
Date Received : Mar 23, 2023
Date Reported : Jun 28, 2023
Report Number : 2699900-1

Page 1 of 2

Sample Number 2322547-1
Sampled Date Mar 23, 2023 1:35 PM
Sample Description Surface Water
Location SW1 : กองโพลห่านจตุรนาถน้ำทั้ง 1,000 เมตร
Date Analysis Commenced Mar 23, 2023
Condition of Sample Contained in one BOD bottle, two glass vials, one amber glass bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Volatile Organics Compounds								
Bromodichloromethane *	ug/L	0.2	0.5	Not Detected	No Standard	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030 B and 8260 D	Bangkok
Bromoform *	ug/L	0.2	0.5	Not Detected	No Standard	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030 B and 8260 D	Bangkok
Chloroform *	ug/L	0.2	0.5	Not Detected	No Standard	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030 B and 8260 D	Bangkok
Dibromochloromethane *	ug/L	0.2	0.5	Not Detected	No Standard	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030 B and 8260 D	Bangkok
Total Trihalomethanes *	ug/L	0.2	1	Not Detected	No Standard	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030 B and 8260 D	Bangkok
Water Testing								
Dissolved Oxygen *	mg/L	-	0.1	7.4	≥4	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-	-	0.001	No Standard	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.27	≤5	≤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	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	-	-	-	7.1	5.0-9.0	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

Approved by

N. Banchoangkit

Narumon Banchoangkit
Supervisor

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Analysis / Test Report

Client : Ratch Energy Rayong Co., Ltd.
222 Moo 5, Tambon Nong Lalok, Amphoe Ban Khai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :



TESTING
No.0042
Lot ID: 2322547
Date Received : Mar 23, 2023
Date Reported : Jun 28, 2023
Report Number : 2699900-1

Page 2 of 2

Sample Number 2322547-1
Sampled Date Mar 23, 2023 1:35 PM
Sample Description Surface Water
Location SW1 : กองโพลห่านจตุรนาถน้ำทั้ง 1,000 เมตร
Date Analysis Commenced Mar 23, 2023
Condition of Sample Contained in one BOD bottle, two glass vials, one amber glass bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Water Testing								
Temperature *	Degree C	-	-	32.2	(c)	(c)	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	96	No Standard	No Standard	Standard Methods for the Examination of Water 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	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : (1) 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 3)
(2) 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)
(a) Not Change from natural condition
(b) Non Objectionable
(c) Change from Natural condition not more than 3 degree C

Note : This Analysis test report is reissued to supersede report No.2582105-1, Date Reported : Mar 31, 2023 due to revise analytical information.

Sampling By : Tanasit Wongsachai ทะเนษิตวงศ์ ๖-323-๖-9460 , Samart Khumphee ทะเมียนเคหะ ๖-204-๖-7830

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.

Approved by

N. Banchoangkit

Narumon Banchoangkit
Supervisor

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Analysis / Test Report

Client : Nexif Ratch Energy Rayong Co., Ltd.
222 Moo 5, T.Nonglalo, A.Bankhai, Rayong Thailand 21120

P/O :

Project Name :

Project Location :

Lot ID: 2342882

Date Received : Apr 20, 2023

Date Reported : Apr 27, 2023

Report Number : 2625877-1

Page 1 of 3

Sample Number	2342882-1
Sampled Date	Apr 20, 2023 11:20 AM
Sample Description	Surface Water
Location	SW1 : ก่อนไหลผ่านจุดระบายน้ำทิ้ง 1,000 เมตร
Date Analysis Commenced	Apr 22, 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 (1)	Guideline (2)	Method	Testing Location
Water Testing								
BOD	mg/L	-	2	<2.0	≤2	≤4		Rayong

Guideline : (1) 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 3)
(2) 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)
(a) Not Change from natural condition
(b) Non Objectionable
(c) Change from Natural condition not more than 3 degree C

Sampling By : Narunat thammassaro ทะเบียนเลขที่ ๖-323-๖-9477

Remark :

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

Approved by

N. Banchongkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : Ratch Energy Rayong Co., Ltd.
222 Moo 5, Tambon Nong Lalo, Amphoe Ban Khai, Rayong Thailand 21120

P/O : PO-2302-0003

Project Name :

Project Location :



TESTING

No.0042

Lot ID: 2322547

Date Received : Mar 23, 2023

Date Reported : Jun 28, 2023

Report Number : 2699901-1

Page 1 of 2

Sample Number	2322547-2
Sampled Date	Mar 23, 2023 2:05 PM
Sample Description	Surface Water
Location	SW3 : หลังไหลผ่านจุดระบายน้ำทิ้ง 1,000 เมตร
Date Analysis Commenced	Mar 23, 2023
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
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Volatile Organics Compounds

Bromodichloromethane *	ug/L	0.2	0.5	Not Detected	No Standard	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030 B and 8260 D	Bangkok
Bromoform *	ug/L	0.2	0.5	Not Detected	No Standard	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030 B and 8260 D	Bangkok
Chloroform *	ug/L	0.2	0.5	Not Detected	No Standard	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030 B and 8260 D	Bangkok
Dibromochloromethane *	ug/L	0.2	0.5	Not Detected	No Standard	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030 B and 8260 D	Bangkok
Total Trihalomethanes *	ug/L	0.2	1	Not Detected	No Standard	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030 B and 8260 D	Bangkok

Water Testing

Dissolved Oxygen *	mg/L	-	0.1	7.7	≥4	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-	-	0.078	No Standard	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.34	≤5	≤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	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		-	-	7.1	5.0-9.0	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

Approved by

N. Banchongkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : Ratch Energy Rayong Co., Ltd.
222 Moo 5, Tambon Nong Lalok, Amphoe Ban Khai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :



TESTING
No.0042
Lot ID: 2322547
Date Received : Mar 23, 2023
Date Reported : Jun 28, 2023
Report Number : 2699901-1

Page 2 of 2

Sample Number	2322547-2							
Sampled Date	Mar 23, 2023 2:05 PM							
Sample Description	Surface Water							
Location	SW3 : แหล่งไหลผ่านจุดระบายน้ำทิ้ง 1,000 เมตร							
Date Analysis Commenced	Mar 23, 2023							
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Water Testing								
Temperature *	Degree C	-	-	32.6	(c)	(c)	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	184	No Standard	No Standard	Standard Methods for the Examination of Water 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	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : (1) 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 3)
(2) 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)
(a) Not Change from natural condition
(b) Non Objectionable
(c) Change from Natural condition not more than 3 degree C

Note : This Analysis test report is reissued to supersede report No.2582105-1, Date Reported : Mar 31, 2023 due to revise analytical information.

Sampling By : Tanasit Wongsachai ทะณัฐวงศ์ 3-323-3-9460, Samart Khumphee ทะณัฐวงศ์ 3-204-3-7830

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.

Approved by

N. Banchoangkit

Narumon Banchoangkit
Supervisor

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Analysis / Test Report

Client : Nexif Ratch Energy Rayong Co., Ltd.
222 Moo 5, T.Nonglailok, A.Bankhai, Rayong Thailand 21120
P/O :
Project Name :
Project Location :

Lot ID: 2342882
Date Received : Apr 20, 2023
Date Reported : Apr 27, 2023
Report Number : 2625877-1

Page 3 of 3

Sample Number	2342882-3							
Sampled Date	Apr 20, 2023 11:45 AM							
Sample Description	Surface Water							
Location	SW3 : แหล่งไหลผ่านจุดระบายน้ำทิ้ง 1,000 เมตร							
Date Analysis Commenced	Apr 22, 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 (1)	Guideline (2)	Method	Testing Location
Water Testing								
BOD	mg/L	-	2	<2.0	≤2	≤4		Rayong

Guideline : (1) 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 3)
(2) 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)
(a) Not Change from natural condition
(b) Non Objectionable
(c) Change from Natural condition not more than 3 degree C

Sampling By : Narunat thammassaro ทะณัฐวงศ์ 3-323-3-9477

Remark :

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

Approved by

N. Banchoangkit

Narumon Banchoangkit
Supervisor

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Analysis / Test Report

Client : Nexif Ratch Energy Rayong Co., Ltd.
222 Moo 5, T.Nonglalo, A.Bankhai, Rayong Thailand 21120

P/O :

Project Name :

Project Location :

Lot ID: 2342882

Date Received : Apr 20, 2023

Date Reported : Apr 27, 2023

Report Number : 2625877-1

Page 2 of 3

Sample Number	2342882-2
Sampled Date	Apr 20, 2023 11:30 AM
Sample Description	Surface Water
Location	SW2 : บริเวณจุดตรวจน้ำทิ้ง
Date Analysis Commenced	Apr 22, 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 (1)	Guideline (2)	Method	Testing Location
Water Testing								
BOD	mg/L	-	2	<2.0	≤2	≤4		Rayong

Guideline : (1) 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 3)
(2) 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)
(a) Not Change from natural condition
(b) Non Objectionable
(c) Change from Natural condition not more than 3 degree C

Sampling By : Narunat thammassero โทรเลข ๖-323-๙-9477

Remark :

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

Approved by

N. Banongkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : Ratch Energy Rayong Co., Ltd.
222 Moo 5, Tambon Nong Lalok, Amphoe Ban Khai, Rayong Thailand 21120

P/O : PO-2302-0003

Project Name :

Project Location :



TESTING

No.0042

Lot ID: 2366208

Date Received : Jun 26, 2023

Date Reported : Jul 04, 2023

Report Number : 2676984-1

Page 1 of 6

Sample Number	2366208-1
Sampled Date	Jun 27, 2023 11:33 AM
Sample Description	Surface Water
Location	SW1 : กองโหลผ่านจุดระบายน้ำทิ้ง 1,000 เมตร
Date Analysis Commenced	Jun 26, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
---------	------	-----	-----------	--------	---------------	---------------	--------	------------------

Volatile Organics Compounds								
Bromodichloromethane *	ug/L	0.2	0.5	Not Detected	No Standard	No Standard	In-house method based on United Bangkok States Environmental Protection Agency, EPA Method 5030 B and 8260 D	
Bromoform *	ug/L	0.2	0.5	Not Detected	No Standard	No Standard	In-house method based on United Bangkok States Environmental Protection Agency, EPA Method 5030 B and 8260 D	
Chloroform *	ug/L	0.2	0.5	Not Detected	No Standard	No Standard	In-house method based on United Bangkok States Environmental Protection Agency, EPA Method 5030 B and 8260 D	
Dibromochloromethane *	ug/L	0.2	0.5	Not Detected	No Standard	No Standard	In-house method based on United Bangkok States Environmental Protection Agency, EPA Method 5030 B and 8260 D	
Total Trihalomethanes *	ug/L	0.2	1	Not Detected	No Standard	No Standard	In-house method based on United Bangkok States Environmental Protection Agency, EPA Method 5030 B and 8260 D	

Water Testing								
BOD *	mg/L	-	2	<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	6.7	≥4	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-	-	0.025	No Standard	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.81	≤5	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong

Approved by

N. Banongkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : Ratch Energy Rayong Co., Ltd.
222 Moo 5, Tambon Nong Lalok, Amphoe Ban Khai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :



TESTING
No.0042
Lot ID: 2366208
Date Received : Jun 26, 2023
Date Reported : Jul 04, 2023
Report Number : 2676984-1

Page 2 of 6

Sample Number	2366208-1							
Sampled Date	Jun 27, 2023 11:33 AM							
Sample Description	Surface Water							
Location	SW1 : ก่อนไหลผ่านจุดระบายน้ำทั้ง 1,000 เมตร							
Date Analysis Commenced	Jun 26, 2023							
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Water Testing								
Oil & Grease *	mg/L	-	3	<3	No Standard	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		-	-	7.3	5.0-9.0	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	-	-	29.3	(c)	(c)	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	100	No Standard	No Standard	Standard Methods for the Examination of Water 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	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : (1) 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 3)
(2) 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)
(a) Not Change from natural condition
(b) Non Objectionable
(c) Change from Natural condition not more than 3 degree C

Sampling By : Narunat thammasaro 09-323-9-9477

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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Analysis / Test Report

Client : Ratch Energy Rayong Co., Ltd.
222 Moo 5, Tambon Nong Lalok, Amphoe Ban Khai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :



TESTING
No.0042
Lot ID: 2366208
Date Received : Jun 26, 2023
Date Reported : Jul 04, 2023
Report Number : 2676984-1

Page 3 of 6

Sample Number	2366208-2							
Sampled Date	Jun 27, 2023 11:00 AM							
Sample Description	Surface Water							
Location	SW3 : หลังไหลผ่านจุดระบายน้ำทั้ง 1,000 เมตร							
Date Analysis Commenced	Jun 26, 2023							
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Volatile Organics Compounds								
Bromodichloromethane *	ug/L	0.2	0.5	Not Detected	No Standard	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030 B and 8260 D	Bangkok
Bromoform *	ug/L	0.2	0.5	Not Detected	No Standard	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030 B and 8260 D	Bangkok
Chloroform *	ug/L	0.2	0.5	Not Detected	No Standard	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030 B and 8260 D	Bangkok
Dibromochloromethane *	ug/L	0.2	0.5	Not Detected	No Standard	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030 B and 8260 D	Bangkok
Total Trihalomethanes *	ug/L	0.2	1	Not Detected	No Standard	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030 B and 8260 D	Bangkok
Water Testing								
BOD *	mg/L	-	2	<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	7.1	≥4	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-	-	1.109	No Standard	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.62	≤5	≤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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Analysis / Test Report

Client : Ratch Energy Rayong Co., Ltd.
222 Moo 5, Tambon Nong Lalok, Amphoe Ban Khai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :



TESTING
No.0042
Lot ID: 2366208
Date Received : Jun 26, 2023
Date Reported : Jul 04, 2023
Report Number : 2676984-1

Page 4 of 6

Sample Number	2366208-2						
Sampled Date	Jun 27, 2023 11:00 AM						
Sample Description	Surface Water						
Location	SW3 : แหล่งน้ำชุมชนตำบลน้ำทิพย์ 1,000 เมตร						
Date Analysis Commenced	Jun 26, 2023						
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Water Testing								
Oil & Grease *	mg/L	-	3	<3	No Standard	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		-	-	7.5	5.0-9.0	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	-	-	30.3	(c)	(c)	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	226	No Standard	No Standard	Standard Methods for the Examination of Water 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	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : (1) 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 3)
(2) 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)
(a) Not Change from natural condition
(b) Non Objectionable
(c) Change from Natural condition not more than 3 degree C

Sampling By : Narunat thammassaro โทร 09-323-9-9477

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.

Approved by

N. Banongkit

Narumon Banhongkit
Supervisor

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Analysis / Test Report

Client : Ratch Energy Rayong Co., Ltd.
222 Moo 5, Tambon Nong Lalok, Amphoe Ban Khai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :



TESTING
No.0042
Lot ID: 2366208
Date Received : Jun 26, 2023
Date Reported : Jul 04, 2023
Report Number : 2676984-1

Page 5 of 6

Sample Number	2366208-3						
Sampled Date	Jun 27, 2023 11:20 AM						
Sample Description	Surface Water						
Location	SW2 : บริเวณจุดระบายน้ำทิ้ง						
Date Analysis Commenced	Jun 26, 2023						
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Water Testing								
BOD *	mg/L	-	2	<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	6.7	≥4	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-	-	0.079	No Standard	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.83	≤5	≤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	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	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	-	-	31.4	(c)	(c)	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	820	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	50	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Approved by

N. Banongkit

Narumon Banhongkit
Supervisor

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Analysis / Test Report

Client : Ratch Energy Rayong Co., Ltd.
222 Moo 5, Tambon Nong Lalok, Amphoe Ban Khai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :

TESTING
No.0042
Lot ID: 2366208
Date Received : Jun 26, 2023
Date Reported : Jul 04, 2023
Report Number : 2676984-1

Page 6 of 6

Guideline : (1) 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 3)
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(a) Not Change from natural condition
(b) Non Objectionable
(c) Change from Natural condition not more than 3 degree C

Sampling By : Narunat thammasaro ๓๓๓๓๓๓๓ ๓-323-๙-9477

Remark :

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Analysis / Test Report

Client : Ratch Energy Rayong Co., Ltd.
222 Moo 5, Tambon Nong Lalok, Amphoe Ban Khai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :



TESTING
No.0042
Lot ID: 2322545
Date Received : May 18, 2023
Date Reported : May 23, 2023
Report Number : 2582123-1

Page 1 of 2

Sample Number 2322545-1
Sampled Date May 18, 2023 3:50 PM
Sample Description Ground Water
Location GW1 : บริเวณริมถนนของสวนอุตสาหกรรมฯ ทางทิศตะวันตกเฉียงเหนือของโครงการ
Date Analysis Commenced May 18, 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							
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	968	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
pH at 25 degree C *	-	-	-	6.0	6.5-9.2	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	596	≤1200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	1004	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong
Water Level *	m	-	-	5.35	No Standard	Water Level Meter	Bangkok

Guideline : Groundwater Quality Standards for Drinking Purposes set by Notification of Ministry of Natural Resources and Environment B.E. 2551, Maximum allowable.

Sampling By : Narunat thammasaro

Remark :

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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Analysis / Test Report

Client : Ratch Energy Rayong Co., Ltd.
222 Moo 5, Tambon Nong Lalok, Amphoe Ban Khai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :

Lot ID: 2370511
Date Received : Jun 22, 2023
Date Reported : Jun 28, 2023
Report Number : 2688648-1

Page 1 of 1

Sample Number 2370511-1
Sampled Date Jun 22, 2023 10:10 AM
Sample Description Ground Water
Location GW5 : บริเวณโครงการระยะที่ 2 ทางทิศใต้
Date Analysis Commenced Jun 22, 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							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	334	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
pH at 25 degree C	-	-	-	5.0	6.5-9.2	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	154	≤1200	Standard Methods for the Examination of Water 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	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong
Water Level	m	-	-	1.30	No Standard	Water Level Meter	Bangkok

Guideline : Groundwater Quality Standards for Drinking Purposes set by Notification of Ministry of Natural Resources and Environment B.E. 2551, Maximum allowable., (1) Suitable Allowance

Sampling By : Narunat thammasaro

Remark :

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

Approved by

N. Banchoangkit

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Analysis / Test Report

TESTING

No.0042

Lot ID: 2322545

Date Received : May 18, 2023

Date Reported : May 23, 2023

Report Number : 2582123-1

Client : Ratch Energy Rayong Co., Ltd.

222 Moo 5, Tambon Nong Lalo, Amphoe Ban Khai, Rayong Thailand 21120

P/O : PO-2302-0003

Project Name :

Project Location :

Page 2 of 2

Sample Number	2322545-3						
Sampled Date	May 18, 2023 3:02 PM						
Sample Description	Ground Water						
Location	GW6 : ฐานโรงการระยะที่ 2 ทางทิศตะวันออก						
Date Analysis Commenced	May 18, 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							
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	73.2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
pH at 25 degree C *	-	-	-	4.9	6.5-9.2	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	55	≤1200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	200	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong
Water Level *	m	-	-	1.80	No Standard	Water Level Meter	Bangkok

Guideline : Groundwater Quality Standards for Drinking Purposes set by Notification of Ministry of Natural Resources and Environment B.E. 2551, Maximum allowable.

Sampling By : Narunat thammasaro

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

N. Banchongkit

Narumon Banchongkit
Supervisor

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ระดับเสียงในพื้นที่ปฏิบัติงาน



Analysis / Test Report

Client : Ratch Energy Rayong Co., Ltd.

222 Moo 5, Tambon Nong Lalok, Amphoe Ban Khai, Rayong Thailand 21120

P/O : PO-2305-0004

Project Name :

Project Location :

Lot ID: 2350215

Date Received : May 05, 2023

Date Reported : May 10, 2023

Report Number: 2640816-1

Page 1 of 1

Sample Number 2350215-1
Parameter Noise (Leq 8 hrs.)
Location Gas Turbine Generator
Measurement Date May 05, 2023
Measurement by Sawai Tonpho

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:27 AM - 10:27 AM	81.0	86.3	78.0
10:27 AM - 11:27 AM	77.8	78.9	77.6
11:27 AM - 12:27 PM	77.6	78.5	77.4
12:27 PM - 01:27 PM	77.5	78.4	77.3
01:27 PM - 02:27 PM	77.6	78.4	77.4
02:27 PM - 03:27 PM	77.6	78.3	77.4
03:27 PM - 04:27 PM	77.8	78.6	77.6
04:27 PM - 05:27 PM	77.6	78.4	77.4

Leq Average 8 hrs. (dB(A)) 78.2
Lmax (dB(A)) 86.3
Standard (dB(A)) 90
Reference Method : ISO1996-1 and 1996-2
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
ในการประกอบกิจการโรงงานเกี่ยวกับสถานะแวดล้อมในการทำงาน พ.ศ.๒๕๕๖

Technical Management

Thanita K.

Thanita Kulsunwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

Client : Nexif Ratch Energy Rayong Co., Ltd.

222 Moo 5, T.Nonglalo, A.Bankhai, Rayong Thailand 21120

P/O : PO-2302-0003

Project Name :

Project Location :

Lot ID: 2328305

Date Received : Mar 24, 2023

Date Reported : Mar 28, 2023

Report Number: 2604748-1

Page 1 of 1

Sample Number 2328305-2
Parameter Noise (Leq 8 hrs.)
Location Air Compressor
Measurement Date Mar 23, 2023
Measurement by Sitpawit Suwannarat

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	71.7	85.9	61.8
10:00 AM - 11:00 AM	70.7	80.1	61.5
11:00 AM - 12:00 PM	71.0	86.5	60.5
12:00 PM - 01:00 PM	73.0	86.3	60.7
01:00 PM - 02:00 PM	72.7	80.9	69.5
02:00 PM - 03:00 PM	72.0	85.5	60.5
03:00 PM - 04:00 PM	71.1	79.7	60.4
04:00 PM - 05:00 PM	71.2	80.6	62.0

Leq Average 8 hrs. (dB(A)) 71.7
Lmax (dB(A)) 86.5
Standard (dB(A)) 90
Reference Method : ISO1996-1 and 1996-2
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Technical Management

Thanita K.

Thanita Kulsunwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

Client : Nexif Ratch Energy Rayong Co., Ltd.
222 Moo 5, T.Nonglalo, A.Bankhai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :

Lot ID: 2328305
Date Received : Mar 24, 2023
Date Reported : Mar 28, 2023
Report Number: 2604749-1

Page 1 of 1

Sample Number 2328305-3
Parameter Noise (Leq 8 hrs.)
Location Steam Turbine Generator
Measurement Date Mar 23, 2023
Measurement by Sitpawit Suwannarat

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:27 AM - 10:27 AM	80.2	86.0	75.3
10:27 AM - 11:27 AM	75.9	83.1	75.1
11:27 AM - 12:27 PM	76.1	83.7	75.1
12:27 PM - 01:27 PM	76.1	84.3	75.1
01:27 PM - 02:27 PM	76.1	85.6	75.1
02:27 PM - 03:27 PM	76.3	85.6	75.3
03:27 PM - 04:27 PM	76.2	85.5	75.2
04:27 PM - 05:27 PM	76.0	83.6	75.0

Leq Average 8 hrs. (dB(A)) 76.9
Lmax (dB(A)) 86.0
Standard (dB(A)) 90
Reference Method : ISO1996-1 and 1996-2
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานเครื่องมือวัดเสียง
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Analysis / Test Report

Client : Ratch Energy Rayong Co., Ltd.
222 Moo 5, Tambon Nong Lalok, Amphoe Ban Khai, Rayong Thailand 21120
P/O : PO-2302-0003
Project Name :
Project Location :

Lot ID: 2370187
Date Received : Jun 20, 2023
Date Reported : Jul 12, 2023
Report Number: 2693782-1

Page 1 of 1

Sample Number 2370187-1
Parameter Noise (Leq 8 hrs.)
Location Gas Turbine Generator
Measurement Date Jun 19, 2023
Measurement by Saknarin Jaraskay

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:04 AM - 11:04 AM	79.3	80.8	79.1
11:04 AM - 12:04 PM	79.2	81.0	79.0
12:04 PM - 01:04 PM	79.1	79.7	78.9
01:04 PM - 02:04 PM	79.3	80.0	79.1
02:04 PM - 03:04 PM	79.2	86.0	78.9
03:04 PM - 04:04 PM	79.4	80.1	79.3
04:04 PM - 05:04 PM	79.4	80.3	79.3
05:04 PM - 06:04 PM	79.3	97.3	67.4

Leq Average 8 hrs. (dB(A)) 79.3
Lmax (dB(A)) 97.3
Standard (dB(A)) 90
Reference Method : ISO1996-1 and 1996-2
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานเครื่องมือวัดเสียง
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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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S:\Reports_Air Noise rpt (11 17AM)

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

Client : Ratch Energy Rayong Co., Ltd.

222 Moo 5, Tambon Nong Lalok, Amphoe Ban Khai, Rayong Thailand 21120

P/O : PO-2302-0003

Project Name :

Project Location :

Lot ID: 2370187

Date Received : Jun 20, 2023

Date Reported : Jul 12, 2023

Report Number: 2693783-1

Page 1 of 1

Sample Number 2370187-2
Parameter Noise (Leq 8 hrs.)
Location Air Compressor
Measurement Date Jun 19, 2023
Measurement by Saknarin Jaraskay

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:54 AM - 10:54 AM	73.3	86.5	63.8
10:54 AM - 11:54 AM	74.0	91.7	65.7
11:54 AM - 12:54 PM	74.0	92.6	72.0
12:54 PM - 01:54 PM	73.6	91.7	71.7
01:54 PM - 02:54 PM	75.9	86.1	71.8
02:54 PM - 03:54 PM	73.7	92.3	71.3
03:54 PM - 04:54 PM	74.0	92.5	72.1
04:54 PM - 05:54 PM	74.2	78.3	72.6

Leq Average 8 hrs. (dB(A))

74.2

Lmax (dB(A))

92.6

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Technical Management

Thanita K.

Thanita Kulsunwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

Client : Ratch Energy Rayong Co., Ltd.

222 Moo 5, Tambon Nong Lalok, Amphoe Ban Khai, Rayong Thailand 21120

P/O : PO-2302-0003

Project Name :

Project Location :

Lot ID: 2370187

Date Received : Jun 20, 2023

Date Reported : Jul 12, 2023

Report Number: 2693784-1

Page 1 of 1

Sample Number 2370187-3
Parameter Noise (Leq 8 hrs.)
Location Steam Turbine Generator
Measurement Date Jun 19, 2023
Measurement by Saknarin Jaraskay

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:04 AM - 11:04 AM	76.3	83.8	75.6
11:04 AM - 12:04 PM	76.9	81.9	75.7
12:04 PM - 01:04 PM	77.7	81.9	76.4
01:04 PM - 02:04 PM	77.0	81.1	75.7
02:04 PM - 03:04 PM	76.2	78.8	75.5
03:04 PM - 04:04 PM	76.0	79.2	75.5
04:04 PM - 05:04 PM	76.2	78.5	75.7
05:04 PM - 06:04 PM	75.9	88.9	69.8

Leq Average 8 hrs. (dB(A))

76.6

Lmax (dB(A))

88.9

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Technical Management

Thanita K.

Thanita Kulsunwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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ภาคผนวก ค-2

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แบบต่อเนื่อง

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
01/12/2023 00:00:00	0.00	21.00
01/12/2023 01:00:00	0.00	21.00
01/12/2023 02:00:00	0.00	21.00
01/12/2023 03:00:00	0.00	21.00
01/12/2023 04:00:00	0.00	21.00
01/12/2023 05:00:00	0.00	21.00
01/12/2023 06:00:00	0.00	21.00
01/12/2023 07:00:00	0.00	21.00
01/12/2023 08:00:00	0.00	21.00
01/12/2023 09:00:00	0.00	21.00
01/12/2023 10:00:00	0.00	21.00
01/12/2023 11:00:00	0.00	21.00
01/12/2023 12:00:00	0.00	21.00
01/12/2023 13:00:00	0.00	21.00
01/12/2023 14:00:00	0.00	21.00
01/12/2023 15:00:00	0.00	21.00
01/12/2023 16:00:00	0.00	21.00
01/12/2023 17:00:00	0.00	21.13
01/12/2023 18:00:00	0.00	21.13
01/12/2023 19:00:00	0.00	21.00
01/12/2023 20:00:00	0.00	21.13
01/12/2023 21:00:00	0.00	21.13
01/12/2023 22:00:00	0.00	21.13
01/12/2023 23:00:00	0.00	21.00
01/13/2023 00:00:00	0.00	21.00
01/13/2023 01:00:00	0.00	21.00
01/13/2023 02:00:00	0.00	21.00
01/13/2023 03:00:00	0.00	21.00
01/13/2023 04:00:00	0.00	21.00
01/13/2023 05:00:00	0.00	21.00
01/13/2023 06:00:00	0.00	21.00
01/13/2023 07:00:00	0.00	21.00
01/13/2023 08:00:00	0.00	21.00

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
01/20/2023 06:00:00	0.00	21.00
01/20/2023 07:00:00	0.00	21.00
01/20/2023 08:00:00	0.00	21.00
01/20/2023 09:00:00	0.00	21.00
01/20/2023 10:00:00	0.00	21.00
01/20/2023 11:00:00	0.00	21.00
01/20/2023 12:00:00	0.00	21.00
01/20/2023 13:00:00	0.00	21.00
01/20/2023 14:00:00	0.00	20.88
01/20/2023 15:00:00	0.00	21.00
01/20/2023 16:00:00	0.00	21.00
01/20/2023 17:00:00	0.00	21.00
01/20/2023 18:00:00	0.00	21.13
01/20/2023 19:00:00	0.00	21.13
01/20/2023 20:00:00	0.00	21.13
01/20/2023 21:00:00	0.00	21.00
01/20/2023 22:00:00	0.00	21.00
01/20/2023 23:00:00	0.00	21.00
01/21/2023 00:00:00	0.00	21.00
01/21/2023 01:00:00	0.00	21.00
01/21/2023 02:00:00	0.00	21.00
01/21/2023 03:00:00	0.00	21.00
01/21/2023 04:00:00	0.00	21.00
01/21/2023 05:00:00	0.00	21.00
01/21/2023 06:00:00	0.00	21.00
01/21/2023 07:00:00	0.00	21.00
01/21/2023 08:00:00	0.00	21.00
01/21/2023 09:00:00	0.00	21.00
01/21/2023 10:00:00	0.00	21.00
01/21/2023 11:00:00	0.00	21.00
01/21/2023 12:00:00	0.00	21.00
01/21/2023 13:00:00	0.00	21.00
01/21/2023 14:00:00	0.00	20.88

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
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01/24/2023 10:00:00	0.00	21.00
01/24/2023 11:00:00	0.00	21.00
01/24/2023 12:00:00	0.00	21.00
01/24/2023 13:00:00	0.00	21.00
01/24/2023 14:00:00	0.00	21.00
01/24/2023 15:00:00	0.00	21.00
01/24/2023 16:00:00	0.00	21.00
01/24/2023 17:00:00	0.00	21.00
01/24/2023 18:00:00	0.00	21.13
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01/24/2023 20:00:00	0.00	21.13
01/24/2023 21:00:00	0.00	21.13
01/24/2023 22:00:00	0.00	21.00
01/24/2023 23:00:00	0.00	21.13
01/25/2023 00:00:00	0.00	21.00
01/25/2023 01:00:00	0.00	21.00
01/25/2023 02:00:00	0.00	21.00
01/25/2023 03:00:00	0.00	21.00
01/25/2023 04:00:00	0.00	21.00
01/25/2023 05:00:00	0.00	21.00
01/25/2023 06:00:00	0.00	21.00
01/25/2023 07:00:00	0.00	21.00
01/25/2023 08:00:00	0.00	21.00
01/25/2023 09:00:00	0.00	21.00
01/25/2023 10:00:00	0.00	21.00
01/25/2023 11:00:00	0.00	21.00
01/25/2023 12:00:00	0.00	21.00
01/25/2023 13:00:00	0.00	21.00
01/25/2023 14:00:00	0.00	20.88
01/25/2023 15:00:00	0.00	21.00
01/25/2023 16:00:00	0.00	21.00
01/25/2023 17:00:00	0.00	21.00

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
01/25/2023 18:00:00	0.00	21.13
01/25/2023 19:00:00	0.00	21.13
01/25/2023 20:00:00	0.00	21.13
01/25/2023 21:00:00	0.00	21.00
01/25/2023 22:00:00	0.00	21.00
01/25/2023 23:00:00	0.00	21.00
01/26/2023 00:00:00	0.00	21.00
01/26/2023 01:00:00	0.00	21.00
01/26/2023 02:00:00	0.00	21.00
01/26/2023 03:00:00	0.00	21.00
01/26/2023 04:00:00	0.00	21.00
01/26/2023 05:00:00	0.00	21.00
01/26/2023 06:00:00	0.00	21.00
01/26/2023 07:00:00	0.00	21.00
01/26/2023 08:00:00	0.00	21.00
01/26/2023 09:00:00	0.00	21.00
01/26/2023 10:00:00	0.00	21.00
01/26/2023 11:00:00	0.00	21.00
01/26/2023 12:00:00	0.00	21.00
01/26/2023 13:00:00	0.00	21.00
01/26/2023 14:00:00	0.00	20.88
01/26/2023 15:00:00	0.00	21.00
01/26/2023 16:00:00	0.00	21.00
01/26/2023 17:00:00	0.00	21.00
01/26/2023 18:00:00	0.00	21.13
01/26/2023 19:00:00	0.00	21.13
01/26/2023 20:00:00	0.00	21.13
01/26/2023 21:00:00	0.00	21.00
01/26/2023 22:00:00	0.00	21.00
01/26/2023 23:00:00	0.00	21.00
01/27/2023 00:00:00	0.00	21.00
01/27/2023 01:00:00	0.00	21.00
01/27/2023 02:00:00	0.00	21.00

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
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01/27/2023 04:00:00	0.00	21.00
01/27/2023 05:00:00	0.00	21.00
01/27/2023 06:00:00	0.00	21.00
01/27/2023 07:00:00	0.00	21.00
01/27/2023 08:00:00	0.00	21.00
01/27/2023 09:00:00	0.00	21.00
01/27/2023 10:00:00	0.00	21.00
01/27/2023 11:00:00	0.00	21.00
01/27/2023 12:00:00	0.00	21.00
01/27/2023 13:00:00	0.00	21.00
01/27/2023 14:00:00	0.00	21.00
01/27/2023 15:00:00	0.00	21.00
01/27/2023 16:00:00	0.00	21.00
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01/27/2023 18:00:00	0.00	21.13
01/27/2023 19:00:00	0.00	21.00
01/27/2023 20:00:00	0.00	21.13
01/27/2023 21:00:00	0.00	21.00
01/27/2023 22:00:00	0.00	21.00
01/27/2023 23:00:00	0.00	21.00
01/28/2023 00:00:00	0.00	21.00
01/28/2023 01:00:00	0.00	21.00
01/28/2023 02:00:00	0.00	21.00
01/28/2023 03:00:00	0.00	21.00
01/28/2023 04:00:00	0.00	21.00
01/28/2023 05:00:00	0.00	21.00
01/28/2023 06:00:00	0.00	21.00
01/28/2023 07:00:00	0.00	21.00
01/28/2023 08:00:00	0.00	21.00
01/28/2023 09:00:00	0.00	21.00
01/28/2023 10:00:00	0.00	21.00
01/28/2023 11:00:00	0.00	21.00

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
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01/28/2023 13:00:00	0.00	21.00
01/28/2023 14:00:00	0.00	21.00
01/28/2023 15:00:00	0.00	21.00
01/28/2023 16:00:00	0.00	21.00
01/28/2023 17:00:00	0.00	21.00
01/28/2023 18:00:00	0.00	21.13
01/28/2023 19:00:00	0.00	21.13
01/28/2023 20:00:00	0.00	21.13
01/28/2023 21:00:00	0.00	21.00
01/28/2023 22:00:00	0.00	21.00
01/28/2023 23:00:00	0.00	22.63
01/29/2023 01:00:00	0.00	22.63
01/29/2023 02:00:00	0.00	22.63
01/29/2023 04:00:00	0.00	22.63
01/29/2023 06:00:00	0.00	22.63
01/29/2023 07:00:00	0.00	22.63
01/29/2023 08:00:00	0.00	22.63
01/29/2023 09:00:00	0.00	22.63
01/29/2023 11:00:00	43.44	22.63
01/31/2023 09:00:00	0.00	16.13
01/31/2023 11:00:00	54.79	13.38
01/31/2023 12:00:00	53.59	13.38
01/31/2023 13:00:00	53.91	13.50
01/31/2023 14:00:00	46.18	12.25
01/31/2023 15:00:00	46.14	12.25
01/31/2023 16:00:00	45.51	12.25
01/31/2023 17:00:00	46.39	12.31
01/31/2023 18:00:00	45.39	12.31
01/31/2023 19:00:00	45.94	12.31
01/31/2023 20:00:00	45.79	12.31
01/31/2023 21:00:00	45.18	12.25
01/31/2023 22:00:00	45.48	12.25

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
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02/01/2023 00:00:00	50.49	13.31
02/01/2023 01:00:00	48.88	13.31
02/01/2023 02:00:00	47.88	13.31
02/01/2023 03:00:00	46.95	13.25
02/01/2023 04:00:00	46.76	13.25
02/01/2023 05:00:00	46.98	13.31
02/01/2023 06:00:00	48.13	13.25
02/01/2023 07:00:00	47.19	13.25
02/01/2023 08:00:00	47.66	13.31
02/01/2023 09:00:00	50.37	13.31
02/01/2023 11:00:00	48.61	13.44
02/01/2023 12:00:00	50.52	13.44
02/01/2023 13:00:00	47.80	13.44
02/01/2023 14:00:00	44.45	12.31
02/01/2023 15:00:00	0.00	20.50
02/01/2023 16:00:00	40.71	12.31
02/01/2023 17:00:00	43.18	12.25
02/01/2023 18:00:00	46.00	12.38
02/01/2023 19:00:00	45.08	12.38
02/01/2023 20:00:00	46.06	12.31
02/01/2023 21:00:00	46.70	12.31
02/01/2023 22:00:00	47.20	12.31
02/01/2023 23:00:00	45.00	13.19
02/02/2023 00:00:00	46.45	13.19
02/02/2023 01:00:00	45.96	13.25
02/02/2023 02:00:00	43.44	13.25
02/02/2023 03:00:00	45.47	13.25
02/02/2023 04:00:00	47.98	13.19
02/02/2023 05:00:00	46.64	13.25
02/02/2023 06:00:00	48.12	13.25
02/02/2023 07:00:00	46.90	13.25
02/02/2023 08:00:00	47.60	13.25

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
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02/02/2023 10:00:00	49.42	13.38
02/02/2023 11:00:00	51.72	13.38
02/02/2023 12:00:00	47.21	13.38
02/02/2023 13:00:00	32.26	13.50
02/02/2023 14:00:00	44.63	12.25
02/02/2023 15:00:00	44.95	12.25
02/02/2023 16:00:00	45.18	12.25
02/02/2023 17:00:00	46.00	12.31
02/02/2023 18:00:00	45.43	12.31
02/02/2023 19:00:00	46.62	12.31
02/02/2023 20:00:00	46.38	12.31
02/02/2023 21:00:00	44.96	12.31
02/02/2023 22:00:00	45.94	12.31
02/02/2023 23:00:00	27.96	13.19
02/03/2023 00:00:00	29.39	13.19
02/03/2023 01:00:00	29.23	13.25
02/03/2023 02:00:00	29.33	13.25
02/03/2023 03:00:00	28.31	13.25
02/03/2023 04:00:00	28.08	13.25
02/03/2023 05:00:00	28.85	13.25
02/03/2023 06:00:00	27.05	13.19
02/03/2023 07:00:00	28.64	13.25
02/03/2023 08:00:00	27.75	13.25
02/03/2023 09:00:00	29.85	13.25
02/03/2023 10:00:00	28.00	13.25
02/03/2023 11:00:00	28.49	13.25
02/03/2023 12:00:00	27.39	13.31
02/03/2023 13:00:00	28.20	13.31
02/03/2023 14:00:00	45.01	12.44
02/03/2023 15:00:00	45.85	12.31
02/03/2023 16:00:00	46.76	12.31
02/03/2023 17:00:00	46.98	12.25

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
02/03/2023 18:00:00	45.38	12.31
02/03/2023 19:00:00	46.04	12.31
02/03/2023 20:00:00	45.78	12.31
02/03/2023 21:00:00	47.36	12.31
02/03/2023 22:00:00	46.42	12.31
02/03/2023 23:00:00	29.17	13.19
02/04/2023 00:00:00	27.97	13.25
02/04/2023 01:00:00	30.31	13.25
02/04/2023 02:00:00	28.48	13.25
02/04/2023 03:00:00	29.04	13.25
02/04/2023 04:00:00	28.72	13.19
02/04/2023 05:00:00	28.71	13.25
02/04/2023 06:00:00	29.74	13.25
02/04/2023 07:00:00	28.13	13.19
02/04/2023 08:00:00	28.88	13.19
02/04/2023 09:00:00	27.67	13.31
02/04/2023 10:00:00	28.92	13.31
02/04/2023 11:00:00	28.80	13.25
02/04/2023 12:00:00	28.50	13.25
02/04/2023 13:00:00	27.08	13.25
02/04/2023 14:00:00	38.96	12.38
02/04/2023 15:00:00	41.75	12.25
02/04/2023 16:00:00	46.09	12.31
02/04/2023 17:00:00	46.20	12.25
02/04/2023 18:00:00	47.10	12.38
02/04/2023 19:00:00	46.06	12.31
02/04/2023 20:00:00	47.05	12.31
02/04/2023 21:00:00	46.85	12.31
02/04/2023 22:00:00	46.41	12.31
02/04/2023 23:00:00	28.84	13.19
02/05/2023 00:00:00	26.79	13.19
02/05/2023 01:00:00	27.51	13.19
02/05/2023 02:00:00	28.54	13.25

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
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02/05/2023 04:00:00	29.01	13.19
02/05/2023 05:00:00	27.03	13.19
02/05/2023 06:00:00	27.62	13.25
02/05/2023 07:00:00	28.88	13.19
02/05/2023 08:00:00	29.09	13.19
02/05/2023 09:00:00	28.99	13.25
02/05/2023 10:00:00	27.37	13.25
02/05/2023 11:00:00	28.92	13.31
02/05/2023 12:00:00	28.06	13.31
02/05/2023 13:00:00	29.13	13.31
02/05/2023 14:00:00	28.66	13.19
02/05/2023 15:00:00	28.86	13.31
02/05/2023 16:00:00	28.91	13.31
02/05/2023 17:00:00	28.04	13.31
02/05/2023 18:00:00	41.87	12.44
02/05/2023 19:00:00	46.19	12.31
02/05/2023 20:00:00	45.96	12.25
02/05/2023 21:00:00	47.00	12.31
02/05/2023 22:00:00	29.09	13.19
02/05/2023 23:00:00	28.82	13.19
02/06/2023 00:00:00	28.41	13.25
02/06/2023 01:00:00	29.32	13.25
02/06/2023 02:00:00	27.91	13.25
02/06/2023 03:00:00	29.68	13.19
02/06/2023 04:00:00	27.16	13.25
02/06/2023 05:00:00	27.68	13.19
02/06/2023 06:00:00	28.26	13.19
02/06/2023 07:00:00	27.25	13.19
02/06/2023 08:00:00	28.03	13.19
02/06/2023 09:00:00	27.96	13.19
02/06/2023 10:00:00	28.25	13.25
02/06/2023 11:00:00	28.19	13.25

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
02/06/2023 12:00:00	29.79	13.31
02/06/2023 13:00:00	27.39	13.25
02/06/2023 14:00:00	44.95	12.25
02/06/2023 15:00:00	46.25	12.25
02/06/2023 16:00:00	44.81	12.19
02/06/2023 17:00:00	46.66	12.25
02/06/2023 18:00:00	46.02	12.25
02/06/2023 19:00:00	46.41	12.25
02/06/2023 20:00:00	46.57	12.31
02/06/2023 21:00:00	46.16	12.25
02/06/2023 22:00:00	47.39	12.31
02/06/2023 23:00:00	28.96	13.19
02/07/2023 00:00:00	27.80	13.19
02/07/2023 01:00:00	27.60	13.25
02/07/2023 02:00:00	29.31	13.25
02/07/2023 03:00:00	28.26	13.25
02/07/2023 04:00:00	29.01	13.25
02/07/2023 05:00:00	29.53	13.19
02/07/2023 06:00:00	29.49	13.19
02/07/2023 07:00:00	28.98	13.19
02/07/2023 08:00:00	29.44	13.19
02/07/2023 09:00:00	29.04	13.25
02/07/2023 10:00:00	30.48	13.25
02/07/2023 11:00:00	29.37	13.31
02/07/2023 12:00:00	29.01	13.31
02/07/2023 13:00:00	28.91	13.31
02/07/2023 14:00:00	45.10	12.19
02/07/2023 15:00:00	43.46	12.25
02/07/2023 16:00:00	44.78	12.13
02/07/2023 17:00:00	44.80	12.25
02/07/2023 18:00:00	45.26	12.25
02/07/2023 19:00:00	45.75	12.31
02/07/2023 20:00:00	45.99	12.25

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
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02/07/2023 22:00:00	45.34	12.25
02/07/2023 23:00:00	27.14	13.25
02/08/2023 00:00:00	27.14	13.19
02/08/2023 01:00:00	28.07	13.19
02/08/2023 02:00:00	27.02	13.19
02/08/2023 03:00:00	27.92	13.19
02/08/2023 04:00:00	28.04	13.19
02/08/2023 05:00:00	29.23	13.19
02/08/2023 06:00:00	27.85	13.25
02/08/2023 07:00:00	28.41	13.25
02/08/2023 08:00:00	28.60	13.19
02/08/2023 09:00:00	28.33	13.25
02/08/2023 10:00:00	29.38	13.25
02/08/2023 11:00:00	29.67	13.38
02/08/2023 12:00:00	28.37	13.31
02/08/2023 13:00:00	29.20	13.31
02/08/2023 14:00:00	42.74	12.19
02/08/2023 15:00:00	45.43	12.19
02/08/2023 16:00:00	45.35	12.19
02/08/2023 17:00:00	45.79	12.19
02/08/2023 18:00:00	44.82	12.19
02/08/2023 19:00:00	47.01	12.25
02/08/2023 20:00:00	46.83	12.25
02/08/2023 21:00:00	44.96	12.25
02/08/2023 22:00:00	46.66	12.25
02/08/2023 23:00:00	28.07	13.25
02/09/2023 00:00:00	28.17	13.19
02/09/2023 01:00:00	29.55	13.25
02/09/2023 02:00:00	28.64	13.25
02/09/2023 03:00:00	26.96	13.19
02/09/2023 04:00:00	27.84	13.19
02/09/2023 05:00:00	28.19	13.25

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
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02/09/2023 07:00:00	27.96	13.25
02/09/2023 08:00:00	28.08	13.19
02/09/2023 09:00:00	29.20	13.31
02/09/2023 10:00:00	29.78	13.31
02/09/2023 11:00:00	28.85	13.25
02/09/2023 12:00:00	29.14	13.31
02/09/2023 13:00:00	28.32	13.31
02/09/2023 14:00:00	46.54	12.31
02/09/2023 15:00:00	45.33	12.31
02/09/2023 16:00:00	46.00	12.31
02/09/2023 17:00:00	45.88	12.31
02/09/2023 18:00:00	47.29	12.31
02/09/2023 19:00:00	46.92	12.31
02/09/2023 20:00:00	46.83	12.31
02/09/2023 21:00:00	46.68	12.31
02/09/2023 22:00:00	44.75	12.31
02/09/2023 23:00:00	27.36	13.19
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02/10/2023 01:00:00	28.52	13.19
02/10/2023 02:00:00	27.70	13.19
02/10/2023 03:00:00	27.60	13.19
02/10/2023 04:00:00	28.15	13.19
02/10/2023 05:00:00	29.50	13.25
02/10/2023 06:00:00	28.06	13.25
02/10/2023 07:00:00	27.40	13.25
02/10/2023 08:00:00	27.48	13.25
02/10/2023 09:00:00	28.26	13.19
02/10/2023 10:00:00	30.07	13.31
02/10/2023 11:00:00	27.64	13.31
02/10/2023 12:00:00	28.11	13.31
02/10/2023 13:00:00	29.38	13.31
02/10/2023 14:00:00	46.15	12.31

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
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02/10/2023 16:00:00	47.06	12.31
02/10/2023 17:00:00	46.10	12.31
02/10/2023 18:00:00	46.50	12.31
02/10/2023 19:00:00	47.01	12.31
02/10/2023 20:00:00	47.48	12.31
02/10/2023 21:00:00	46.40	12.31
02/10/2023 22:00:00	46.01	12.31
02/10/2023 23:00:00	28.29	13.19
02/11/2023 00:00:00	28.41	13.25
02/11/2023 01:00:00	28.54	13.25
02/11/2023 02:00:00	27.41	13.25
02/11/2023 03:00:00	28.97	13.19
02/11/2023 04:00:00	27.83	13.25
02/11/2023 05:00:00	27.83	13.25
02/11/2023 06:00:00	27.72	13.25
02/11/2023 07:00:00	29.22	13.19
02/11/2023 08:00:00	27.53	13.19
02/11/2023 09:00:00	29.65	13.25
02/11/2023 10:00:00	29.86	13.38
02/11/2023 11:00:00	28.74	13.31
02/11/2023 12:00:00	29.99	13.31
02/11/2023 13:00:00	29.79	13.31
02/11/2023 14:00:00	45.42	12.31
02/11/2023 15:00:00	46.19	12.31
02/11/2023 16:00:00	47.03	12.31
02/11/2023 17:00:00	46.24	12.31
02/11/2023 18:00:00	46.71	12.38
02/11/2023 19:00:00	46.05	12.31
02/11/2023 20:00:00	46.94	12.31
02/11/2023 21:00:00	46.42	12.31
02/11/2023 22:00:00	47.02	12.31
02/11/2023 23:00:00	27.48	13.25

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
02/12/2023 00:00:00	27.74	13.25
02/12/2023 01:00:00	29.13	13.25
02/12/2023 02:00:00	28.64	13.25
02/12/2023 03:00:00	28.78	13.25
02/12/2023 04:00:00	29.14	13.25
02/12/2023 05:00:00	27.81	13.25
02/12/2023 06:00:00	28.52	13.25
02/12/2023 07:00:00	27.64	13.19
02/12/2023 08:00:00	28.77	13.25
02/12/2023 09:00:00	29.72	13.25
02/12/2023 10:00:00	28.69	13.25
02/12/2023 11:00:00	29.49	13.31
02/12/2023 12:00:00	28.20	13.25
02/12/2023 13:00:00	28.70	13.38
02/12/2023 14:00:00	29.39	13.31
02/12/2023 15:00:00	28.46	13.31
02/12/2023 16:00:00	29.06	13.31
02/12/2023 17:00:00	28.94	13.31
02/12/2023 18:00:00	45.51	12.31
02/12/2023 19:00:00	45.32	12.38
02/12/2023 20:00:00	46.69	12.31
02/12/2023 21:00:00	46.30	12.31
02/12/2023 22:00:00	28.08	13.19
02/12/2023 23:00:00	29.11	13.25
02/13/2023 00:00:00	27.72	13.25
02/13/2023 01:00:00	27.61	13.25
02/13/2023 02:00:00	27.83	13.25
02/13/2023 03:00:00	28.96	13.19
02/13/2023 04:00:00	27.61	13.25
02/13/2023 05:00:00	28.28	13.25
02/13/2023 06:00:00	26.92	13.19
02/13/2023 07:00:00	27.74	13.19
02/13/2023 08:00:00	27.61	13.25

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
02/13/2023 09:00:00	27.70	13.25
02/13/2023 10:00:00	27.76	13.25
02/13/2023 11:00:00	28.57	13.31
02/13/2023 12:00:00	28.46	13.31
02/13/2023 13:00:00	28.94	13.31
02/13/2023 14:00:00	43.43	12.19
02/13/2023 15:00:00	43.34	12.31
02/13/2023 16:00:00	46.22	12.19
02/13/2023 17:00:00	46.63	12.19
02/13/2023 18:00:00	46.82	12.25
02/13/2023 19:00:00	47.31	12.38
02/13/2023 20:00:00	46.68	12.38
02/13/2023 21:00:00	47.28	12.31
02/13/2023 22:00:00	46.03	12.31
02/13/2023 23:00:00	28.77	13.19
02/14/2023 00:00:00	26.95	13.25
02/14/2023 01:00:00	28.74	13.19
02/14/2023 02:00:00	28.15	13.25
02/14/2023 03:00:00	27.60	13.19
02/14/2023 04:00:00	27.05	13.25
02/14/2023 05:00:00	27.15	13.25
02/14/2023 06:00:00	28.21	13.19
02/14/2023 07:00:00	27.71	13.25
02/14/2023 08:00:00	27.13	13.19
02/14/2023 09:00:00	27.74	13.25
02/14/2023 10:00:00	28.54	13.25
02/14/2023 11:00:00	29.14	13.25
02/14/2023 12:00:00	28.26	13.31
02/14/2023 13:00:00	28.84	13.31
02/14/2023 14:00:00	44.70	12.31
02/14/2023 15:00:00	45.38	12.31
02/14/2023 16:00:00	45.22	12.31
02/14/2023 17:00:00	46.93	12.38

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
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02/14/2023 19:00:00	45.50	12.31
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02/14/2023 21:00:00	45.65	12.31
02/14/2023 22:00:00	46.47	12.31
02/14/2023 23:00:00	27.64	13.19
02/15/2023 00:00:00	27.51	13.19
02/15/2023 01:00:00	27.77	13.25
02/15/2023 02:00:00	27.57	13.19
02/15/2023 03:00:00	28.13	13.19
02/15/2023 04:00:00	27.70	13.25
02/15/2023 05:00:00	27.62	13.25
02/15/2023 06:00:00	28.30	13.25
02/15/2023 07:00:00	27.17	13.25
02/15/2023 08:00:00	28.74	13.25
02/15/2023 09:00:00	29.00	13.25
02/15/2023 10:00:00	30.24	13.31
02/15/2023 11:00:00	28.30	13.25
02/15/2023 12:00:00	29.42	13.25
02/15/2023 13:00:00	28.61	13.19
02/15/2023 14:00:00	44.36	12.31
02/15/2023 15:00:00	46.62	12.38
02/15/2023 16:00:00	45.78	12.25
02/15/2023 17:00:00	45.78	12.31
02/15/2023 18:00:00	46.65	12.31
02/15/2023 19:00:00	45.64	12.31
02/15/2023 20:00:00	46.49	12.31
02/15/2023 21:00:00	46.76	12.38
02/15/2023 22:00:00	45.91	12.38
02/15/2023 23:00:00	27.96	13.25
02/16/2023 00:00:00	28.29	13.19
02/16/2023 01:00:00	27.91	13.19
02/16/2023 02:00:00	26.57	13.25

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
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02/16/2023 04:00:00	29.20	13.25
02/16/2023 05:00:00	28.46	13.25
02/16/2023 06:00:00	29.38	13.25
02/16/2023 07:00:00	29.49	13.25
02/16/2023 08:00:00	30.37	13.25
02/16/2023 09:00:00	30.19	13.25
02/16/2023 10:00:00	31.03	13.31
02/16/2023 11:00:00	29.66	13.31
02/16/2023 12:00:00	30.57	13.31
02/16/2023 13:00:00	31.71	13.38
02/16/2023 14:00:00	45.61	12.38
02/16/2023 15:00:00	45.99	12.44
02/16/2023 16:00:00	45.76	12.38
02/16/2023 17:00:00	46.41	12.38
02/16/2023 18:00:00	45.18	12.38
02/16/2023 19:00:00	45.44	12.44
02/16/2023 20:00:00	46.64	12.38
02/16/2023 21:00:00	46.20	12.44
02/16/2023 22:00:00	46.58	12.38
02/16/2023 23:00:00	31.99	13.31
02/17/2023 00:00:00	30.41	13.31
02/17/2023 01:00:00	29.74	13.31
02/17/2023 02:00:00	30.94	13.31
02/17/2023 03:00:00	30.70	13.31
02/17/2023 04:00:00	31.48	13.31
02/17/2023 05:00:00	30.04	13.31
02/17/2023 06:00:00	30.71	13.31
02/17/2023 07:00:00	30.21	13.31
02/17/2023 08:00:00	31.72	13.31
02/17/2023 09:00:00	31.58	13.31
02/17/2023 10:00:00	31.66	13.38
02/17/2023 11:00:00	30.62	13.38

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
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02/17/2023 13:00:00	31.22	13.38
02/17/2023 14:00:00	45.49	12.38
02/17/2023 15:00:00	45.76	12.38
02/17/2023 16:00:00	44.61	12.38
02/17/2023 17:00:00	45.65	12.38
02/17/2023 18:00:00	46.41	12.44
02/17/2023 19:00:00	45.04	12.44
02/17/2023 20:00:00	46.41	12.38
02/17/2023 21:00:00	46.24	12.38
02/17/2023 22:00:00	46.44	12.44
02/17/2023 23:00:00	32.43	13.25
02/18/2023 00:00:00	30.20	13.31
02/18/2023 01:00:00	31.23	13.31
02/18/2023 02:00:00	30.60	13.31
02/18/2023 03:00:00	30.38	13.31
02/18/2023 04:00:00	32.35	13.31
02/18/2023 05:00:00	31.17	13.25
02/18/2023 06:00:00	32.41	13.31
02/18/2023 07:00:00	30.53	13.31
02/18/2023 08:00:00	30.83	13.31
02/18/2023 09:00:00	32.19	13.31
02/18/2023 10:00:00	30.71	13.31
02/18/2023 11:00:00	30.06	13.38
02/18/2023 12:00:00	32.71	13.38
02/18/2023 13:00:00	31.45	13.38
02/18/2023 14:00:00	45.06	12.38
02/18/2023 15:00:00	44.66	12.31
02/18/2023 16:00:00	45.58	12.38
02/18/2023 17:00:00	45.83	12.38
02/18/2023 18:00:00	45.38	12.38
02/18/2023 19:00:00	46.39	12.38
02/18/2023 20:00:00	46.00	12.38

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
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02/18/2023 22:00:00	46.36	12.38
02/18/2023 23:00:00	28.88	13.19
02/19/2023 00:00:00	29.83	13.25
02/19/2023 01:00:00	29.35	13.25
02/19/2023 02:00:00	29.10	13.25
02/19/2023 03:00:00	29.01	13.25
02/19/2023 04:00:00	30.25	13.25
02/19/2023 05:00:00	30.72	13.25
02/19/2023 06:00:00	30.30	13.31
02/19/2023 07:00:00	29.84	13.31
02/19/2023 08:00:00	31.44	13.31
02/19/2023 09:00:00	30.98	13.38
02/19/2023 10:00:00	32.28	13.38
02/19/2023 11:00:00	31.22	13.44
02/19/2023 12:00:00	32.26	13.44
02/19/2023 13:00:00	32.77	13.44
02/19/2023 14:00:00	31.62	13.44
02/19/2023 15:00:00	30.13	13.44
02/19/2023 16:00:00	30.64	13.38
02/19/2023 17:00:00	31.20	13.44
02/19/2023 18:00:00	44.37	12.44
02/19/2023 19:00:00	45.28	12.44
02/19/2023 20:00:00	44.43	12.44
02/19/2023 21:00:00	44.77	12.44
02/19/2023 22:00:00	28.53	13.19
02/19/2023 23:00:00	27.56	13.19
02/20/2023 00:00:00	28.25	13.31
02/20/2023 01:00:00	28.68	13.19
02/20/2023 02:00:00	28.20	13.25
02/20/2023 03:00:00	27.43	13.25
02/20/2023 04:00:00	27.19	13.25
02/20/2023 05:00:00	29.06	13.25

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
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02/20/2023 07:00:00	27.19	13.25
02/20/2023 08:00:00	28.64	13.25
02/20/2023 09:00:00	28.50	13.38
02/20/2023 10:00:00	31.46	13.31
02/20/2023 11:00:00	32.14	13.44
02/20/2023 12:00:00	30.22	13.38
02/20/2023 13:00:00	32.05	13.44
02/20/2023 14:00:00	44.77	12.31
02/20/2023 15:00:00	45.76	12.38
02/20/2023 16:00:00	44.69	12.38
02/20/2023 17:00:00	45.60	12.38
02/20/2023 18:00:00	45.63	12.44
02/20/2023 19:00:00	46.03	12.44
02/20/2023 20:00:00	46.25	12.38
02/20/2023 21:00:00	45.62	12.38
02/20/2023 22:00:00	46.17	12.38
02/20/2023 23:00:00	29.36	13.25
02/21/2023 00:00:00	29.10	13.25
02/21/2023 01:00:00	29.89	13.25
02/21/2023 02:00:00	29.81	13.25
02/21/2023 03:00:00	28.68	13.25
02/21/2023 04:00:00	29.13	13.25
02/21/2023 05:00:00	30.36	13.25
02/21/2023 06:00:00	30.53	13.25
02/21/2023 07:00:00	29.73	13.25
02/21/2023 08:00:00	29.06	13.25
02/21/2023 09:00:00	30.36	13.31
02/21/2023 10:00:00	31.27	13.38
02/21/2023 11:00:00	32.03	13.38
02/21/2023 12:00:00	30.70	13.44
02/21/2023 13:00:00	31.46	13.44
02/21/2023 14:00:00	45.46	12.31

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
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02/21/2023 16:00:00	46.10	12.31
02/21/2023 17:00:00	45.24	12.31
02/21/2023 18:00:00	45.92	12.31
02/21/2023 19:00:00	45.88	12.31
02/21/2023 20:00:00	45.92	12.31
02/21/2023 21:00:00	45.89	12.31
02/21/2023 22:00:00	46.93	12.31
02/21/2023 23:00:00	29.77	13.31
02/22/2023 00:00:00	27.64	13.19
02/22/2023 01:00:00	28.11	13.19
02/22/2023 02:00:00	28.77	13.31
02/22/2023 03:00:00	27.90	13.25
02/22/2023 04:00:00	28.35	13.25
02/22/2023 05:00:00	29.05	13.25
02/22/2023 06:00:00	29.02	13.25
02/22/2023 07:00:00	29.66	13.25
02/22/2023 08:00:00	28.10	13.25
02/22/2023 09:00:00	29.00	13.25
02/22/2023 10:00:00	31.22	13.31
02/22/2023 11:00:00	30.75	13.38
02/22/2023 12:00:00	33.59	13.44
02/22/2023 13:00:00	33.17	13.44
02/22/2023 14:00:00	45.21	12.44
02/22/2023 15:00:00	46.74	12.31
02/22/2023 16:00:00	45.30	12.31
02/22/2023 17:00:00	46.30	12.31
02/22/2023 18:00:00	45.71	12.38
02/22/2023 19:00:00	46.79	12.38
02/22/2023 20:00:00	46.14	12.38
02/22/2023 21:00:00	46.50	12.38
02/22/2023 22:00:00	47.74	12.38
02/22/2023 23:00:00	32.22	13.25

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
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02/23/2023 01:00:00	29.51	13.31
02/23/2023 02:00:00	29.27	13.31
02/23/2023 03:00:00	29.49	13.25
02/23/2023 04:00:00	30.63	13.31
02/23/2023 05:00:00	29.22	13.31
02/23/2023 06:00:00	28.92	13.25
02/23/2023 07:00:00	30.58	13.31
02/23/2023 08:00:00	29.11	13.25
02/23/2023 09:00:00	29.26	13.25
02/23/2023 10:00:00	30.11	13.38
02/23/2023 11:00:00	30.80	13.38
02/23/2023 12:00:00	33.04	13.44
02/23/2023 13:00:00	32.41	13.50
02/23/2023 14:00:00	46.68	12.44
02/23/2023 15:00:00	47.15	12.44
02/23/2023 16:00:00	45.86	12.31
02/23/2023 17:00:00	46.12	12.31
02/23/2023 18:00:00	46.64	12.44
02/23/2023 19:00:00	46.89	12.44
02/23/2023 20:00:00	45.44	12.44
02/23/2023 21:00:00	48.48	12.38
02/23/2023 22:00:00	45.60	12.38
02/23/2023 23:00:00	29.51	13.25
02/24/2023 00:00:00	29.80	13.31
02/24/2023 01:00:00	30.31	13.25
02/24/2023 02:00:00	29.80	13.31
02/24/2023 03:00:00	29.23	13.25
02/24/2023 04:00:00	29.72	13.25
02/24/2023 05:00:00	29.63	13.31
02/24/2023 06:00:00	30.88	13.31
02/24/2023 07:00:00	33.46	13.25
02/24/2023 08:00:00	31.68	13.31

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
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02/24/2023 11:00:00	33.65	13.44
02/24/2023 12:00:00	32.80	13.56
02/24/2023 13:00:00	33.28	13.50
02/24/2023 14:00:00	45.23	12.38
02/24/2023 15:00:00	47.25	12.38
02/24/2023 16:00:00	44.35	12.38
02/24/2023 17:00:00	45.90	12.38
02/24/2023 18:00:00	47.51	12.38
02/24/2023 19:00:00	46.88	12.38
02/24/2023 20:00:00	46.01	12.38
02/24/2023 21:00:00	47.21	12.44
02/24/2023 22:00:00	47.01	12.38
02/24/2023 23:00:00	29.70	13.25
02/25/2023 00:00:00	30.27	13.31
02/25/2023 01:00:00	29.62	13.31
02/25/2023 02:00:00	29.00	13.31
02/25/2023 03:00:00	31.18	13.31
02/25/2023 04:00:00	32.63	13.31
02/25/2023 05:00:00	32.43	13.44
02/25/2023 06:00:00	31.77	13.44
02/25/2023 07:00:00	31.58	13.38
02/25/2023 08:00:00	33.68	13.38
02/25/2023 09:00:00	31.71	13.38
02/25/2023 10:00:00	33.53	13.44
02/25/2023 11:00:00	33.25	13.44
02/25/2023 12:00:00	32.66	13.44
02/25/2023 13:00:00	31.33	13.44
02/25/2023 14:00:00	46.36	12.31
02/25/2023 15:00:00	45.40	12.38
02/25/2023 16:00:00	47.15	12.38
02/25/2023 17:00:00	46.26	12.38

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
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02/25/2023 19:00:00	46.67	12.44
02/25/2023 20:00:00	45.58	12.50
02/25/2023 21:00:00	45.76	12.50
02/25/2023 22:00:00	46.13	12.50
02/25/2023 23:00:00	32.91	13.25
02/26/2023 00:00:00	31.28	13.38
02/26/2023 01:00:00	32.05	13.38
02/26/2023 02:00:00	32.46	13.38
02/26/2023 03:00:00	30.35	13.38
02/26/2023 04:00:00	32.26	13.38
02/26/2023 05:00:00	35.52	13.38
02/26/2023 06:00:00	36.60	13.38
02/26/2023 07:00:00	38.61	13.38
02/26/2023 08:00:00	38.19	13.38
02/26/2023 09:00:00	37.67	13.38
02/26/2023 10:00:00	35.66	13.38
02/26/2023 11:00:00	33.19	13.38
02/26/2023 12:00:00	32.53	13.38
02/26/2023 13:00:00	32.38	13.44
02/26/2023 14:00:00	31.94	13.38
02/26/2023 15:00:00	32.51	13.44
02/26/2023 16:00:00	33.91	13.44
02/26/2023 17:00:00	33.37	13.44
02/26/2023 18:00:00	44.35	12.38
02/26/2023 19:00:00	47.53	12.50
02/26/2023 20:00:00	45.81	12.50
02/26/2023 21:00:00	46.45	12.50
02/26/2023 22:00:00	32.77	13.38
02/26/2023 23:00:00	31.47	13.44
02/27/2023 00:00:00	34.14	13.38
02/27/2023 01:00:00	31.73	13.38
02/27/2023 02:00:00	33.36	13.38

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
02/27/2023 03:00:00	34.46	13.38
02/27/2023 04:00:00	33.07	13.38
02/27/2023 05:00:00	35.35	13.38
02/27/2023 06:00:00	36.84	13.31
02/27/2023 07:00:00	39.49	13.38
02/27/2023 08:00:00	39.07	13.38
02/27/2023 09:00:00	36.52	13.38
02/27/2023 10:00:00	32.24	13.38
02/27/2023 11:00:00	32.55	13.38
02/27/2023 12:00:00	33.59	13.38
02/27/2023 13:00:00	32.86	13.44
02/27/2023 14:00:00	46.63	12.44
02/27/2023 15:00:00	46.12	12.31
02/27/2023 16:00:00	46.67	12.38
02/27/2023 17:00:00	47.23	12.38
02/27/2023 18:00:00	47.95	12.44
02/27/2023 19:00:00	48.71	12.44
02/27/2023 20:00:00	47.94	12.44
02/27/2023 21:00:00	47.10	12.44
02/27/2023 22:00:00	47.67	12.44
02/27/2023 23:00:00	36.58	13.31
02/28/2023 00:00:00	33.94	13.44
02/28/2023 01:00:00	33.24	13.38
02/28/2023 02:00:00	32.63	13.44
02/28/2023 03:00:00	31.69	13.31
02/28/2023 04:00:00	32.89	13.38
02/28/2023 05:00:00	34.13	13.38
02/28/2023 06:00:00	34.71	13.38
02/28/2023 07:00:00	34.80	13.38
02/28/2023 08:00:00	32.96	13.38
02/28/2023 09:00:00	33.39	13.38
02/28/2023 10:00:00	33.79	13.44
02/28/2023 11:00:00	32.92	13.44

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
02/28/2023 12:00:00	32.78	13.44
02/28/2023 13:00:00	32.78	13.44
02/28/2023 14:00:00	47.50	12.31
02/28/2023 15:00:00	46.37	12.38
02/28/2023 16:00:00	46.43	12.38
02/28/2023 17:00:00	46.06	12.38
02/28/2023 18:00:00	46.51	12.44
02/28/2023 19:00:00	47.25	12.44
02/28/2023 20:00:00	46.28	12.44
02/28/2023 21:00:00	47.50	12.44
02/28/2023 22:00:00	47.24	12.44
02/28/2023 23:00:00	33.54	13.31
03/01/2023 00:00:00	32.43	13.31
03/01/2023 01:00:00	31.65	13.38
03/01/2023 02:00:00	31.89	13.31
03/01/2023 03:00:00	32.16	13.38
03/01/2023 04:00:00	33.26	13.38
03/01/2023 05:00:00	34.51	13.38
03/01/2023 06:00:00	31.03	13.38
03/01/2023 07:00:00	32.18	13.31
03/01/2023 08:00:00	32.17	13.38
03/01/2023 09:00:00	33.08	13.38
03/01/2023 10:00:00	46.57	12.38
03/01/2023 11:00:00	46.37	12.50
03/01/2023 12:00:00	47.51	12.44
03/01/2023 13:00:00	48.70	12.44
03/01/2023 14:00:00	46.71	12.31
03/01/2023 15:00:00	47.44	12.38
03/01/2023 16:00:00	47.31	12.31
03/01/2023 17:00:00	47.34	12.31
03/01/2023 18:00:00	48.67	12.38
03/01/2023 19:00:00	48.04	12.38
03/01/2023 20:00:00	47.82	12.38

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
03/01/2023 21:00:00	48.49	12.38
03/01/2023 22:00:00	48.46	12.38
03/01/2023 23:00:00	47.66	12.38
03/02/2023 00:00:00	31.16	13.25
03/02/2023 01:00:00	31.32	13.31
03/02/2023 02:00:00	30.76	13.31
03/02/2023 03:00:00	29.96	13.31
03/02/2023 04:00:00	30.43	13.25
03/02/2023 05:00:00	30.14	13.38
03/02/2023 06:00:00	30.63	13.38
03/02/2023 07:00:00	30.50	13.25
03/02/2023 08:00:00	30.30	13.25
03/02/2023 09:00:00	28.35	13.25
03/02/2023 10:00:00	48.17	12.31
03/02/2023 11:00:00	47.99	12.31
03/02/2023 12:00:00	48.21	12.38
03/02/2023 13:00:00	48.17	12.38
03/02/2023 14:00:00	45.92	12.38
03/02/2023 15:00:00	46.46	12.38
03/02/2023 16:00:00	46.31	12.31
03/02/2023 17:00:00	47.39	12.38
03/02/2023 18:00:00	47.89	12.38
03/02/2023 19:00:00	48.09	12.44
03/02/2023 20:00:00	48.67	12.44
03/02/2023 21:00:00	48.47	12.44
03/02/2023 22:00:00	48.26	12.44
03/02/2023 23:00:00	47.27	12.44
03/03/2023 00:00:00	31.02	13.19
03/03/2023 01:00:00	28.92	13.31
03/03/2023 02:00:00	30.44	13.31
03/03/2023 03:00:00	30.60	13.31
03/03/2023 04:00:00	31.79	13.44
03/03/2023 05:00:00	31.90	13.38

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
03/03/2023 06:00:00	32.66	13.38
03/03/2023 07:00:00	33.78	13.38
03/03/2023 08:00:00	33.82	13.44
03/03/2023 09:00:00	34.07	13.44
03/03/2023 10:00:00	48.85	12.44
03/03/2023 11:00:00	47.39	12.50
03/03/2023 12:00:00	47.44	12.50
03/03/2023 13:00:00	46.85	12.38
03/03/2023 14:00:00	47.08	12.44
03/03/2023 15:00:00	47.07	12.44
03/03/2023 16:00:00	47.26	12.44
03/03/2023 17:00:00	48.82	12.44
03/03/2023 18:00:00	48.08	12.50
03/03/2023 19:00:00	49.08	12.50
03/03/2023 20:00:00	47.22	12.50
03/03/2023 21:00:00	48.03	12.44
03/03/2023 22:00:00	49.04	12.44
03/03/2023 23:00:00	48.81	12.44
03/04/2023 00:00:00	31.23	13.31
03/04/2023 01:00:00	32.16	13.25
03/04/2023 02:00:00	30.18	13.25
03/04/2023 03:00:00	29.93	13.25
03/04/2023 04:00:00	29.27	13.31
03/04/2023 05:00:00	30.32	13.31
03/04/2023 06:00:00	31.90	13.31
03/04/2023 07:00:00	33.88	13.38
03/04/2023 08:00:00	32.79	13.44
03/04/2023 09:00:00	34.71	13.38
03/04/2023 10:00:00	46.81	12.50
03/04/2023 11:00:00	47.20	12.50
03/04/2023 12:00:00	48.86	12.50
03/04/2023 13:00:00	47.82	12.50
03/04/2023 14:00:00	47.69	12.38

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
03/04/2023 15:00:00	48.50	12.44
03/04/2023 16:00:00	47.98	12.44
03/04/2023 17:00:00	48.41	12.44
03/04/2023 18:00:00	48.52	12.44
03/04/2023 19:00:00	49.06	12.50
03/04/2023 20:00:00	49.08	12.50
03/04/2023 21:00:00	48.46	12.44
03/04/2023 22:00:00	48.03	12.50
03/04/2023 23:00:00	48.41	12.50
03/05/2023 01:00:00	0.00	21.13
03/05/2023 02:00:00	0.00	21.13
03/05/2023 03:00:00	0.00	21.13
03/05/2023 04:00:00	0.00	21.13
03/05/2023 05:00:00	0.00	21.13
03/05/2023 06:00:00	0.00	21.13
03/05/2023 07:00:00	0.00	21.13
03/05/2023 08:00:00	0.00	21.13
03/05/2023 09:00:00	0.00	21.13
03/05/2023 10:00:00	0.00	21.13
03/05/2023 11:00:00	0.00	21.00
03/05/2023 12:00:00	0.00	21.00
03/05/2023 13:00:00	0.00	21.00
03/05/2023 14:00:00	0.00	21.00
03/05/2023 15:00:00	0.00	21.00
03/05/2023 16:00:00	0.00	21.00
03/05/2023 17:00:00	0.00	21.13
03/05/2023 18:00:00	0.00	21.13
03/05/2023 19:00:00	0.00	21.13
03/05/2023 20:00:00	0.00	21.13
03/05/2023 21:00:00	0.00	21.13
03/05/2023 22:00:00	0.00	21.13
03/05/2023 23:00:00	0.00	21.13
03/06/2023 00:00:00	0.00	21.13

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
03/06/2023 01:00:00	0.00	21.13
03/06/2023 02:00:00	0.00	21.13
03/06/2023 03:00:00	0.00	21.13
03/06/2023 04:00:00	0.00	21.13
03/06/2023 05:00:00	0.00	21.13
03/06/2023 06:00:00	0.00	21.13
03/06/2023 07:00:00	0.00	21.13
03/06/2023 08:00:00	0.00	21.13
03/06/2023 09:00:00	0.00	21.13
03/06/2023 10:00:00	0.00	21.00
03/06/2023 11:00:00	0.00	21.00
03/06/2023 12:00:00	0.00	21.00
03/06/2023 13:00:00	0.00	21.00
03/06/2023 14:00:00	0.00	21.00
03/06/2023 15:00:00	0.00	21.00
03/06/2023 16:00:00	0.00	21.13
03/06/2023 17:00:00	0.00	21.13
03/06/2023 18:00:00	0.00	21.13
03/06/2023 19:00:00	0.00	21.13
03/06/2023 20:00:00	0.00	21.13
03/06/2023 21:00:00	0.00	21.13
03/06/2023 22:00:00	0.00	21.13
03/06/2023 23:00:00	0.00	21.13
03/07/2023 00:00:00	0.00	19.50
03/07/2023 01:00:00	0.00	21.13
03/07/2023 04:00:00	28.29	13.25
03/07/2023 05:00:00	30.64	13.38
03/07/2023 06:00:00	40.98	13.19
03/07/2023 07:00:00	42.05	13.19
03/07/2023 08:00:00	28.15	13.31
03/07/2023 09:00:00	28.30	13.31
03/07/2023 10:00:00	44.85	12.44
03/07/2023 11:00:00	44.40	12.44

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
03/07/2023 12:00:00	44.18	12.38
03/07/2023 13:00:00	45.83	12.44
03/07/2023 14:00:00	45.04	12.44
03/07/2023 15:00:00	45.20	12.44
03/07/2023 16:00:00	45.03	12.38
03/07/2023 17:00:00	45.18	12.38
03/07/2023 18:00:00	45.60	12.44
03/07/2023 19:00:00	47.26	12.44
03/07/2023 20:00:00	45.73	12.44
03/07/2023 21:00:00	46.04	12.56
03/07/2023 22:00:00	45.87	12.44
03/07/2023 23:00:00	47.20	12.50
03/08/2023 00:00:00	27.52	13.31
03/08/2023 01:00:00	27.15	13.19
03/08/2023 02:00:00	27.78	13.25
03/08/2023 03:00:00	26.86	13.25
03/08/2023 04:00:00	26.63	13.25
03/08/2023 05:00:00	26.32	13.25
03/08/2023 06:00:00	27.46	13.25
03/08/2023 07:00:00	28.59	13.25
03/08/2023 08:00:00	26.08	13.25
03/08/2023 09:00:00	27.14	13.25
03/08/2023 10:00:00	45.58	12.44
03/08/2023 11:00:00	45.43	12.38
03/08/2023 12:00:00	45.63	12.44
03/08/2023 13:00:00	45.61	12.38
03/08/2023 14:00:00	45.44	12.38
03/08/2023 15:00:00	43.75	12.38
03/08/2023 16:00:00	45.44	12.44
03/08/2023 17:00:00	46.49	12.44
03/08/2023 18:00:00	45.68	12.44
03/08/2023 19:00:00	45.04	12.44
03/08/2023 20:00:00	45.32	12.44

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
03/08/2023 21:00:00	45.89	12.44
03/08/2023 22:00:00	46.27	12.44
03/08/2023 23:00:00	46.92	12.44
03/09/2023 00:00:00	27.52	13.19
03/09/2023 01:00:00	27.48	13.31
03/09/2023 02:00:00	28.24	13.25
03/09/2023 03:00:00	27.24	13.25
03/09/2023 04:00:00	27.81	13.25
03/09/2023 05:00:00	27.75	13.25
03/09/2023 06:00:00	27.64	13.25
03/09/2023 07:00:00	25.86	13.25
03/09/2023 08:00:00	26.40	13.25
03/09/2023 09:00:00	27.25	13.25
03/09/2023 10:00:00	46.49	13.19
03/09/2023 11:00:00	45.42	12.44
03/09/2023 12:00:00	45.63	12.38
03/09/2023 13:00:00	45.82	12.38
03/09/2023 14:00:00	44.68	12.38
03/09/2023 15:00:00	44.36	12.38
03/09/2023 16:00:00	44.21	12.38
03/09/2023 17:00:00	45.83	12.44
03/09/2023 18:00:00	45.65	12.44
03/09/2023 19:00:00	45.28	12.44
03/09/2023 20:00:00	45.87	12.38
03/09/2023 21:00:00	46.62	12.44
03/09/2023 22:00:00	45.42	12.38
03/09/2023 23:00:00	45.48	12.44
03/10/2023 00:00:00	27.21	13.31
03/10/2023 01:00:00	26.29	13.25
03/10/2023 02:00:00	27.10	13.25
03/10/2023 03:00:00	26.76	13.25
03/10/2023 04:00:00	26.76	13.25
03/10/2023 05:00:00	27.53	13.25

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
03/10/2023 06:00:00	26.76	13.25
03/10/2023 07:00:00	28.41	13.31
03/10/2023 08:00:00	28.19	13.31
03/10/2023 09:00:00	24.85	13.31
03/10/2023 10:00:00	44.51	12.31
03/10/2023 11:00:00	44.52	12.44
03/10/2023 12:00:00	45.94	12.31
03/10/2023 13:00:00	44.46	12.38
03/10/2023 14:00:00	43.26	12.38
03/10/2023 15:00:00	44.42	12.31
03/10/2023 16:00:00	44.64	12.31
03/10/2023 17:00:00	45.47	12.38
03/10/2023 18:00:00	45.62	12.38
03/10/2023 19:00:00	44.37	12.38
03/10/2023 20:00:00	45.60	12.38
03/10/2023 21:00:00	44.99	12.44
03/10/2023 22:00:00	46.30	12.38
03/10/2023 23:00:00	45.80	12.44
03/11/2023 00:00:00	27.09	13.31
03/11/2023 01:00:00	26.07	13.25
03/11/2023 02:00:00	26.76	13.25
03/11/2023 03:00:00	26.22	13.25
03/11/2023 04:00:00	27.81	13.25
03/11/2023 05:00:00	26.55	13.25
03/11/2023 06:00:00	27.91	13.31
03/11/2023 07:00:00	27.71	13.25
03/11/2023 08:00:00	27.25	13.25
03/11/2023 09:00:00	26.93	13.25
03/11/2023 10:00:00	46.60	12.38
03/11/2023 11:00:00	45.55	12.38
03/11/2023 12:00:00	45.75	12.38
03/11/2023 13:00:00	44.95	12.38
03/11/2023 14:00:00	44.71	12.38

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
03/11/2023 15:00:00	45.51	12.31
03/11/2023 16:00:00	45.00	12.44
03/11/2023 17:00:00	46.22	12.38
03/11/2023 18:00:00	45.05	12.44
03/11/2023 19:00:00	46.51	12.38
03/11/2023 20:00:00	44.63	12.44
03/11/2023 21:00:00	45.42	12.44
03/11/2023 22:00:00	45.03	12.44
03/11/2023 23:00:00	45.65	12.44
03/12/2023 00:00:00	25.41	13.31
03/12/2023 01:00:00	25.53	13.25
03/12/2023 02:00:00	26.07	13.25
03/12/2023 03:00:00	26.83	13.31
03/12/2023 04:00:00	25.53	13.31
03/12/2023 05:00:00	26.14	13.31
03/12/2023 06:00:00	27.62	13.31
03/12/2023 07:00:00	28.20	13.31
03/12/2023 08:00:00	27.69	13.31
03/12/2023 09:00:00	26.38	13.31
03/12/2023 10:00:00	26.55	13.31
03/12/2023 11:00:00	28.98	13.31
03/12/2023 12:00:00	26.33	13.31
03/12/2023 13:00:00	26.81	13.31
03/12/2023 14:00:00	27.51	13.38
03/12/2023 15:00:00	25.67	13.38
03/12/2023 16:00:00	27.51	13.38
03/12/2023 17:00:00	26.82	13.38
03/12/2023 18:00:00	28.42	13.38
03/12/2023 19:00:00	44.91	12.50
03/12/2023 20:00:00	45.03	12.38
03/12/2023 21:00:00	45.18	12.44
03/12/2023 22:00:00	46.41	12.44
03/12/2023 23:00:00	26.50	13.31

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
03/13/2023 00:00:00	25.30	13.31
03/13/2023 01:00:00	27.29	13.31
03/13/2023 02:00:00	27.14	13.25
03/13/2023 03:00:00	27.48	13.31
03/13/2023 04:00:00	26.66	13.31
03/13/2023 05:00:00	28.68	13.31
03/13/2023 06:00:00	26.23	13.25
03/13/2023 07:00:00	26.33	13.25
03/13/2023 08:00:00	27.29	13.31
03/13/2023 09:00:00	26.69	13.31
03/13/2023 10:00:00	45.62	12.44
03/13/2023 11:00:00	44.13	12.38
03/13/2023 12:00:00	44.35	12.38
03/13/2023 13:00:00	44.86	12.38
03/13/2023 14:00:00	44.74	12.38
03/13/2023 15:00:00	44.35	12.38
03/13/2023 16:00:00	44.78	12.38
03/13/2023 17:00:00	45.39	12.38
03/13/2023 18:00:00	44.01	12.44
03/13/2023 19:00:00	45.42	12.44
03/13/2023 20:00:00	45.40	12.44
03/13/2023 21:00:00	46.46	12.44
03/13/2023 22:00:00	45.50	12.44
03/13/2023 23:00:00	44.00	12.44
03/14/2023 00:00:00	26.52	13.31
03/14/2023 01:00:00	26.98	13.25
03/14/2023 02:00:00	25.75	13.25
03/14/2023 03:00:00	26.21	13.25
03/14/2023 04:00:00	26.33	13.25
03/14/2023 05:00:00	27.23	13.25
03/14/2023 06:00:00	27.05	13.25
03/14/2023 07:00:00	28.36	13.38
03/14/2023 08:00:00	28.11	13.31

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
03/14/2023 09:00:00	29.97	13.38
03/14/2023 10:00:00	45.72	12.50
03/14/2023 11:00:00	44.36	12.38
03/14/2023 12:00:00	45.45	12.44
03/14/2023 13:00:00	44.77	12.38
03/14/2023 14:00:00	44.37	12.44
03/14/2023 15:00:00	44.60	12.38
03/14/2023 16:00:00	44.59	12.44
03/14/2023 17:00:00	45.27	12.44
03/14/2023 18:00:00	45.05	12.44
03/14/2023 19:00:00	44.93	12.44
03/14/2023 20:00:00	44.67	12.44
03/14/2023 21:00:00	44.44	12.44
03/14/2023 22:00:00	45.29	12.44
03/14/2023 23:00:00	43.82	12.44
03/15/2023 00:00:00	26.79	13.31
03/15/2023 01:00:00	26.90	13.25
03/15/2023 02:00:00	26.23	13.31
03/15/2023 03:00:00	26.70	13.31
03/15/2023 04:00:00	27.61	13.25
03/15/2023 05:00:00	26.03	13.31
03/15/2023 06:00:00	28.08	13.31
03/15/2023 07:00:00	27.26	13.31
03/15/2023 08:00:00	27.12	13.25
03/15/2023 09:00:00	27.04	13.31
03/15/2023 10:00:00	45.59	12.31
03/15/2023 11:00:00	43.59	12.31
03/15/2023 12:00:00	44.98	12.31
03/15/2023 13:00:00	44.58	12.31
03/15/2023 14:00:00	45.17	12.31
03/15/2023 15:00:00	44.58	12.31
03/15/2023 16:00:00	45.07	12.25
03/15/2023 17:00:00	43.81	12.38

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
03/15/2023 18:00:00	45.67	12.31
03/15/2023 19:00:00	44.64	12.31
03/15/2023 20:00:00	44.66	12.31
03/15/2023 21:00:00	45.48	12.31
03/15/2023 22:00:00	44.31	12.31
03/15/2023 23:00:00	45.62	12.31
03/16/2023 00:00:00	26.22	13.31
03/16/2023 01:00:00	27.41	13.31
03/16/2023 02:00:00	26.81	13.31
03/16/2023 03:00:00	26.34	13.31
03/16/2023 04:00:00	26.97	13.31
03/16/2023 05:00:00	27.30	13.31
03/16/2023 06:00:00	26.25	13.31
03/16/2023 07:00:00	26.50	13.31
03/16/2023 08:00:00	27.95	13.31
03/16/2023 09:00:00	27.25	13.31
03/16/2023 10:00:00	43.62	12.38
03/16/2023 11:00:00	44.31	12.31
03/16/2023 12:00:00	44.97	12.31
03/16/2023 13:00:00	44.41	12.31
03/16/2023 14:00:00	44.55	12.31
03/16/2023 15:00:00	43.94	12.31
03/16/2023 16:00:00	44.19	12.31
03/16/2023 17:00:00	44.69	12.31
03/16/2023 18:00:00	45.66	12.31
03/16/2023 19:00:00	44.49	12.31
03/16/2023 20:00:00	45.72	12.31
03/16/2023 21:00:00	44.87	12.31
03/16/2023 22:00:00	44.07	12.31
03/16/2023 23:00:00	44.23	12.31
03/17/2023 00:00:00	27.90	13.31
03/17/2023 01:00:00	26.23	13.25
03/17/2023 02:00:00	26.57	13.31

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
03/17/2023 03:00:00	25.89	13.25
03/17/2023 04:00:00	27.14	13.25
03/17/2023 05:00:00	26.84	13.25
03/17/2023 06:00:00	27.16	13.31
03/17/2023 07:00:00	25.79	13.31
03/17/2023 08:00:00	25.23	13.31
03/17/2023 09:00:00	26.33	13.31
03/17/2023 10:00:00	44.48	12.31
03/17/2023 11:00:00	43.88	12.31
03/17/2023 12:00:00	45.60	12.31
03/17/2023 13:00:00	43.51	12.31
03/17/2023 14:00:00	44.18	12.31
03/17/2023 15:00:00	44.60	12.25
03/17/2023 16:00:00	44.32	12.31
03/17/2023 17:00:00	44.70	12.31
03/17/2023 18:00:00	46.11	12.38
03/17/2023 19:00:00	44.47	12.38
03/17/2023 20:00:00	45.48	12.31
03/17/2023 21:00:00	44.41	12.38
03/17/2023 22:00:00	45.07	12.31
03/17/2023 23:00:00	45.25	12.31
03/18/2023 00:00:00	26.20	13.31
03/18/2023 01:00:00	26.80	13.25
03/18/2023 02:00:00	25.77	13.25
03/18/2023 03:00:00	26.13	13.31
03/18/2023 04:00:00	26.44	13.31
03/18/2023 05:00:00	26.57	13.25
03/18/2023 06:00:00	26.46	13.31
03/18/2023 07:00:00	26.69	13.31
03/18/2023 08:00:00	26.49	13.31
03/18/2023 09:00:00	27.47	13.31
03/18/2023 10:00:00	44.19	12.31
03/18/2023 11:00:00	45.27	12.31

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
03/18/2023 12:00:00	44.73	12.31
03/18/2023 13:00:00	43.56	12.31
03/18/2023 14:00:00	43.78	12.31
03/18/2023 15:00:00	44.72	12.25
03/18/2023 16:00:00	44.36	12.31
03/18/2023 17:00:00	44.58	12.31
03/18/2023 18:00:00	44.91	12.31
03/18/2023 19:00:00	44.68	12.31
03/18/2023 20:00:00	45.08	12.31
03/18/2023 21:00:00	45.42	12.31
03/18/2023 22:00:00	44.77	12.31
03/18/2023 23:00:00	43.02	12.31
03/19/2023 00:00:00	27.10	13.31
03/19/2023 01:00:00	25.55	13.31
03/19/2023 02:00:00	25.58	13.31
03/19/2023 03:00:00	27.26	13.31
03/19/2023 04:00:00	25.55	13.31
03/19/2023 05:00:00	25.68	13.31
03/19/2023 06:00:00	26.01	13.31
03/19/2023 07:00:00	25.91	13.31
03/19/2023 08:00:00	24.98	13.31
03/19/2023 09:00:00	25.16	13.31
03/19/2023 10:00:00	26.22	13.31
03/19/2023 11:00:00	27.13	13.31
03/19/2023 12:00:00	27.24	13.38
03/19/2023 13:00:00	25.28	13.31
03/19/2023 14:00:00	26.22	13.38
03/19/2023 15:00:00	26.36	13.38
03/19/2023 16:00:00	25.95	13.38
03/19/2023 17:00:00	26.34	13.38
03/19/2023 18:00:00	25.86	13.38
03/19/2023 19:00:00	44.11	12.25
03/19/2023 20:00:00	43.44	12.38

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
03/19/2023 21:00:00	44.66	12.31
03/19/2023 22:00:00	44.62	12.31
03/19/2023 23:00:00	24.77	13.31
03/20/2023 00:00:00	24.96	13.25
03/20/2023 01:00:00	26.54	13.25
03/20/2023 02:00:00	26.12	13.31
03/20/2023 03:00:00	26.12	13.31
03/20/2023 04:00:00	26.90	13.31
03/20/2023 05:00:00	25.65	13.31
03/20/2023 06:00:00	25.53	13.25
03/20/2023 07:00:00	26.31	13.25
03/20/2023 08:00:00	25.56	13.25
03/20/2023 09:00:00	24.57	13.31
03/20/2023 10:00:00	43.38	12.31
03/20/2023 11:00:00	44.36	12.31
03/20/2023 12:00:00	43.48	12.19
03/20/2023 13:00:00	45.46	12.25
03/20/2023 14:00:00	43.84	12.19
03/20/2023 15:00:00	44.06	12.19
03/20/2023 16:00:00	44.21	12.19
03/20/2023 17:00:00	44.47	12.19
03/20/2023 18:00:00	44.63	12.31
03/20/2023 19:00:00	44.56	12.31
03/20/2023 20:00:00	43.35	12.31
03/20/2023 21:00:00	43.98	12.31
03/20/2023 22:00:00	44.96	12.31
03/20/2023 23:00:00	45.34	12.31
03/21/2023 00:00:00	26.87	13.31
03/21/2023 01:00:00	25.62	13.25
03/21/2023 02:00:00	25.88	13.31
03/21/2023 03:00:00	26.35	13.31
03/21/2023 04:00:00	25.44	13.25
03/21/2023 05:00:00	25.89	13.25

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
03/21/2023 06:00:00	25.98	13.25
03/21/2023 07:00:00	26.00	13.31
03/21/2023 08:00:00	27.28	13.31
03/21/2023 09:00:00	25.63	13.31
03/21/2023 10:00:00	43.40	12.31
03/21/2023 11:00:00	44.97	12.31
03/21/2023 12:00:00	43.31	12.31
03/21/2023 13:00:00	44.38	12.25
03/21/2023 14:00:00	42.95	12.31
03/21/2023 15:00:00	43.35	12.25
03/21/2023 16:00:00	42.23	12.25
03/21/2023 17:00:00	43.58	12.25
03/21/2023 18:00:00	43.74	12.25
03/21/2023 19:00:00	44.10	12.25
03/21/2023 20:00:00	43.34	12.25
03/21/2023 21:00:00	44.21	12.25
03/21/2023 22:00:00	44.12	12.25
03/21/2023 23:00:00	44.74	12.25
03/22/2023 00:00:00	25.51	13.25
03/22/2023 01:00:00	25.24	13.25
03/22/2023 02:00:00	26.23	13.31
03/22/2023 03:00:00	26.58	13.31
03/22/2023 04:00:00	24.63	13.31
03/22/2023 05:00:00	24.88	13.25
03/22/2023 06:00:00	26.35	13.25
03/22/2023 07:00:00	25.77	13.25
03/22/2023 08:00:00	26.13	13.31
03/22/2023 09:00:00	26.53	13.31
03/22/2023 10:00:00	43.47	12.19
03/22/2023 11:00:00	44.91	12.31
03/22/2023 12:00:00	42.86	12.31
03/22/2023 13:00:00	44.04	12.19
03/22/2023 14:00:00	44.66	12.25

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
03/22/2023 15:00:00	42.66	12.19
03/22/2023 16:00:00	43.65	12.25
03/22/2023 17:00:00	44.08	12.25
03/22/2023 18:00:00	43.55	12.25
03/22/2023 19:00:00	44.14	12.25
03/22/2023 20:00:00	44.53	12.25
03/22/2023 21:00:00	43.66	12.25
03/22/2023 22:00:00	45.37	12.25
03/22/2023 23:00:00	44.89	12.25
03/23/2023 00:00:00	27.54	13.25
03/23/2023 01:00:00	26.08	13.25
03/23/2023 02:00:00	25.29	13.25
03/23/2023 03:00:00	25.66	13.31
03/23/2023 04:00:00	25.68	13.31
03/23/2023 05:00:00	24.75	13.25
03/23/2023 06:00:00	24.97	13.31
03/23/2023 07:00:00	26.68	13.31
03/23/2023 08:00:00	26.12	13.31
03/23/2023 09:00:00	25.63	13.38
03/23/2023 10:00:00	43.83	12.38
03/23/2023 11:00:00	43.88	12.31
03/23/2023 12:00:00	43.28	12.31
03/23/2023 13:00:00	44.44	12.31
03/23/2023 14:00:00	43.39	12.31
03/23/2023 15:00:00	43.16	12.31
03/23/2023 16:00:00	0.00	0.00
03/23/2023 17:00:00	48.08	12.44
03/23/2023 18:00:00	48.70	12.44
03/23/2023 19:00:00	48.47	12.44
03/23/2023 20:00:00	48.46	12.44
03/23/2023 21:00:00	48.66	12.44
03/23/2023 22:00:00	48.64	12.38
03/23/2023 23:00:00	48.23	12.38

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
03/24/2023 00:00:00	28.94	13.38
03/24/2023 01:00:00	29.72	13.31
03/24/2023 02:00:00	29.95	13.31
03/24/2023 03:00:00	30.15	13.31
03/24/2023 04:00:00	30.64	13.31
03/24/2023 05:00:00	29.92	13.31
03/24/2023 06:00:00	30.85	13.31
03/24/2023 07:00:00	30.15	13.31
03/24/2023 08:00:00	28.95	13.31
03/24/2023 09:00:00	30.32	13.38
03/24/2023 10:00:00	48.83	12.63
03/24/2023 11:00:00	48.06	12.38
03/24/2023 12:00:00	47.98	12.38
03/24/2023 13:00:00	48.24	12.38
03/24/2023 14:00:00	47.79	12.38
03/24/2023 15:00:00	47.74	12.38
03/24/2023 16:00:00	48.05	12.38
03/24/2023 17:00:00	48.68	12.38
03/24/2023 18:00:00	47.49	12.44
03/24/2023 19:00:00	48.49	12.44
03/24/2023 20:00:00	48.70	12.44
03/24/2023 21:00:00	48.68	12.38
03/24/2023 22:00:00	48.46	12.44
03/24/2023 23:00:00	49.52	12.44
03/25/2023 00:00:00	29.71	13.31
03/25/2023 01:00:00	29.69	13.31
03/25/2023 02:00:00	29.79	13.31
03/25/2023 03:00:00	29.54	13.31
03/25/2023 04:00:00	30.64	13.31
03/25/2023 05:00:00	30.44	13.38
03/25/2023 06:00:00	30.67	13.31
03/25/2023 07:00:00	30.22	13.31
03/25/2023 08:00:00	29.98	13.31

Date Time	CEMS NO _x 7%O ₂	CEMS O ₂
03/25/2023 09:00:00	30.56	13.38
03/25/2023 10:00:00	48.05	12.38
03/25/2023 11:00:00	48.23	12.38
03/25/2023 12:00:00	47.21	12.38
03/25/2023 13:00:00	47.37	12.38
03/25/2023 14:00:00	48.00	12.38
03/25/2023 15:00:00	47.79	12.38
03/25/2023 16:00:00	47.69	12.38
03/25/2023 17:00:00	48.25	12.38
03/25/2023 18:00:00	48.67	12.44
03/25/2023 19:00:00	48.28	12.44
03/25/2023 20:00:00	48.91	12.44
03/25/2023 21:00:00	47.84	12.38
03/25/2023 22:00:00	49.06	12.38
03/25/2023 23:00:00	48.45	12.38
03/26/2023 00:00:00	28.92	13.38
03/26/2023 01:00:00	29.97	13.31
03/26/2023 02:00:00	29.80	13.31
03/26/2023 03:00:00	29.45	13.38
03/26/2023 04:00:00	29.71	13.38
03/26/2023 05:00:00	30.23	13.38
03/26/2023 06:00:00	30.18	13.38
03/26/2023 07:00:00	29.90	13.38
03/26/2023 08:00:00	30.18	13.38
03/26/2023 09:00:00	29.53	13.38
03/26/2023 10:00:00	31.40	13.38
03/26/2023 11:00:00	31.09	13.38
03/26/2023 12:00:00	31.34	13.44
03/26/2023 13:00:00	29.69	13.44
03/26/2023 14:00:00	29.98	13.38
03/26/2023 15:00:00	30.56	13.38
03/26/2023 16:00:00	30.16	13.44
03/26/2023 17:00:00	30.21	13.44