

ภาคผนวก ค-4

คุณภาพน้ำทิ้ง



Analysis / Test Report

TESTING

No.0009

Lot ID: 2269332

Date Received : Jul 08, 2022

Date Reported : Jul 15, 2022

Report Number : 2335415-1

Client : Gulf NRV2 Co., Ltd.

789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000

P/O : สัญญาเลขที่ 4600001547

Project Name : Monitoring EIA

Project Location : GNRV2

Page 1 of 1

Sample Number	2269332-1							
Sampled Date	Jul 07, 2022 9:40 AM							
Sample Description	Wastewater							
Location	บ่อพักน้ำทิ้งรวม							
Date Analysis Commenced	Jul 08, 2022							
Condition of Sample	Contained in two BOD bottles, two glass vials, one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
Chromium	mg/L	0.0003	0.0005	Not Detected	No Standard	No Standard	Based on APHA (2017), 3125	Bangkok
Copper	mg/L	0.0003	0.0005	0.001	≤1	No Standard	Based on APHA (2017), 3125	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	No Standard	Based on APHA (2017), 3112	Bangkok
Zinc	mg/L	0.003	0.005	0.40	≤5.0	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing								
BOD (5 days at 20 degree C)	mg/L	-	2	6	≤20	No Standard	Based on APHA (2017), 5210 B	Bangkok
Oil & Grease	mg/L	-	3	<3	≤5	No Standard	Based on APHA (2017), 5520 B	Bangkok
pH at 25 degree C		-	-	7.7	6.5-8.5	No Standard	Based on APHA (2017), 4500-H (B)	Bangkok
Temperature *	Degree C	-	-	31.5	≤40	≤34	Based on APHA (2017), 2550 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	188	≤1300	≤1100	Based on APHA (2017), 2540 C	Bangkok
Total Kjeldahl Nitrogen as N *	mg/L	0.15	1.0	1.2	≤35	No Standard	Based on APHA (2017), 4500-Norg (C)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤30	No Standard	Based on APHA (2017), 2540 D	Bangkok

Guideline : Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

Guideline (2) : Environmental Impact Assessment Report of Gulf NRV2 Co., Ltd.

Sampled By : Somboon Butchan

Remark :

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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Sawitree N.

Sawitree Noisangiam
Manager

ทะเบียนเลขที่ ว-204-จ-4709

Approved by

Kanokkorn Anek

Kanokkorn Anek
Senior Manager

ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0009

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2269332
Date Received : Jul 08, 2022
Date Reported : Jul 16, 2022
Report Number : 2335415-2

Page 1 of 1

Sample Number	2269332-1							
Sampled Date	Jul 07, 2022 9:40 AM							
Sample Description	Wastewater							
Location	บ่อกักน้ำทิ้งรวม							
Date Analysis Commenced	Jul 08, 2022							
Condition of Sample	Contained in two BOD bottles, two glass vials, one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
Calcium *	mmol/L	0.002	0.004	0.47	No Standard	No Standard	Based on US EPA, Method 200.7, Revision 4.4	Bangkok
Magnesium *	mmol/L	0.002	0.004	0.26	No Standard	No Standard	Based on US EPA, Method 200.7, Revision 4.4	Bangkok
SAR *	-	-	-	1.21	No Standard	No Standard	Based on US EPA, Method 200.7, Revision 4.4	Bangkok
Sodium *	mmol/L	0.002	0.004	1.03	No Standard	No Standard	Based on US EPA, Method 200.7, Revision 4.4	Bangkok
Water Testing Ammonia Nitrogen *								
	mg/L	-	0.06	0.16	No Standard	No Standard	Based on APHA (2017), 4500-NH3 (B), (F)	Bangkok
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	≤2.92	Based on US EPA, Method 300.1	Bangkok
Conductivity at 25 degree C *	micromhos/cm	-	0.5	296	No Standard	No Standard	Based on APHA (2017), 2510 B	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	6.2	≥2	No Standard	Based on APHA (2017), 4500-O (C)	Bangkok
Phosphate as P *	mg/L	0.005	0.01	<0.01	No Standard	No Standard	Based on APHA (2017), 4500-P(E)	Bangkok

Guideline : Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.
Guideline (2) : Environmental Impact Assessment Report of Gulf NRV2 Co., Ltd.

Sampled By : Somboon Butchan

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Approved by

Sithichok T.

Sithichok Thongnguen
Scientist (3)

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Analysis / Test Report

TESTING
No.0009

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000

P/O :

Project Name : Monitoring EIA

Project Location: GNRV2

Lot ID: 2291910

Date Received : Jul 28, 2022

Date Reported : Aug 04, 2022

Report Number : 2386404-1

Page 1 of 1

Sample Number	2291910-1
Sampled Date	Jul 27, 2022 2:20 PM
Sample Description	Wastewater
Location	บ่อพักน้ำทิ้งรวม
Date Analysis Commenced	Jul 28, 2022
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
Microbiological Testing							
Fecal Coliform	MPN/100mL	-	-	1100.0	No Standard	APHA (2017), 9221 E	Bangkok

Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

Guideline (2) : Environmental Impact Assessment Report of Gulf NRV2 Co., Ltd.

Sampled By : Sangtawan Natasat

Remark :

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Approved by

Tuanjai Thangklang
Manager



Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่ 4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

TESTING
No.0009
Lot ID: 2272012
Date Received : Aug 10, 2022
Date Reported : Sep 05, 2022
Report Number : 2340905-1

Page 1 of 4

Sample Number	2272012-1							
Sampled Date	Aug 09, 2022 9:35 AM							
Sample Description	Wastewater							
Location	บ่อกักน้ำทิ้งรวม							
Date Analysis Commenced	Aug 10, 2022							
Condition of Sample	Contained in four amber glass bottles, two BOD bottles, two glass vials and twelve plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
Arsenic	mg/L	0.0003	0.0005	0.002	≤0.25	No Standard	Based on APHA (2017), 3125	Bangkok
Barium	mg/L	0.0003	0.0005	0.03	≤1.0	No Standard	Based on APHA (2017), 3125	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.01	No Standard	Based on APHA (2017), 3125	Bangkok
Chromium	mg/L	0.0003	0.0005	0.0006	No Standard	No Standard	Based on APHA (2017), 3125	Bangkok
Copper	mg/L	0.0003	0.0005	0.005	≤1	No Standard	Based on APHA (2017), 3125	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	No Standard	Based on APHA (2017), 3500-Cr (B)	Bangkok
Lead	mg/L	0.0003	0.0005	Not Detected	≤0.1	No Standard	Based on APHA (2017), 3125	Bangkok
Manganese	mg/L	0.0003	0.0005	0.15	≤5	No Standard	Based on APHA (2017), 3125	Bangkok
Mercury *	mg/L	0.0001	0.0005	<0.0005	≤0.005	No Standard	Based on APHA (2017), 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	Not Detected	≤0.2	No Standard	Based on APHA (2017), 3125	Bangkok
Selenium	mg/L	0.0003	0.0005	Not Detected	≤0.02	No Standard	Based on APHA (2017), 3125	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	≤0.75	No Standard	Based on APHA (2017), Calculated	Bangkok
Zinc	mg/L	0.003	0.005	0.38	≤5.0	No Standard	Based on APHA (2017), 3125	Bangkok

Technical Management

Siriluk P.

Siriluk Puengpang
Supervisor

ทะเบียนเลขที่ ว-204-จ-4720

Approved by

Kanokkorn Anek

Kanokkorn Anek
Senior Manager

ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0009

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2272012
Date Received : Aug 10, 2022
Date Reported : Sep 05, 2022
Report Number : 2340905-1

Page 2 of 4

Sample Number	2272012-1
Sampled Date	Aug 09, 2022 9:35 AM
Sample Description	Wastewater
Location	บ่อกักน้ำทิ้งรวม
Date Analysis Commenced	Aug 10, 2022
Condition of Sample	Contained in four amber glass bottles, two BOD bottles, two glass vials and twelve plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Pesticides - Organochlorine Group								
2,4-DDD	ug/L	0.001	0.02	Not Detected	Not Detected	No Standard	Based on APHA (2017), 6630 C	Bangkok
2,4-DDE	ug/L	0.001	0.02	Not Detected	Not Detected	No Standard	Based on APHA (2017), 6630 C	Bangkok
2,4-DDT	ug/L	0.001	0.02	Not Detected	Not Detected	No Standard	Based on APHA (2017), 6630 C	Bangkok
4,4-DDD	ug/L	0.001	0.02	Not Detected	Not Detected	No Standard	Based on APHA (2017), 6630 C	Bangkok
4,4-DDE	ug/L	0.001	0.02	Not Detected	Not Detected	No Standard	Based on APHA (2017), 6630 C	Bangkok
4,4-DDT	ug/L	0.001	0.02	Not Detected	Not Detected	No Standard	Based on APHA (2017), 6630 C	Bangkok
Aldrin	ug/L	0.001	0.02	Not Detected	Not Detected	No Standard	Based on APHA (2017), 6630 C	Bangkok
alpha-BHC	ug/L	0.001	0.02	Not Detected	Not Detected	No Standard	Based on APHA (2017), 6630 C	Bangkok
beta-BHC	ug/L	0.001	0.02	Not Detected	Not Detected	No Standard	Based on APHA (2017), 6630 C	Bangkok
Chlordane	ug/L	0.001	0.02	Not Detected	Not Detected	No Standard	Based on APHA (2017), 6630 C	Bangkok
delta-BHC	ug/L	0.001	0.02	Not Detected	Not Detected	No Standard	Based on APHA (2017), 6630 C	Bangkok
Dieldrin	ug/L	0.001	0.02	Not Detected	Not Detected	No Standard	Based on APHA (2017), 6630 C	Bangkok
Endosulfan I	ug/L	0.001	0.02	Not Detected	Not Detected	No Standard	Based on APHA (2017), 6630 C	Bangkok
Endosulfan II	ug/L	0.001	0.02	Not Detected	Not Detected	No Standard	Based on APHA (2017), 6630 C	Bangkok
Endrin	ug/L	0.001	0.02	Not Detected	Not Detected	No Standard	Based on APHA (2017), 6630 C	Bangkok
Heptachlor	ug/L	0.001	0.02	Not Detected	Not Detected	No Standard	Based on APHA (2017), 6630 C	Bangkok
Heptachlor-Epoxide	ug/L	0.001	0.02	Not Detected	Not Detected	No Standard	Based on APHA (2017), 6630 C	Bangkok
Lindane (gamma-BHC)	ug/L	0.001	0.02	Not Detected	Not Detected	No Standard	Based on APHA (2017), 6630 C	Bangkok
Methoxychlor	ug/L	0.001	0.02	Not Detected	Not Detected	No Standard	Based on APHA (2017), 6630 C	Bangkok

Technical Management

Siriluk P.

Siriluk Puengpang

Supervisor

ทะเบียนเลขที่ ว-204-จ-4720

Approved by

Kanokkorn Anek

Kanokkorn Anek

Senior Manager

ทะเบียนเลขที่ ว-204-ค-6111

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P/O : สัญญาเลขที่ 4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

TESTING
No.0009
Lot ID: 2272012
Date Received : Aug 10, 2022
Date Reported : Sep 05, 2022
Report Number : 2340905-1

Page 3 of 4

Sample Number	2272012-1
Sampled Date	Aug 09, 2022 9:35 AM
Sample Description	Wastewater
Location	บ่อกักน้ำทิ้งรวม
Date Analysis Commenced	Aug 10, 2022
Condition of Sample	Contained in four amber glass bottles, two BOD bottles, two glass vials and twelve 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								
Anionic Surfactant as MBAS *	mg/L	0.015	0.05	<0.05	No Standard	No Standard	Based on APHA (2017), 5540 (B),(C)	Bangkok
BOD (5 days at 20 degree C)	mg/L	-	2	4	≤20	No Standard	Based on APHA (2017), 5210 B	Bangkok
COD	mg/L	1.5	5	41	≤100	No Standard	Based on APHA (2017), 5220 D	Bangkok
Color (at Original pH) *	ADMI	-	5	16	≤300	No Standard	APHA (2017), 2120 F	Bangkok
Color (at pH 7.0) *	ADMI	-	5	16	≤300	No Standard	APHA (2017), 2120 F	Bangkok
Cyanide as CN	mg/L	0.002	0.005	Not Detected	≤0.2	No Standard	Based on APHA (2017), 4500-CN (C),(E)	Bangkok
Formaldehyde *	mg/L	0.03	0.1	<0.1	≤1	No Standard	Wastewater Analysis	Bangkok
Oil & Grease	mg/L	-	3	<3	≤5	No Standard	Based on APHA (2017), 5520 B	Bangkok
pH at 25 degree C	-	-	-	7.3	6.5-8.5	No Standard	Based on APHA (2017), 4500-H (B)	Bangkok
Phenol *	mg/L	0.0005	0.001	Not Detected	≤1	No Standard	Based on APHA (2017), 5530 C	Bangkok
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	No Standard	APHA (2017), 4500-Cl(F)	Bangkok
Sulfide *	mg/L	-	0.5	<0.5	≤1	No Standard	Based on APHA (2017), 4500-S2(C), (F)	Bangkok
Temperature *	Degree C	-	-	28.4	≤40	≤34	Based on APHA (2017), 2550 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	368	≤1300	≤1100	Based on APHA (2017), 2540 C	Bangkok
Total Kjeldahl Nitrogen as N *	mg/L	0.15	1.0	2.5	≤35	No Standard	Based on APHA (2017), 4500-Norg (C)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	15	≤30	No Standard	Based on APHA (2017), 2540 D	Bangkok

Guideline : Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.
Guideline (2) : Environmental Impact Assessment Report of Gulf NRV2 Co., Ltd.

Sampled By : Sangtawan Natasat

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Technical Management

Siriluk P.

Siriluk Puengpang
Supervisor

ทะเบียนเลขที่ ว-204-จ-4720

Approved by

Kanokkorn Anek

Kanokkorn Anek
Senior Manager

ทะเบียนเลขที่ ว-204-ค-6111

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P/O : สัญญาเลขที่ 4600001547

Project Name : Monitoring EIA

Project Location : GNRV2

TESTING

No.0009

Lot ID: 2272012

Date Received : Aug 10, 2022

Date Reported : Sep 05, 2022

Report Number : 2340905-1

Page 4 of 4

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Technical Management

Siriluk P.

Siriluk Puenggang

Supervisor

ทะเบียนเลขที่ ว-204-จ-4720

Approved by

Kanokkorn Anek

Kanokkorn Anek

Senior Manager

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P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2272012
Date Received : Aug 10, 2022
Date Reported : Sep 05, 2022
Report Number : 2340905-2

Page 1 of 2

Sample Number	2272012-1							
Sampled Date	Aug 09, 2022 9:35 AM							
Sample Description	Wastewater							
Location	บ่อกักน้ำทิ้งรวม							
Date Analysis Commenced	Aug 10, 2022							
Condition of Sample	Contained in four amber glass bottles, two BOD bottles, two glass vials and twelve plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
Calcium *	mmol/L	0.002	0.004	0.83	No Standard	No Standard	Based on US EPA, Method 200.7, Revision 4.4	Bangkok
Magnesium *	mmol/L	0.002	0.004	0.45	No Standard	No Standard	Based on US EPA, Method 200.7, Revision 4.4	Bangkok
SAR *	-	-	-	1.88	No Standard	No Standard	Based on US EPA, Method 200.7, Revision 4.4	Bangkok
Sodium *	mmol/L	0.002	0.004	2.12	No Standard	No Standard	Based on US EPA, Method 200.7, Revision 4.4	Bangkok
Microbiological Testing								
Fecal Coliform	MPN/100mL	-	-	130.0	No Standard	No Standard	APHA (2017), 9221 E	Bangkok
Pesticides v Organochlorine Group								
alpha-Chlordane *	ug/L	0.001	0.02	Not Detected	Not Detected	No Standard	Based on APHA (2017), 6630 C	Bangkok
gamma-Chlordane *	ug/L	0.001	0.02	Not Detected	Not Detected	No Standard	Based on APHA (2017), 6630 C	Bangkok
Hexachlorobenzene	ug/L	0.001	0.02	Not Detected	Not Detected	No Standard	Based on APHA (2017), 6630 C	Bangkok
Mirex *	ug/L	0.001	0.02	Not Detected	Not Detected	No Standard	Based on APHA (2017), 6630 C	Bangkok
- ater Testing								
Ammonia Nitrogen *	mg/L	-	0.06	<0.06	No Standard	No Standard	Based on APHA (2017), 4500-NH3 (B), (F)	Bangkok
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	≤2.92	Based on US EPA, Method 300.1	Bangkok
Conductivity at 25 degree C *	micromhos/cm	-	0.5	539	No Standard	No Standard	Based on APHA (2017), 2510 B	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	9.6	≥2	No Standard	Based on APHA (2017), 4500-O (C)	Bangkok
Gross alpha activity *	Bq/L	0.018	0.018	Not Detected	No Standard	No Standard	Based on APHA (2017), 7110 B	Bangkok
Gross beta activity *	Bq/L	0.012	0.012	0.370 ± 0.028	No Standard	No Standard	Based on APHA (2017), 7110 B	Bangkok
Odour *	-	-	-	Odourless	No Standard	No Standard	APHA (2017), 2150 B	Bangkok
Phosphate as P *	mg/L	0.005	0.01	0.02	No Standard	No Standard	Based on APHA (2017), 4500-P(E)	Bangkok
Tar *	mg/L	0.5	1.0	Not Detected	No Standard	No Standard	Based on US EPA, Method 8015D	Bangkok

Guideline : Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.
Guideline (2) : Environmental Impact Assessment Report of Gulf NRV2 Co., Ltd.

Approved by

Siriluk P.

Siriluk Puengpang
Supervisor

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Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่ 4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

TESTING
No.0009
Lot ID: 2272012
Date Received : Aug 10, 2022
Date Reported : Sep 05, 2022
Report Number : 2340905-2

Page 2 of 2

Sampled By : Sangtawan Natasat

Remark :

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

Siriluk P.

Siriluk Puenggang
Supervisor

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Analysis / Test Report

TESTING
No.0009

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่ 4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2295763
Date Received : Sep 09, 2022
Date Reported : Sep 16, 2022
Report Number : 2394877-1

Page 1 of 1

Sample Number	2295763-1
Sampled Date	Sep 08, 2022 10:00 AM
Sample Description	Wastewater
Location	บ่อพักน้ำทิ้งรวม
Date Analysis Commenced	Sep 09, 2022
Condition of Sample	Contained in one amber glass bottle, two glass vials, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
Chromium	mg/L	0.0003	0.0005	0.0007	No Standard	No Standard	Based on APHA (2017), 3125	Bangkok
Copper	mg/L	0.0003	0.0005	0.002	≤1	No Standard	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.005	No Standard	Based on US EPA, Method 1631 Revision E	Bangkok
Zinc	mg/L	0.003	0.005	0.35	≤5.0	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing								
BOD (5 days at 20 degree C)	mg/L	-	2	5	≤20	No Standard	Based on APHA (2017), 5210 B	Bangkok
Oil & Grease	mg/L	-	3	<3	≤5	No Standard	Based on APHA (2017), 5520 B	Bangkok
pH at 25 degree C		-	-	7.4	6.5-8.5	No Standard	Based on APHA (2017), 4500-H (B)	Bangkok
Temperature *	Degree C	-	-	29.2	≤40	≤34	Based on APHA (2017), 2550 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	188	≤1300	≤1100	Based on APHA (2017), 2540 C	Bangkok
Total Kjeldahl Nitrogen as N *	mg/L	0.15	1.0	1.7	≤35	No Standard	Based on APHA (2017), 4500-Norg (C)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	17	≤30	No Standard	Based on APHA (2017), 2540 D	Bangkok

Guideline : Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.
Guideline (2) : Environmental Impact Assessment Report of Gulf NRV2 Co., Ltd.

Sampled By : Dunlayaphon Sonnok

Remark :

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Technical Management

Siriluk P.

Siriluk Puengpang
Supervisor

ทะเบียนเลขที่ ว-204-จ-4720

Approved by

Kanokkorn Anek

Kanokkorn Anek
Senior Manager

ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING

No.0009

Lot ID: 22106479

Client Db NIG1 Rf 9 Vo2. tdc

, LMg oo 82TC1 onkraveink2ACg Nank21 ahsonrat0kasiu a Tailand 6:::

P/O : ~ ญา เลขที่ 38:::473,

Project Name Dg onitorink EIA

Project Location Db 1 Rf 9

cate Re0eived DS0t 9, 29: 99

cate Reported D1ov : 629: 99

Report 1 Nu mer D9348387-4

Pake 4 oG4

Sample Number	994: 83, M4
Sampled Date	S0t 9829: 99 6D : Pg
Sample Description	Wastewater
Location	บ่อกวนน้ำ อ่างรวม
Date Analysis Commenced	S0t 9, 29: 99
Condition of Sample	Vontained in one au mer klass nottle2two klass vials2two BS c nottles and siOplasti0 nottles2sau ple Containers 0ou ply to pretreatu ent - preservation standards xAP(A2HUEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
Vairou iNu	u k/.	: C:: 6	: C:: 7	≤: C:: 7	1o Utandard	1o Utandard	Based on AP(A x9: 4,)26497	Bankhoh
Vopper	u k/.	: C:: 6	: C:: 7	: C: 6	Z4	1o Utandard	Based on AP(A x9: 4,)26497	Bankhoh
gerONry &	u k/.	: C:: 4	: C:: 7	1ot c ete0ted	Z: C: 7	1o Utandard	Based on AP(A x9: 4,)26449	Bankhoh
<in0	u k/.	: C: 6	: C: 7	: G4	Z7C	1o Utandard	Based on AP(A x9: 4,)26497	Bankhoh
Water Testing								
BS c x7 days at 9: dekree V)	u k/.	-	9	≤9	Z9:	1o Utandard	Based on AP(A x9: 4,)2794: B	Bankhoh
Sil * brease	u k/.	-	6	≤6	Z7	1o Utandard	Based on AP(A x9: 4,)2779: B	Bankhoh
p(at 97 dekree V		-	-	, C	8C-LC	1o Utandard	Based on AP(A x9: 4,)237: -(xB)	Bankhoh
Teu peratNre &	c ekree V	-	-	66C	Z3:	Z63	Based on AP(A x9: 4,)2977: B	Bankhoh
Total c issolved solids c ried at 4L: dekree V	u k/.	-	7	6::	Z46::	Z44::	Based on AP(A x9: 4,)2973: V	Bankhoh
Total Kjeldaal 1itroken as 1 &	u k/.	: C7	4C	4C	Z67	1o Utandard	Based on AP(A x9: 4,)237: -1ork xV)	Bankhoh
Total UNspended Uolids c ried at 4: 6-4: 7 dekree V	u k/.	-	7	≤7	Z6:	1o Utandard	Based on AP(A x9: 4,)2973: c	Bankhoh

Guideline : b Nideline x4) DWater Vsarateristi0s c is0sarke into Irrikation Uyste 2Royal Irrikation c epartu ent 1o C/L/9784C

b Nideline x9) DEnvironu ental Iu pa0t Assessu ent Report oGb NIG1 Rf 9 Vo2. tdc

Sampled By : Uou noon BNT0san

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- .Sc D. iu it oGcete0tion
- "≤" D. over tsan .SQ x iu it oGQNantitation) / .SR x iu it oGReportink)
- Analyt(x)s u arhed & is/are not in0Nded in s0ope oGA00reditation IUS/IEV 4, : 97C
- Tæ lamratory sas reen a00epted as an a00redited lamratory 0ou plyink witæ tæ IUS/IEV 4, : 97C

Technical Management

Sauitree N.

Uawitree 1oisankiau

g anaker

“ เลขขึ้นหลักที่ 5-9: 3-3-3, : M

Approved by

Kanohorn Aneh

Kanohorn Aneh

Unior g anaker

“ เลขขึ้นหลักที่ 5-9: 3-3-8444

Tæ amove resNts are valid only 0ir tæ analyzed/tested sau plexs) as indi0ated in tæis reportC1o part oGtæis report or 0erti0date u ay ne reprodN0ed in any 0iru wita0nt written 0onsent 0ou tæe .amratoryCA. U. amratory broNp xTæiland) stronkly re0ou u ends tæat tæis report is not reprodN0ed e0Dept in 0NIC

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Analysis / Test Report

TESTING
No.0009

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2295763
Date Received : Sep 09, 2022
Date Reported : Sep 16, 2022
Report Number : 2394877-2

Page 1 of 1

Sample Number	2295763-1
Sampled Date	Sep 08, 2022 10:00 AM
Sample Description	Wastewater
Location	บ่อกักน้ำทิ้งรวม
Date Analysis Commenced	Sep 09, 2022
Condition of Sample	Contained in one amber glass bottle, two glass vials, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
Calcium *	mmol/L	0.002	0.004	0.39	No Standard	No Standard	Based on US EPA, Method 200.7, Revision 4.4	Bangkok
Magnesium *	mmol/L	0.002	0.004	0.23	No Standard	No Standard	Based on US EPA, Method 200.7, Revision 4.4	Bangkok
SAR *	-	-	-	1.41	No Standard	No Standard	Based on US EPA, Method 200.7, Revision 4.4	Bangkok
Sodium *	mmol/L	0.002	0.004	1.11	No Standard	No Standard	Based on US EPA, Method 200.7, Revision 4.4	Bangkok
Microbiological Testing								
Fecal Coliform	MPN/100mL	-	-	790.0	No Standard	No Standard	APHA (2017), 9221 E	Bangkok
Water Testing								
Ammonia Nitrogen *	mg/L	-	0.06	<0.06	No Standard	No Standard	Based on APHA (2017), 4500-NH3 (B), (F)	Bangkok
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	≤2.92	Based on US EPA, Method 300.1	Bangkok
Conductivity at 25 degree C *	micromhos/cm	-	0.5	290	No Standard	No Standard	Based on APHA (2017), 2510 B	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	6.5	≥2	No Standard	Based on APHA (2017), 4500-O (C)	Bangkok
Phosphate as P *	mg/L	0.005	0.01	Not Detected	No Standard	No Standard	Based on APHA (2017), 4500-P(E)	Bangkok

Guideline : Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.
Guideline (2) : Environmental Impact Assessment Report of Gulf NRV2 Co., Ltd.

Sampled By : Dunlayaphon Sonnok

Remark :

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Approved by

Siriluk P.

Siriluk Puengpang
Supervisor

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Analysis / Test Report

TESTING

No.0009

Lot ID: 22106479

Date Received : Oct 27, 2022

Date Reported : Nov 03, 2022

Report Number : 2416465-2

Client : Gulf NRV2 Co., Ltd.

789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000

P/O : สัญญาเลขที่4600001547

Project Name : Monitoring EIA

Project Location : GNRV2

Page 1 of 1

Sample Number	22106479-1							
Sampled Date	Oct 26, 2022 3:00 PM							
Sample Description	Wastewater							
Location	บ่อกักน้ำทิ้งรวม							
Date Analysis Commenced	Oct 27, 2022							
Condition of Sample	Contained in one amber glass bottle, two glass vials, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
Calcium *	mmol/L	0.002	0.004	0.60	No Standard	No Standard	Based on US EPA, Method 200.7, Revision 4.4	Bangkok
Magnesium *	mmol/L	0.002	0.004	0.34	No Standard	No Standard	Based on US EPA, Method 200.7, Revision 4.4	Bangkok
SAR *	-	-	-	2.12	No Standard	No Standard	Based on US EPA, Method 200.7, Revision 4.4	Bangkok
Sodium *	mmol/L	0.002	0.004	2.06	No Standard	No Standard	Based on US EPA, Method 200.7, Revision 4.4	Bangkok
Microbiological Testing								
Fecal Coliform	MPN/100mL	-	-	2.0	No Standard	No Standard	APHA (2017), 9221 E	Bangkok
Water Testing								
Ammonia Nitrogen *	mg/L	-	0.06	<0.06	No Standard	No Standard	Based on APHA (2017), 4500-NH3 (B), (F)	Bangkok
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	≤2.92	Based on US EPA, Method 300.1	Bangkok
Conductivity at 25 degree C *	micromhos/cm	-	0.5	460	No Standard	No Standard	Based on APHA (2017), 2510 B	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	6.6	≥2	No Standard	Based on APHA (2017), 4500-O (C)	Bangkok
Phosphate as P *	mg/L	0.005	0.01	0.17	No Standard	No Standard	Based on APHA (2017), 4500-P(E)	Bangkok

Guideline : Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

Guideline (2) : Environmental Impact Assessment Report of Gulf NRV2 Co., Ltd.

Sampled By : Somboon Butchan

Remark :

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Approved by

Tuanjai Thangklang
Manager

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Analysis / Test Report

TESTING

No.0009

Lot ID: 22122580

Client Du7In6Rb: Gof2Vtdf

3C. L oo M2Tf Songra0eing2Af L 7ang2Sakhonratvhasi- a Thailand 49999

P/O : สัญญาเลขที่, M999916, 3

Project Name DL onitoring 5EA

Project Location DuSRb:

c ate ReveiOed DSo0 9, 2: 9: :

c ate Reported DSo0 112: 9: :

Report S7- Ner D: , 6, 34381

Page 1 om1

Sample Number	: : 1: : 6C981							
Sampled Date	So0 942: 9: : 19D 6 AL							
Sample Description	P asteWater							
Location	พมฉัพพาทที่ งรว							
Date Analysis Commenced	So0 9, 2: 9: :							
Condition of Sample	Contained in tWo mBc Nottles2siO plastiv Nottles2one a- Ner glass Nottle and tWo glass Oials2sa- ple vontainers vo- ply to pretreat- ent 8preser0ation standards xAI (A2HU5IA)							

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
Ghro- i7-	- g/V	9f9994	9f9996	9f999M	So Utandard	So Utandard	ased on AI (A x: 913)241: 6	Bangkok
Gopper	- g/V	9f9994	9f9996	9f994	≤1	So Utandard	ased on AI (A x: 913)241: 6	Bangkok
L erv7ry	- g/V	9f9991	9f9996	Sot c etevted	≤9f996	So Utandard	ased on HU 5IA2L ethod 1M#1 Re0ision 5	Bangkok
Zinv	- g/V	9f994	9f996	9f6,	≤6f9	So Utandard	ased on AI (A x: 913)241: 6	Bangkok
Water Testing								
mBc x6 days at : 9 degree G)	- g/V	8	:	4	≤: 9	So Utandard	ased on AI (A x: 913)26: 19 m	Bangkok
Bil & urease	- g/V	8	4	<4	≤6	So Utandard	ased on AI (A x: 913)266: 9 m	Bangkok
p(at : 6 degree G		8	8	3f6	M68Cf6	So Utandard	ased on AI (A x: 913)2, 6998(m)	Bangkok
Te- perat7re *	c egree G	8	8	: . fm	≤, 9	≤4,	ased on AI (A x: 913)2: 669 m	Bangkok
Total c issolOed solids c ried at 1C9 degree G	- g/V	8	6	, 9,	≤1499	≤1199	ased on AI (A x: 913)2: 6, 9 G	Bangkok
Total Kjeldahl Nitrogen as S *	- g/V	9f16	1f9	1f4	≤46	So Utandard	ased on AI (A x: 913)2, 6998Sorg xG)	Bangkok
Total U7spended Uolids c ried at 1948196 degree G	- g/V	8	6	<6	≤49	So Utandard	ased on AI (A x: 913)2: 6, 9 c	Bangkok

Guideline : u7ideline x1) DP ater Gharavteristivs c isvcharge into Errigation Uyste- 2Royal Errigation c epart- ent Sof1C/: 6M1f
u7ideline x:) D5n0iron- ental E- pavt Assess- ent Report omu 7In6Rb: Gof2Vtdf

Sampled By : Satthapon K7nnas7t

Re- ark D

- VBc DV- it omc etevtion
- "<" DVoWer than VBQ xM- it onQ7antitation) / VBR xM- it onReporting)
- Analytexs) - arked * is/are not invl7ded in svope omAvvreditation EUB/ESG 139: 6f
- The laNortory has Neen avvepted as an avvredited laNortory vo- plying With the EUB/ESG 139: 6f

Technical Management

Siriluk P.

Uiril7k I 7engpang

U7per0isor

ทะเบียนเลขที่ ร& 9, 8& 3: 9

Approved by

Kanokkorn Anek

Kanokkorn Anek

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ทะเบียนเลขที่ ร& 9, 8& 111

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Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่ 4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

TESTING
No.0009
Lot ID: 22122580
Date Received : Nov 04, 2022
Date Reported : Nov 11, 2022
Report Number : 2454737-2

Page 1 of 1

Sample Number	22122580-1							
Sampled Date	Nov 03, 2022 10:45 AM							
Sample Description	Wastewater							
Location	บ่อกักน้ำทิ้งรวม							
Date Analysis Commenced	Nov 04, 2022							
Condition of Sample	Contained in two BOD bottles, six plastic bottles, one amber glass bottle and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
Calcium *	mmol/L	0.002	0.004	0.76	No Standard	No Standard	Based on US EPA, Method 200.7, Revision 4.4	Bangkok
Magnesium *	mmol/L	0.002	0.004	0.47	No Standard	No Standard	Based on US EPA, Method 200.7, Revision 4.4	Bangkok
SAR *	-	-	-	2.48	No Standard	No Standard	Based on US EPA, Method 200.7, Revision 4.4	Bangkok
Sodium *	mmol/L	0.002	0.004	2.75	No Standard	No Standard	Based on US EPA, Method 200.7, Revision 4.4	Bangkok
Microbiological Testing								
Fecal Coliform	MPN/100mL	-	-	7.8	No Standard	No Standard	APHA (2017), 9221 E	Bangkok
Water Testing								
Ammonia Nitrogen *	mg/L	-	0.06	0.15	No Standard	No Standard	Based on APHA (2017), 4500-NH3 (B), (F)	Bangkok
Chlorite *	mg/L	0.05	0.1	<0.10	No Standard	≤2.92	Based on US EPA, Method 300.1	Bangkok
Conductivity at 25 degree C *	micromhos/cm	-	0.5	726	No Standard	No Standard	Based on APHA (2017), 2510 B	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	7.3	≥2	No Standard	Based on APHA (2017), 4500-O (C)	Bangkok
Phosphate as P *	mg/L	0.005	0.01	0.28	No Standard	No Standard	Based on APHA (2017), 4500-P(E)	Bangkok

Guideline : Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.
Guideline (2) : Environmental Impact Assessment Report of Gulf NRV2 Co., Ltd.

Sampled By : Natthapon Kunasut

Remark :

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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Approved by

Sawitree N.

Sawitree Noisangiam
Manager



Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่ 4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

TESTING
No.0009
Lot ID: 22135888
Date Received : Dec 07, 2022
Date Reported : Jan 05, 2023
Report Number : 2485736-1

Page 1 of 2

Sample Number	22135888-1							
Sampled Date	Dec 06, 2022 11:00 AM							
Sample Description	Wastewater							
Location	บ่อพักน้ำทิ้งรวม							
Date Analysis Commenced	Dec 08, 2022							
Condition of Sample	Contained in two BOD bottles, two glass vials, six plastic bottles and one amber glass 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 (5 days at 20 degree C)	mg/L	-	2	9	≤20	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Bangkok
Oil & Grease	mg/L	-	3	3	≤5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Bangkok
pH at 25 degree C		-	-	7.4	6.5-8.5	No Standard	In - house method : STM 04-003 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Bangkok
Temperature *	Degree C	-	-	30.9	≤40	≤34	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	340	≤1300	≤1100	In - house method : STM 04-011 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Bangkok
Total Kjeldahl Nitrogen as N *	mg/L	0.15	1.0	2.0	≤35	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	22	≤30	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Bangkok

Guideline : Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.
Guideline (2) : Environmental Impact Assessment Report of Gulf NRV2 Co., Ltd.

Sampling By : Jessadin Kongsukdithai ทะเบียนเลขที่ ว-204-จ-7092

Remark :

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

Technical Management

Siriluk P.

Siriluk Puengpang
Supervisor

ทะเบียนเลขที่ ว-204-จ-4720

Approved by

Kanokkorn Anek

Kanokkorn Anek
Senior Manager

ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.

789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000

P/O : สัญญาเลขที่ 4600001547

Project Name : Monitoring EIA

Project Location : GNRV2

TESTING

No.0009

Lot ID: 22135888

Date Received : Dec 07, 2022

Date Reported : Jan 05, 2023

Report Number : 2485736-1

Page 2 of 2

- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Siriluk P.

Siriluk Puenggang

Supervisor

ทะเบียนเลขที่ ว-204-จ-4720

Approved by

Kanokkorn Anek

Kanokkorn Anek

Senior Manager

ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่ 4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

TESTING
No.0009
Lot ID: 22135888
Date Received : Dec 07, 2022
Date Reported : Jan 05, 2023
Report Number : 2485736-2

Page 1 of 2

Sample Number	22135888-1							
Sampled Date	Dec 06, 2022 11:00 AM							
Sample Description	Wastewater							
Location	บ่อพักน้ำทิ้งรวม							
Date Analysis Commenced	Dec 07, 2022							
Condition of Sample	Contained in two BOD bottles, two glass vials, six plastic bottles and one amber glass bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
Calcium *	mmol/L	0.002	0.004	0.76	No Standard	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Chromium	mg/L	0.0003	0.0005	0.001	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.003	≤1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Magnesium *	mmol/L	0.002	0.004	0.51	No Standard	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
SAR *	-	-	-	1.99	No Standard	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Sodium *	mmol/L	0.002	0.004	2.24	No Standard	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Zinc	mg/L	0.003	0.005	1.09	≤5.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Microbiological Testing								
Fecal Coliform	MPN/100mL	-	-	17.0	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Bangkok

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Approved by

Sithichok T.

Sithichok Thongnguen
Scientist (3)

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Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่ 4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

TESTING
No.0009
Lot ID: 22135888
Date Received : Dec 07, 2022
Date Reported : Jan 05, 2023
Report Number : 2485736-2

Page 2 of 2

Sample Number	22135888-1							
Sampled Date	Dec 06, 2022 11:00 AM							
Sample Description	Wastewater							
Location	บ่อกักน้ำทิ้งรวม							
Date Analysis Commenced	Dec 07, 2022							
Condition of Sample	Contained in two BOD bottles, two glass vials, six plastic bottles and one amber glass bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
B ater Testing								
Ammonia Nitrogen *	mg/L	-	0.06	<0.06	No Standard	No Standard	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (B, F)	Bangkok
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	≤2.92	Based on US EPA, Method 300.1	Bangkok
Conductivity at 25 degree C *	micromhos/cm	-	0.5	522	No Standard	No Standard	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	6.9	≥2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Bangkok
Phosphate as P *	mg/L	0.005	0.01	0.09	No Standard	No Standard	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-P (E)	Bangkok

Guideline : Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.
Guideline (2) : Environmental Impact Assessment Report of Gulf NRV2 Co., Ltd.

Sampling by : Jessadin Kongsukdithai ทะเบียนเลขที่ ว-204-จ-7092

Remark :

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Approved by

Sithichok T.

Sithichok Thongnguen
Scientist (3)

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ภาคผนวก ค-5

คุณภาพน้ำใต้ดิน



Analysis / Test Report

TESTING
No.0009

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima 30000

P/O : สัญญาเลขที่4600001546

Project Name : Monitoring EIA

Project Location : GNRV2

Lot ID: 2226696

Date Received : Oct 07, 2022

Date Reported : Oct 14, 2022

Report Number : 2464055-1

Page 1 of 1

Sample Number	2226696-1						
Sampled Date	Oct 06, 2022 3:30 PM						
Sample Description	Groundwater						
Location	GW1 Up gradient monitoring well ของโครงการโรงไฟฟ้าหนองเรีง 1						
Date Analysis Commenced	Oct 08, 2022						
Condition of Sample	Contained in one amber glass bottle, two BOD bottles 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							
pH at 25 degree C		-	-	7.2	6.5-9.2 (I)	Based on APHA (2017), 4500-H (B)	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

(I): ในกรณีที่มีการปนเปื้อนของกรดหรือด่างให้เปรียบเทียบผลวิเคราะห์ค่าพีเอชจากจุดเก็บตัวอย่างบ่อน้ำที่ใช้ในการติดตามตรวจสอบการปนเปื้อนกับผลวิเคราะห์จากจุดเก็บตัวอย่างบ่อน้ำที่ใช่เป็นบ่ออ้างอิงบนทิศทางการไหลของน้ำใต้ดินในพื้นที่ โดยค่าพีเอชที่เปลี่ยนแปลงจะต้องไม่เกินหนึ่งระดับ และไม่อยู่นอกช่วงค่าเกณฑ์อนุโลมสูงสุดของมาตรฐานคุณภาพน้ำบาดาลที่บริโภคคือ 6.5-9.2

Sampled By : Pongsaton Chaitip

Remark :

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Technical Management

Siriluk P.

Siriluk Puengpang
Supervisor

ทะเบียนเลขที่ ว-204-จ-4720

Approved by

Kanokkorn Anek

Kanokkorn Anek
Senior Manager

ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

TESTING
No.0009

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima 30000

P/O : สัญญาเลขที่4600001546

Project Name : Monitoring EIA

Project Location : GNRV2

Lot ID: 2226696

Date Received : Oct 07, 2022

Date Reported : Oct 14, 2022

Report Number : 2464055-2

Page 1 of 1

Sample Number	2226696-1						
Sampled Date	Oct 06, 2022 3:30 PM						
Sample Description	Groundwater						
Location	GW1 Up gradient monitoring well ของโครงการโรงไฟฟ้าหนองระเวียง 1						
Date Analysis Commenced	Oct 07, 2022						
Condition of Sample	Contained in one amber glass bottle, two BOD bottles 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	<2	No Standard	Based on APHA (2017), 5210 B	Bangkok
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	Based on US EPA, Method 300.1	Bangkok
Conductivity at 25 degree C *	micromhos/cm	-	0.5	416	No Standard	Based on APHA (2017), 2510 B	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	6.1	No Standard	Based on APHA (2017), 4500-O (C)	Bangkok
Oil & Grease	mg/L	-	3	<3	No Standard	Based on APHA (2017), 5520 B	Bangkok
Temperature *	Degree C	-	-	28.4	No Standard	Based on APHA (2017), 2550 B	Bangkok
Total Dissolved solids Dried at 180 degree C *	mg/L	-	5	312	No Standard	Based on APHA (2017), 2540 C	Bangkok
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	85	No Standard	Based on APHA (2017), 2540 D	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

Sampled By : Pongsaton Chaitip

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Approved by

Siriluk P.

Siriluk Puengpang
Supervisor

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TESTING
No.0009

Report Number : 2464056-1

Project Location: GNRV2

Sample Number	2226696-2
Sampled Date	Oct 06, 2022 5:20 PM
Sample Description	Groundwater
Location	GW2 Down gradient monitoring well ขปองโครางคอกไฟ หปอคนชั่วอ 1
Date Analysis Commenced	Oct 0๖, 2022
Condition of Sample	Contained in one amber glass bottle, two 8OD bottles and three plastic bottles, sample containers comply to pretreatment - preservation standards BAP(A, HSEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	7.1	6.5-9.2 (B)	Based on AP(A B2017), 4500-(BB)	Bangkok

Sampled By : Pongsaton Chaitip

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ทนายบิวเลขที่ ะ-204-โ-6111

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Analysis / Test Report

TESTING
No.0009

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima 30000

P/O : สัญญาเลขที่ 4600001546

Project Name : Monitoring EIA

Project Location : GNRV2

Lot ID: 2226696

Date Received : Oct 07, 2022

Date Reported : Oct 14, 2022

Report Number : 2464056-2

Page 1 of 1

Sample Number	2226696-2						
Sampled Date	Oct 06, 2022 5:20 PM						
Sample Description	Groundwater						
Location	GW2 Down gradient monitoring well บ่อบ่งโศกรางคอกไฟฟ้า เขตคลองเตย 1						
Date Analysis Commenced	Oct 07, 2022						
Condition of Sample	Contained in one amber glass bottle, two 500 mL bottles and three plastic bottles, sample containers comply to pretreatment - preservation standards BAP(A, HSEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
500 mL days at 20 degree C) *	mg/L	-	2	<2	No Standard	based on AP(A 2017), 5210 ม	Bangkok
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	based on HS EPA, Method 300.1	Bangkok
Conductivity at 25 degree C *	micromhos/cm	-	0.5	339	No Standard	based on AP(A 2017), 2510 ม	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	5.2	No Standard	based on AP(A 2017), 4500-O (C)	Bangkok
Oil & Grease	mg/L	-	3	<3	No Standard	based on AP(A 2017), 5520 ม	Bangkok
Temperature *	Degree C	-	-	29.9	No Standard	based on AP(A 2017), 2550 ม	Bangkok
Total Dissolved solids Dried at 180 degree C *	mg/L	-	5	358	No Standard	based on AP(A 2017), 2540 C	Bangkok
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	148	No Standard	based on AP(A 2017), 2540 D	Bangkok

Guideline : Notification of the Ministry of Industry ม.ร. 2559 ม.ร. 2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

Sampled By : Pongsaton Chaitip

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Approved by

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TESTING
No.0009

Report Number : 2464057-1

Project Location: GNRV2

Sample Number	2226696-3
Sampled Date	Oct 06, 2022 5:45 PM
Sample Description	Groundwater
Location	GW3 Down gradient monitoring well ขปองโครางคอกไฟ หปอคนชั่วอ 2
Date Analysis Commenced	Oct 0๖, 2022
Condition of Sample	Contained in one amber glass bottle, two 8OD bottles and three plastic bottles, sample containers comply to pretreatment - preservation standards BAP(A, HSEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	7.2	6.5-9.2 (B)	Based on AP(A B2017), 4500-(B)	Bangkok

Sampled By : Pongsaton Chaitip

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Analysis / Test Report

TESTING
No.0009

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima 30000

P/O : สัญญาเลขที่ 4600001546

Project Name : Monitoring EIA

Project Location : GNRV2

Lot ID: 2226696

Date Received : Oct 07, 2022

Date Reported : Oct 14, 2022

Report Number : 2464057-2

Page 1 of 1

Sample Number	2226696-3						
Sampled Date	Oct 06, 2022 5:45 PM						
Sample Description	Groundwater						
Location	GW3 Down gradient monitoring well บ่อบ่งโศรารณคณไฟฟ้ หนองแวง 2						
Date Analysis Commenced	Oct 07, 2022						
Condition of Sample	Contained in one amber glass bottle, two ๕๐๐ ml bottles and three plastic bottles, sample containers comply to pretreatment - preservation standards BAP(A, HSEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
๕๐๐ ml days at 20 degree C) *	mg/L	-	2	<2	No Standard	based on AP(A ๒017), 5210 ๕	๕๕๕๕๕๕
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	based on HS EPA, Method 300.1	๕๕๕๕๕๕
Conductivity at 25 degree C *	micromhos/cm	-	0.5	751	No Standard	based on AP(A ๒017), 2510 ๕	๕๕๕๕๕๕
Dissolved Oxygen *	mg/L	-	0.1	4.2	No Standard	based on AP(A ๒017), 4500-O (C)	๕๕๕๕๕๕
Oil & Grease	mg/L	-	3	<3	No Standard	based on AP(A ๒017), 5520 ๕	๕๕๕๕๕๕
Temperature *	Degree C	-	-	29.2	No Standard	based on AP(A ๒017), 2550 ๕	๕๕๕๕๕๕
Total Dissolved solids Dried at 180 degree C *	mg/L	-	5	492	No Standard	based on AP(A ๒017), 2540 C	๕๕๕๕๕๕
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	26	No Standard	based on AP(A ๒017), 2540 D	๕๕๕๕๕๕

Guideline : Notification of the Ministry of Industry ๕.E. 2559 ๒016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

Sampled By : Pongsaton Chaitip

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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Siriluk P.

Siriluk Puengpang
Supervisor

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Analysis / Test Report

TESTING
No.0009

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : GNRV2-4211200239
Project Name : Monitoring EIA
Project Location: GNRV2

Lot ID: 2226693

Date Received : Mar 11, 2022
Date Reported : Jun 29, 2022
Report Number : 2245032-1 C11

Page 3 of 3

Sample Number 2226693-3
Sampled Date Mar 10, 2022 3:00 PM
Sample Description Groundwater
Location GW3 Down gradient monitoring well ของโครงการโรงไฟฟ้าหนองระเรียง 2
Date Analysis Commenced Mar 11, 2022
Condition of Sample Contained in one amber glass bottle, three plastic bottles and two BOD 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	5	No Standard	Based on APHA (2017), 5210 B	Bangkok
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	Based on US EPA, Method 300.1	Bangkok
Conductivity at 25 degree C *	micromhos/cm	-	0.5	333	No Standard	Based on APHA (2017), 2510 B	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	6.6	No Standard	Based on APHA (2017), 4500-O (C)	Bangkok
Oil & Grease	mg/L	-	3	3	No Standard	Based on APHA (2017), 5520 B	Bangkok
pH at 25 degree C		-	-	7.0	6.5-9.2 (I)	Based on APHA (2017), 4500-H (B)	Bangkok
Temperature *	Degree C	-	-	31.2	No Standard	Based on APHA (2017), 2550 B	Bangkok
Total Dissolved solids Dried at 180 degree C *	mg/L	-	5	436	No Standard	Based on APHA (2017), 2540 C	Bangkok
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	35	No Standard	Based on APHA (2017), 2540 D	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

(I): ในกรณีที่มีการปนเปื้อนของกรดหรือด่างให้เปรียบเทียบผลวิเคราะห์ค่าพีเอชจากจุดเก็บตัวอย่างบ่อน้ำที่ใช้ในการติดตามตรวจสอบการปนเปื้อนกับผลวิเคราะห์จากจุดเก็บตัวอย่างบ่อน้ำที่เป็นบ่อน้ำทิ้งบนที่ศทางกรไหลของน้ำใต้ดินในพื้นที่ โดยค่าพีเอชที่เปลี่ยนแปลงจะต้องไม่เกินหนึ่งระดับ และไม่อยู่นอกช่วงค่าเกณฑ์อนุมัติสูงสุดของมาตรฐานคุณภาพน้ำบาดาลที่บริโภคคือ 6.5-9.2

Sampled By : Sangtawan Natasat

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Siriluk P.

Siriluk Puengpang
Supervisor

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Analysis / Test Report

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P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location: GNRV2

Lot ID: 2269338

Date Received : Jul 09, 2022

Date Reported : Jul 12, 2022

Report Number : 2335424-1

Page 1 of 2

Sample Number 2269338-1
Sampled Date Jul 08, 2022 12:20 PM
Sample Description Groundwater_บริเวณอ่างเก็บน้ำดิบ
Location GWR1 Up gradient monitoring well ของโครงการโรงไฟฟ้าหนองระเวียง 2
Date Analysis Commenced Jul 11, 2022
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	1652	No Standard	Based on APHA (2017), 2510 B	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

Sampled By : Sangtawan Natasat

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Nanthawadee Somboon
Specialist 1



Analysis / Test Report

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P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location: GNRV2

Lot ID: 2269338

Date Received : Jul 09, 2022

Date Reported : Jul 12, 2022

Report Number : 2335424-1

Page 2 of 2

Sample Number 2269338-2
Sampled Date Jul 08, 2022 11:40 AM
Sample Description Groundwater_บริเวณอ่างเก็บน้ำดิบ
Location GWR2 Down gradient monitoring well ของโครงการโรงไฟฟ้าหนองแวง 2
Date Analysis Commenced Jul 11, 2022
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	4319	No Standard	Based on APHA (2017), 2510 B	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

Sampled By : Sangtawan Natasat

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Nanthawadee Somboon
Specialist 1



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P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2269339

Date Received : Jul 22, 2022
Date Reported : Jul 25, 2022
Report Number : 2335422-1

Page 1 of 2

Sample Number 2269339-1
Sampled Date Jul 21, 2022 12:50 PM
Sample Description Groundwater_บริเวณอ่างเก็บน้ำดิบ
Location GWR1 Up gradient monitoring well ของโครงการโรงไฟฟ้าหนองระเวียง 2
Date Analysis Commenced Jul 25, 2022
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	1602	No Standard	Based on APHA (2017), 2510 B	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

Sampled By : Dunlayaphon Sonnok

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P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location: GNRV2

Lot ID: 2269339

Date Received : Jul 22, 2022
Date Reported : Jul 25, 2022
Report Number : 2335422-1

Page 2 of 2

Sample Number 2269339-2
Sampled Date Jul 21, 2022 12:30 PM
Sample Description Groundwater_บริเวณอ่างเก็บน้ำดิบ
Location GWR2 Down gradient monitoring well ของโครงการโรงไฟฟ้าหนองแวง 2
Date Analysis Commenced Jul 25, 2022
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	4253	No Standard	Based on APHA (2017), 2510 B	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

Sampled By : Dunlayaphon Sonnok

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P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location: GNRV2

Lot ID: 2272015

Date Received : Aug 06, 2022
Date Reported : Aug 09, 2022
Report Number : 2340913-1

Page 1 of 2

Sample Number 2272015-1
Sampled Date Aug 05, 2022 1:40 PM
Sample Description Groundwater_บริเวณอ่างเก็บน้ำดิบ
Location GWR1 Up gradient monitoring well ของโครงการโรงไฟฟ้าหนองระเวียง 2
Date Analysis Commenced Aug 08, 2022
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	1704	No Standard	Based on APHA (2017), 2510 B	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

Sampled By : Sangtawan Natasat

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P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location: GNRV2

Lot ID: 2272015

Date Received : Aug 06, 2022
Date Reported : Aug 09, 2022
Report Number : 2340913-1

Page 2 of 2

Sample Number 2272015-2
Sampled Date Aug 05, 2022 1:30 PM
Sample Description Groundwater_บริเวณอ่างเก็บน้ำดิบ
Location GWR2 Down gradient monitoring well ของโครงการโรงไฟฟ้าหนองแวง 2
Date Analysis Commenced Aug 08, 2022
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	4306	No Standard	Based on APHA (2017), 2510 B	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

Sampled By : Sangtawan Natasat

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P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location: GNRV2

Lot ID: 2272016

Date Received : Aug 20, 2022
Date Reported : Aug 23, 2022
Report Number : 2340911-1

Page 1 of 2

Sample Number 2272016-1
Sampled Date Aug 19, 2022 12:40 PM
Sample Description Groundwater_บริเวณอ่างเก็บน้ำดิบ
Location GWR1 Up gradient monitoring well ของโครงการโรงไฟฟ้าหนองระเวียง 2
Date Analysis Commenced Aug 22, 2022
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	1648	No Standard	Based on APHA (2017), 2510 B	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

Sampled By : Dunlayaphon Sonnok

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P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location: GNRV2

Lot ID: 2272016

Date Received : Aug 20, 2022

Date Reported : Aug 23, 2022

Report Number : 2340911-1

Page 2 of 2

Sample Number 2272016-2
Sampled Date Aug 19, 2022 12:15 PM
Sample Description Groundwater_บริเวณอ่างเก็บน้ำดิบ
Location GWR2 Down gradient monitoring well ของโครงการโรงไฟฟ้าหนองแวง 2
Date Analysis Commenced Aug 22, 2022
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	4352	No Standard	Based on APHA (2017), 2510 B	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

Sampled By : Dunlayaphon Sonnok

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P/O : สัญญาเลขที่ 4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2296321

Date Received : Aug 31, 2022
Date Reported : - ep 02, 2022
Report NumPer : 2396567bl

Page 1 of 2

Sample Number 2296321bl
Sampled Date Aug 30, 2022 12:40 wM
Sample Description Ground_aterน้ำบาดาล
Location GU R1 ปฏิกิริยา gradient monitoring _ell ขั้ว กัดไฟ ที่ ำ คัด นฟั ณะ ' ที่ ยลั (ก 2
Date Analysis Commenced - ep 01, 2022
Condition of Sample Contained in one plastic Pottle, sample containers comply to pretreatment b preservation standards HAwSA, 1 - EwA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 degree C	micromhos/cm b		0.5	1678	No - tandard	Based on AwSA H2017), 2510 B	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 H2016) on - oil and Ground_ater Contamination Criteria, Monitoring of - oil and Ground_ater Quality, Report - uPmission and Report wparation of - oil and Ground_ater Quality, and wproposal Report of - oil and Ground_ater Controlling and Reduction Measures

Sampled By : - angta_an Natasat

Remark :

- LOD : Limit of Detection
- "<" : Lo_er than LOQ Hlimit of Quantitation) / LOR Hlimit of Reporting)

Approved by

Siriluk P.

- iriluk wuenggang
- upervisor

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P/O : สัญญาเลขที่ 4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2296321

Date Received : Aug 31, 2022
Date Reported : - ep 02, 2022
Report NumPer : 2396567bl

Page 2 of 2

Sample Number 2296321b2
Sampled Date Aug 30, 2022 12:10 wM
Sample Description Ground_aterน้ำบาดาล จกไฟ รั้ว ๓V๓
Location GU R2 Do_n gradient monitoring _ell ชีวเคมี กักเก็บน้ำดื่มที่ ๓๖' ๓๖' ๓๖' (n 2
Date Analysis Commenced - ep 01, 2022
Condition of Sample Contained in one plastic Pottle, sample containers comply to pretreatment b preservation standards HAwSA, 1 - EwA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 degree C	micromhos/cm b		0.5	4384	No - tandard	Based on AwSA H2017), 2510 B	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 H2016) on - oil and Ground_ater Contamination Criteria, Monitoring of - oil and Ground_ater Quality, Report - uPmission and Report wparation of - oil and Ground_ater Quality, and wproposal Report of - oil and Ground_ater Controlling and Reduction Measures

Sampled By : - angta_an Natasat

Remark :

- LOD : Limit of Detection
- "<" : Lo_er than LOQ Hlimit of Quantitation) / LOR Hlimit of Reporting)

Approved by

Siriluk P.

- iriluk wuenggang
- upervisor

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Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่ 4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2295766

- ate Received : Dep 14, 2022
- ate Reported : Dep 16, 2022
Report NumPer : 2394889bl

Page 2 of 2

Sample Number 2295766b2
Sampled Date Dep 13, 2022 11:20 AM
Sample Description Ground_aterน้ำบาดาล จกไฟ ผลิตไฟฟ้า
Location GU R2 - o_n gradient monitoring _ell ชีวเคมี กักเก็บน้ำดื่ม น้ำใช้ กักเก็บน้ำดื่ม (n 2
Date Analysis Commenced Dep 15, 2022
Condition of Sample Contained in one plastic Pottle, sample containers comply to pretreatment b preservation standards HAwSA, 1 DEwA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 degree C	micromhos/cm b		0.5	4374	No Dstandard	Based on AwSA H2017), 2510 B	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 H2016) on Doil and Ground_ater Contamination Criteria, Monitoring of Doil and Ground_ater Quality, Report DuPmission and Report wrepairation of Doil and Ground_ater Quality, and wproposal Report of Doil and Ground_ater Controlling and Reduction Measures

Sampled By : Dangta_an Natasat

Remark :

- LO- : Limit of - etection
- "<" : Lo_er than LOQ Hlimit of Quantitation) / LOR Hlimit of Reporting)

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Approved by

Siriluk P.

Diriluk wuenggang
Dupervisor

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Analysis / Test Report

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789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่ 4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2295767

- ate Received : Dep 30, 2022
- ate Reported : b ct 03, 2022
Report Number : 2394887P1

_age 1 of 2

Sample Number 2295767P1
Sampled Date Dep 29, 2022 12:30 _M
Sample Description Groundwater รวบรวม น้ำใน บ่ดักซึม
Location G1 R1 คบ gradient monitoring บ่ดักซึม ไฟฟ้า นาวาไร ห้วยดง ว(เขื่อน 2
Date Analysis Commenced b ct 03, 2022
Condition of Sample Contained in one plastic bottle, sample containers comply to pretreatment & preservation standards SA_) A, ค DE_AB

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 degree C	micromhos/cm	P	0.5	1617	No Dstandard	Qased on A_) A S2017B 2510 Q	Qangkok

Guideline : Notification of the Ministry of Industry Q.E. 2559 S2016B on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report _reparation of Soil and Groundwater Quality, and _proposal Report of Soil and Groundwater Controlling and Reduction Measures

Sampled By : - ulyadit Nuilek

Remark :

- Lb- : Limit of - etection
- "<" : Lower than Lb O Limit of QuantitationB/ Lb R Limit of ReportingB

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Approved by

Narin Daiseng
Dupervisor



Analysis / Test Report

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789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2295767

- ate Received : Dep 30, 2022
- ate Reported : b ct 03, 2022
Report Number : 2394887P1

_age 2 of 2

Sample Number 2295767P2
Sampled Date Dep 29, 2022 12:15 _M
Sample Description Groundwater รวบรวม น้ำใน บ่ดักซึม
Location G R2 - บ่ดัก gradient monitoring บ่ดัก ไฟฟ้า นาวาไร ห้วยดง (เนื้อที่ 2
Date Analysis Commenced b ct 03, 2022
Condition of Sample Contained in one plastic bottle, sample containers comply to pretreatment & preservation standards SA_) A, ค DE_AB

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 degree C	micromhos/cm	P	0.5	4246	No Standard	Based on A_) A S2017B 2510 Q	Qangk

Guideline : Notification of the Ministry of Industry Q.E. 2559 S2016B on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

Sampled By : - ulyadit Nuilek

Remark :

- Lb- : Limit of detection
- "<" : Lower than Lb O Limit of Quantitation / Lb R Limit of Reporting

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Approved by

Narin Daiseng
Supervisor



Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location: GNRV2

Lot ID: 22122584

Date Received : Nov 11, 2022

Date Reported : Nov 15, 2022

Report Number : 2454741-1

Page 1 of 2

Sample Number 22122584-1
Sampled Date Nov 10, 2022 3:50 PM
Sample Description Groundwater_บริเวณอ่างเก็บน้ำดิบ
Location GWR1 Up gradient monitoring well ของโครงการโรงไฟฟ้าหนองระเวียง 2
Date Analysis Commenced Nov 14, 2022
Condition of Sample Contained in one plastic bottle

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 degree C	micromhos/cm	-	0.5	271	No Btandard	(ased on APHA S2017), 2510 ((angkok

Guideline : Notification of the Ministry of Industry (.E. 2559 S2016) on Boil and Groundwater Contamination Criteria, Monitoring of Boil and Groundwater Quality, Report Bubmission and Report Preparation of Boil and Groundwater Quality, and Proposal Report of Boil and Groundwater Controlling and Reduction Measures

Sampled By : Pongsaton Chaitip

Remark :

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

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Narin Baiseng
Bupervisor



Analysis / Test Report

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P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location: GNRV2

Lot ID: 22122584

Date Received : Nov 11, 2022

Date Reported : Nov 15, 2022

Report Number : 2454741-1

Page 2 of 2

Sample Number 22122584-2
Sampled Date Nov 10, 2022 3:35 PM
Sample Description Groundwater_บริเวณอ่างเก็บน้ำดิบ
Location GWR2 Down gradient monitoring well ของโครงการโรงไฟฟ้าหนองแวง 2
Date Analysis Commenced Nov 14, 2022
Condition of Sample Contained in one plastic bottle

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 degree C	micromhos/cm	-	0.5	771	No Btandard	(ased on APHA S2017), 2510 ((angkok

Guideline : Notification of the Ministry of Industry (.E. 2559 S2016) on Boil and Groundwater Contamination Criteria, Monitoring of Boil and Groundwater Quality, Report Bubmission and Report Preparation of Boil and Groundwater Quality, and Proposal Report of Boil and Groundwater Controlling and Reduction Measures

Sampled By : Pongsaton Chaitip

Remark :

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

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Narin Baiseng
Bupervisor



Analysis / Test Report

TESTING
No.0009

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location: GNRV2

Lot ID: 22106488

Date Received : Nov 26, 2022

Date Reported : Dec 03, 2022

Report Number : 2511255-1

Page 1 of 1

Sample Number	22106488-1
Sampled Date	Nov 25, 2022 12:30 PM
Sample Description	Groundwater_บริเวณอ่างเก็บน้ำดิบ
Location	GWR1 Up gradient monitoring well ของโครงการโรงไฟฟ้าหนองระเวียง 2
Date Analysis Commenced	Nov 28, 2022
Condition of Sample	Contained in two BOD bottles, 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							
pH at 25 degree C		-	-	6.6	6.5-9.2 (I)	In - house method : STM 04-003 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

(I): ในกรณีที่มีการปนเปื้อนของกรดหรือด่างให้เปรียบเทียบผลวิเคราะห์ค่าพีเอชจากจุดเก็บตัวอย่างบ่อน้ำที่ใช้ในการติดตามตรวจสอบการปนเปื้อนกับผลวิเคราะห์จากจุดเก็บตัวอย่างบ่อน้ำที่ใช้เป็นบ่ออ้างอิงบนทิศทางการไหลของน้ำใต้ดินในพื้นที่ โดยค่าพีเอชที่เปลี่ยนแปลงจะต้องไม่เกินหนึ่งระดับ และไม่อยู่นอกช่วงค่าเกณฑ์อนุโลมสูงสุดของมาตรฐานคุณภาพน้ำบาดาลที่บริโภคคือ 6.5-9.2

Sampled By : Jessadin Kongsukdithai

Remark :

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

Technical Management

Nant Somb

Nanthawadee Somboon

Specialist 1

ทะเบียนเลขที่ ว-204-จ-4716

Approved by

Kanok Anek

Kanokkorn Anek

Senior Manager

ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

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P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

TESTING
No.0009

Lot ID: 22106488

Date Received : Nov 26, 2022

Date Reported : Dec 03, 2022

Report Number : 2511255-2

Page 1 of 2

Sample Number	22106488-1
Sampled Date	Nov 25, 2022 12:30 PM
Sample Description	Groundwater_บริเวณอ่างเก็บน้ำดิบ
Location	GWR1 Up gradient monitoring well ของโครงการโรงไฟฟ้าหนองระเวียง 2
Date Analysis Commenced	Nov 26, 2022
Condition of Sample	Contained in two BOD bottles, 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	4	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Bangkok
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	Based on US EPA, Method 300.1	Bangkok
Conductivity at 25 degree C *	micromhos/cm	-	0.5	359	No Standard	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	2.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Bangkok
Oil & Grease	mg/L	-	3	<3	No Standard	In - house method : STM 04-014 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Bangkok
Temperature *	Degree C	-	-	29.5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Bangkok
Total Dissolved solids Dried at 180 degree C *	mg/L	-	5	252	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Bangkok
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	41	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

Sampled By : Jessadin Kongsukdithai

Remark :

- LOD : Limit of Detection
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Approved by

Nanthawadee Somboon
Specialist 1

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Analysis / Test Report

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789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่ 4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

TESTING
No.0009
Lot ID: 22106488
Date Received : Nov 26, 2022
Date Reported : Dec 03, 2022
Report Number : 2511255-2

Page 2 of 2

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Nanthawadee Somboon
Specialist 1

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Analysis / Test Report

TESTING
No.0009

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location: GNRV2

Lot ID: 22106488

Date Received : Nov 26, 2022

Date Reported : Dec 03, 2022

Report Number : 2511256-1

Page 1 of 1

Sample Number	22106488-2
Sampled Date	Nov 25, 2022 12:15 PM
Sample Description	Groundwater_บริเวณอ่างเก็บน้ำดิบ
Location	GWR2 Down gradient monitoring well ของโครงการโรงคั่วไฟฟ้า นองรณวัง 2
Date Analysis Commenced	Nov 28, 2022
Condition of Sample	Contained in two 500 ml bottles, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards QAP(A, HSEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	6.7	6.5-9.2 (Q)	In - house method : STM 04-003 based on Standard Methods for the Examination of Water and Wastewater. AP(A, AWWA & WEF, 23rd ed., 2017, part 4500 - (Q))	Bangkok

Guideline : Notification of the Ministry of Industry บ.ร. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

(Q): ในกรณีที่มีการปนเปื้อนของกรด หรือด่าง ในระดับที่เกินผลวิเคราะห์ ไอพีเอชจากจุดเก็บตัวอย่างบ่อน้ำที่ใช้ในการติดตามตรวจสอบการปนเปื้อนกับผลวิเคราะห์จากจุดเก็บตัวอย่างบ่อน้ำที่ใช้น้ำดื่มหรือบ่อน้ำที่ดื่มน้ำเพื่อการบริโภค ลของน้ำใต้ดินในพื้นที่ บ่อไอพีเอชที่เปลี่ยนแปลงของค่าเคมี น้ำดื่ม และหม้อต้มนอกช่วงไอเทคชั่นอุณหภูมิสูงสุดของมาตรฐานคุณภาพน้ำบาดาลที่ใช้อยู่คือ 6.5-9.2

Sampled By : Jessadin Kongsukdithai

Remark :

- LBD : Limit of Detection
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Technical Management

Nant Somb

Nanthawadee Somboon

Specialist 1

ทะเบียนเลขที่ ว-204-จ-4716

Approved by

Kanok Korn Anek

Kanok Korn Anek

Senior Manager

ทะเบียนเลขที่ ว-204-ท-6111

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Analysis / Test Report

TESTING
No.0009

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22106488

Date Received : Nov 26, 2022

Date Reported : Dec 03, 2022

Report Number : 2511256-2

Page 1 of 1

Sample Number	22106488-2
Sampled Date	Nov 25, 2022 12:15 PM
Sample Description	Groundwater_บริเวณอ่างเก็บน้ำดิบ
Location	GWR2 Down gradient monitoring well ของโครงการโรงไฟฟ้า ของรฟท. 2
Date Analysis Commenced	Nov 26, 2022
Condition of Sample	Contained in two 500 ml bottles, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards QAP(A, HSEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
5BD 5 days at 20 degree C) *	mg/L	-	2	3	No Standard	Standard Methods for the Examination of Water and Wastewater. AP(A, AWWA & WEF, 23rd ed., 2017, part 5210 ๒	๒angkok
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	๒ased on HS EPA, Method 300.1	๒angkok
Conductivity at 25 degree C *	micromhos/cm	-	0.5	2434	No Standard	๒ased on Standard Methods for the Examination of Water and Wastewater. AP(A, AWWA & WEF, 23rd ed., 2017, part 2510 ๒	๒angkok
Dissolved Bxygen *	mg/L	-	0.1	2.0	No Standard	๒ased on AP(A ๒017), 4500-B ๒)	๒angkok
Bil & Grease	mg/L	-	3	<3	No Standard	In - house method : STM 04-014 based on Standard Methods for the Examination of Water and Wastewater. AP(A, AWWA & WEF, 23rd ed., 2017, part 5520 ๒	๒angkok
Temperature *	Degree C	-	-	29.9	No Standard	Standard Methods for the Examination of Water and Wastewater. AP(A, AWWA & WEF, 23rd ed., 2017, part 2550 ๒	๒angkok
Total Dissolved solids Dried at 180 degree C *	mg/L	-	5	1770	No Standard	Standard Methods for the Examination of Water and Wastewater. AP(A, AWWA & WEF, 23rd ed., 2017, part 2540 C	๒angkok
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	10	No Standard	Standard Methods for the Examination of Water and Wastewater. AP(A, AWWA & WEF, 23rd ed., 2017, part 2540 D	๒angkok

Guideline : Notification of the Ministry of Industry ๒.E. 2559 ๒016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

Sampled By : Jessadin Kongsukdithai

Remark :

- LBD : Limit of Detection
- "<" : Lower than LBQ (Limit of Quantitation) / LBR (Limit of Reporting)
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Nant Somb

Approved by

Nanthawadee Somboon
Specialist 1

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Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22135892

Date Received : Dec 10, 2022

Date Reported : Dec 19, 2022

Report Number : 2485737-1

Page 1 of 2

Sample Number 22135892-1
Sampled Date Dec 09, 2022 11:30 AM
Sample Description Groundwater_บริเวณอ่างเก็บน้ำดิบ
Location GWR1 Up gradient monitoring well ของโครงการโรงไฟฟ้าหนองระเวียง 2
Date Analysis Commenced Dec 13, 2022
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	893	No Standard	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

Sampling By : Somboon Butchan ทะเบียนเลขที่ ว-204-จ-7514

Remark :

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

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

Approved by

Narin Saiseng
Supervisor



Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22135892

Date Received : Dec 10, 2022

Date Reported : Dec 19, 2022

Report Number : 2485737-1

Page 2 of 2

Sample Number 22135892-2
Sampled Date Dec 09, 2022 12:30 PM
Sample Description Groundwater_บริเวณอ่างเก็บน้ำดิบ
Location GWR2 Down gradient monitoring well ของโครงการโรงไฟฟ้าหนองแวง 2
Date Analysis Commenced Dec 13, 2022
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	2241	No Standard	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

Sampling By : Somboon Butchan ทะเบียนเลขที่ ว-204-จ-7514

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Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22135893

Date Received : Dec 23, 2022

Date Reported : Dec 26, 2022

Report Number : 2485740-1

Page 1 of 2

Sample Number 22135893-1
Sampled Date Dec 22, 2022 11:25 AM
Sample Description Groundwater_บริเวณอ่างเก็บน้ำดิบ
Location GWR1 Up gradient monitoring well ของโครงการโรงไฟฟ้าหนองระเวียง 2
Date Analysis Commenced Dec 26, 2022
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	1268	No Standard	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

Sampling By : Somboon Butchan ทะเบียนเลขที่ ว-204-จ-7514

Remark :

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

Approved by

Siriluk P.

Siriluk Puengpang
Supervisor

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Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22135893

Date Received : Dec 23, 2022

Date Reported : Dec 26, 2022

Report Number : 2485740-1

Page 2 of 2

Sample Number 22135893-2
Sampled Date Dec 22, 2022 12:55 PM
Sample Description Groundwater_บริเวณอ่างเก็บน้ำดิบ
Location GWR2 Down gradient monitoring well ของโครงการโรงไฟฟ้าหนองแวง 2
Date Analysis Commenced Dec 26, 2022
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	3895	No Standard	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

Sampling By : Somboon Butchan ทะเบียนเลขที่ ว-204-จ-7514

Remark :

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

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Siriluk P.

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ภาคผนวก ค-6

นิเวศวิทยาแหล่งน้ำ



สถานีวิจัยประมงศรีราชา
101/12 หมู่ 9 ต. บางพระ
อ. ศรีราชา จ. ชลบุรี 20110
โทร./โทรสาร. (038) 311379

Client : Gulf NRV2 Co., Ltd.

Address : 789 Moo 6 T. Nongraveing, A. Muang, Nakhonratchasima, Thailand, 30000

Project Name : Monitoring EIA

Project Name : GNRV2

รายงานผลการวิเคราะห์แพลงก์ตอนพืช

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 1 ตุลาคม 2565)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)				
	22106476-1	22106476-2	22106476-3	22106476-4	22106476-5
Division Cyanophyta					
Class Cyanophyceae					
Order Chroococcales					
Family Chroococcaceae					
1. <i>Microcystis aeruginosa</i>	79,000	-	29,000	8,000	-
Order Nostocales					
Family Oscillatoriaceae					
2. <i>Lyngbya</i> sp.	-	-	-	-	17,000
3. <i>Oscillatoria brevis</i>	-	-	48,000	41,000	-
4. <i>Oscillatoria princeps</i>	-	27,000	10,000	-	34,000
5. <i>Oscillatoria</i> sp.	228,000	293,000	267,000	353,000	304,000
6. <i>Oscillatoria tenuis</i>	-	18,000	-	66,000	25,000
7. <i>Spirulina platensis</i>	9,000	37,000	-	16,000	-

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 1 ตุลาคม 2565)

(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)				
	22106476-1	22106476-2	22106476-3	22106476-4	22106476-5
Family Nostocaceae					
8. <i>Anabaena azollae</i>	-	46,000	-	41,000	-
9. <i>Raphidiopsis mediterranea</i>	-	-	10,000	33,000	25,000
10. <i>Raphidiopsis</i> sp.	-	220,000	-	-	-
Family Scytonemataceae					
11. <i>Tolypothrix tenuis</i>	18,000	-	-	-	-
Division Chlorophyta					
Class Chlorophyceae					
Order Volvocales					
Family Volvocaceae					
12. <i>Eudorina elegans</i>	88,000	46,000	-	57,000	42,000
13. <i>Pandorina morum</i>	26,000	46,000	-	25,000	34,000
14. <i>Volvox</i> sp.	-	-	-	-	8,000
Order Chlorococcales					
Family Chlorrococcaceae					
15. <i>Golenkinia radiata</i>	-	-	-	8,000	-
Family Hydrodictyaceae					
16. <i>Pediastrum duplex</i>	-	27,000	29,000	8,000	-
Family Coelastraceae					
17. <i>Coelastrum microporm</i>	-	-	-	16,000	-
Family Oocystaceae					
18. <i>Ankistrodesmus falcatus</i>	9,000	-	-	-	-
19. <i>Dictyosphaerium pulchellum</i>	44,000	-	19,000	-	34,000
20. <i>Kirchneriella lunaris</i>	96,000	27,000	-	74,000	17,000
21. <i>Selenastrum gracile</i>	-	-	19,000	41,000	-
22. <i>Tetraedron gracile</i>	-	27,000	-	33,000	-
23. <i>Tetraedron trigonum</i>	-	18,000	10,000	-	-

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 1 ตุลาคม 2565)

(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)				
	22106476-1	22106476-2	22106476-3	22106476-4	22106476-5
Family Scenedesmaceae					
24. <i>Actinastrum hantzschii</i>	9,000	27,000	-	25,000	-
25. <i>Micractinium pusillum</i>	61,000	-	-	-	-
26. <i>Scenedesmus armatus</i>	9,000	-	-	16,000	-
27. <i>Scenedesmus dimorplus</i>	-	101,000	-	-	-
Order Ulotrichales					
Family Ulotrichaceae					
28. <i>Geminella ellipsoidea</i>	-	-	38,000	25,000	-
29. <i>Geminella</i> sp.	-	27,000	-	41,000	-
Order Zygematales					
Family Zygnemataceae					
30. <i>Spirogyra</i> sp.	-	46,000	-	-	-
31. <i>Spirogyra weberi</i>	70,000	73,000	48,000	205,000	270,000
Family Desmidiaceae					
32. <i>Arthodesmus curvatus</i>	-	-	-	-	25,000
33. <i>Closterium acerosum</i>	-	9,000	-	-	-
34. <i>Closterium ehrenbergii</i>	26,000	-	-	-	-
35. <i>Closterium gracile</i>	9,000	-	-	8,000	17,000
36. <i>Closterium kuetzingii</i>	-	-	-	8,000	-
37. <i>Closterium lineatum</i>	35,000	27,000	-	-	-
38. <i>Closterium</i> sp.	-	-	19,000	-	34,000
39. <i>Cosmarium nudum</i>	18,000	27,000	-	16,000	8,000
40. <i>Euastrum denticulatum</i>	-	-	10,000	-	-
41. <i>Euastrum sinuosum</i>	-	18,000	19,000	16,000	-
42. <i>Micrasterias foliacea</i>	-	9,000	-	-	-
43. <i>Staurostrum gracile</i>	-	37,000	57,000	8,000	-
44. <i>Xanthidium acanthophorum</i>	9,000	-	-	16,000	-

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 1 ตุลาคม 2565)

(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)				
	22106476-1	22106476-2	22106476-3	22106476-4	22106476-5
45. <i>Xanthidium basidentatum</i>	-	-	10,000	-	-
Class Euglenophyceae					
Order Euglenales					
Family Euglenaceae					
46. <i>Euglena acus</i>	210,000	448,000	172,000	139,000	144,000
47. <i>Euglena oxyuris</i>	26,000	46,000	48,000	25,000	25,000
48. <i>Euglena viridis</i>	70,000	27,000	38,000	57,000	42,000
49. <i>Lepocinclis ovum</i>	131,000	659,000	48,000	49,000	34,000
50. <i>Phacus angulatus</i>	-	92,000	57,000	8,000	-
51. <i>Phacus hamatus</i>	70,000	229,000	38,000	33,000	76,000
52. <i>Phacus helikoides</i>	18,000	-	-	-	-
53. <i>Phacus longicauda</i>	44,000	156,000	-	-	-
54. <i>Phacus myersi</i>	26,000	64,000	-	-	-
55. <i>Phacus platala</i>	-	-	10,000	16,000	42,000
56. <i>Phacus ranula</i>	79,000	18,000	38,000	49,000	-
57. <i>Phacus</i> sp.	-	92,000	29,000	41,000	34,000
58. <i>Phacus suecicus</i>	-	9,000	-	-	-
59. <i>Phacus tortus</i>	114,000	201,000	162,000	148,000	68,000
60. <i>Strombomonas australica</i>	44,000	-	10,000	-	-
61. <i>Strombomonas fluviatilis</i>	245,000	73,000	76,000	74,000	-
62. <i>Strombomonas gibberosa</i>	88,000	82,000	10,000	66,000	8,000
63. <i>Strombomonas girardiana</i>	201,000	329,000	401,000	295,000	211,000
64. <i>Trachelomonas australica</i>	-	9,000	-	-	-
65. <i>Trachelomonas crebea</i>	219,000	183,000	134,000	230,000	135,000
66. <i>Trachelomonas daugerdiana</i>	26,000	82,000	19,000	25,000	34,000
67. <i>Trachelomonas hispida</i>	630,000	366,000	306,000	369,000	406,000
68. <i>Trachelomonas mirabilis</i>	-	18,000	10,000	-	-
69. <i>Trachelomonas superba</i>	18,000	55,000	57,000	25,000	25,000

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 1 ตุลาคม 2565)

(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)				
	22106476-1	22106476-2	22106476-3	22106476-4	22106476-5
70. <i>Trachelomonas volzii</i>	53,000	18,000	19,000	8,000	17,000
Division Chromophyta					
Class Bacillariophyceae					
Order Biddulphiales					
Suborder Coscinodiscineae					
Family Thalassiosiraceae					
71. <i>Cyclotella stelligera</i>	105,000	27,000	-	-	34,000
Family Aulacoseiraceae					
72. <i>Aulacoseira baicalensis</i>	35,000	119,000	96,000	164,000	110,000
73. <i>Aulacoseira granulata</i>	26,000	9,000	19,000	8,000	-
Order Bacillariales					
Suborder Fragilariineae					
Family Fragilariaceae					
74. <i>Fragilaria capucina</i>	44,000	-	48,000	-	-
75. <i>Synedra acus</i>	140,000	64,000	29,000	131,000	-
76. <i>Synedra rumpens</i>	175,000	110,000	153,000	49,000	25,000
77. <i>Synedra ulna</i>	114,000	165,000	86,000	98,000	42,000
Suborder Bacillariineae					
Family Eunotiaceae					
78. <i>Eunotia pectinalis</i>	53,000	92,000	38,000	41,000	76,000
79. <i>Eunotia tenella</i>	-	-	115,000	-	-
Family Achnantheaceae					
80. <i>Cocconeis</i> sp.	-	9,000	-	16,000	-
Family Cymbellaceae					
81. <i>Gomphonema parvulum</i>	-	9,000	48,000	25,000	-
Family Naviculaceae					
82. <i>Gyrosigma attenuatum</i>	-	9,000	19,000	-	-

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 1 ตุลาคม 2565)

(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)				
	22106476-1	22106476-2	22106476-3	22106476-4	22106476-5
83. <i>Gyrosigma distortum</i>	-	-	-	16,000	8,000
84. <i>Navicula lanceolata</i>	-	18,000	19,000	-	-
85. <i>Pinnularia gibba</i>	-	-	-	-	8,000
Family Bacillariaceae					
86. <i>Nitzschia acicularis</i>	-	-	-	-	25,000
87. <i>Nitzschia lorenziana</i>	-	9,000	115,000	-	-
88. <i>Nitzschia reversa</i>	-	18,000	-	16,000	-
89. <i>Nitzschia sigmoidea</i>	-	-	-	8,000	8,000
90. <i>Nitzschia</i> sp.	35,000	-	-	-	-
Family Surirellaceae					
91. <i>Surirella elegans</i>	26,000	-	76,000	8,000	42,000
92. <i>Surirella linearis</i>	-	-	29,000	-	-
93. <i>Surirella ovata</i>	-	9,000	-	8,000	-
94. <i>Surirella robusta</i>	-	-	-	-	8,000
95. <i>Surirella tenera</i>	-	-	19,000	16,000	-
Class Crysophyceae					
Order Ochromonadales					
Family Dinobryaceae					
96. <i>Dinobryon</i> sp.	-	-	19,000	-	-
Order Synurales					
Family Mallomonadaceae					
97. <i>Mallomonas litomesa</i>	131,000	229,000	162,000	139,000	-
Class Dinophyceae					
Order Gonyaulacales					
Family Ceratiaceae					
98. <i>Ceratium hirundinella</i>	18,000	9,000	10,000	33,000	25,000

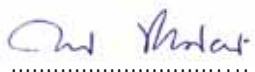
ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 1 ตุลาคม 2565)

(ต่อ)

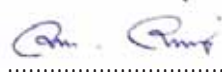
ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)				
	22106476-1	22106476-2	22106476-3	22106476-4	22106476-5
Order Peridiniales					
Family Peridiniaceae					
99. <i>Peridinium bipes</i>	490,000	348,000	382,000	525,000	676,000
100. <i>Peridinium cunningtonii</i>	-	46,000	19,000	57,000	17,000
101. <i>Peridinium</i> sp.	-	82,000	29,000	49,000	68,000
ชนิดแพลงก์ตอนพืช	50	64	57	63	45
ปริมาณแพลงก์ตอนพืช	4,547,000	5,870,000	3,854,000	4,268,000	3,367,000
ดัชนีความหลากหลายแพลงก์ตอนพืช	3.3675	3.5301	3.4739	3.4700	3.0447
ดัชนีความสม่ำเสมอแพลงก์ตอนพืช	0.8608	0.8488	0.8592	0.8375	0.7998

- Sample Location :
1. สถานี 22106476-1 : AE1 แม่น้ำมูลบริเวณเหนือจุดสูบน้ำของโครงการโรงไฟฟ้าหนองระเวียง 2 ประมาณ 500 เมตร
 2. สถานี 22106476-2 : AE2 แม่น้ำมูลบริเวณจุดสูบน้ำของโครงการโรงไฟฟ้าหนองระเวียง 2
 3. สถานี 22106476-3 : AE3 แม่น้ำมูลบริเวณเหนือจุดระบายน้ำของโครงการโรงไฟฟ้าหนองระเวียง 1 ประมาณ 500 เมตร
 4. สถานี 22106476-4 : AE4 แม่น้ำมูลบริเวณจุดระบายน้ำของโครงการโรงไฟฟ้าหนองระเวียง 1
 5. สถานี 22106476-5 : AE5 แม่น้ำมูลบริเวณท้ายจุดระบายน้ำของโครงการโรงไฟฟ้าหนองระเวียง 1 ประมาณ 500 เมตร

Condition of Sample : contained in one plastic bottle, sample containers comply to pretreatment-preservation standards (APHA, USEPA)



(นางสาวกนกวรรณ ขวาค่อน)
ผู้วิเคราะห์



(นายอลงกต อินทราชติ)
หัวหน้าสถานีวิจัยประมงศรีราชา



สถานีวิจัยประมงศรีราชา
101/12 หมู่ 9 ต. บางพระ
อ. ศรีราชา จ. ชลบุรี 20110
โทร./โทรสาร. (038) 311379

Client : Gulf NRV2 Co., Ltd.

Address : 789 Moo 6 T. Nongraveing, A. Muang, Nakhonratchasima, Thailand, 30000

Project Name : Monitoring EIA

Project Name : GNRV2

รายงานผลการวิเคราะห์แพลงก์ตอนสัตว์

ตาราง ผลการวิเคราะห์แพลงก์ตอนสัตว์ (เก็บตัวอย่างวันที่ 1 ตุลาคม 2565)

ชนิดแพลงก์ตอนสัตว์	ปริมาณแพลงก์ตอนสัตว์ (หน่วยต่อลูกบาศก์เมตร)				
	22106476-1	22106476-2	22106476-3	22106476-4	22106476-5
Phylum Protozoa					
Subphylum Plasmodroma					
Class Sarcodina					
Subclass Rhizopoda					
Order Testacida					
Family Arcellidae					
1. <i>Arcella</i> sp.	-	9,000	19,000	-	-
2. <i>Arcella vulgaris</i>	18,000	-	-	16,000	25,000
Family Diffugiidae					
3. <i>Centropyxis aculeata</i>	-	9,000	-	8,000	8,000
4. <i>Diffugia acuminata</i>	26,000	-	10,000	16,000	85,000
5. <i>Diffugia lebes</i>	-	-	19,000	8,000	-
6. <i>Diffugia lobostoma</i>	-	-	10,000	-	-

ตาราง ผลการวิเคราะห์แฟลงก์ตอนสัตว์ (เก็บตัวอย่างวันที่ 1 ตุลาคม 2565)
(ต่อ)

ชนิดแฟลงก์ตอนสัตว์	ปริมาณแฟลงก์ตอนสัตว์ (หน่วยต่อลูกบาศก์เมตร)				
	22106476-1	22106476-2	22106476-3	22106476-4	22106476-5
7. <i>Diffugia</i> sp.	-	-	-	8,000	-
Family Euglyphidae					
8. <i>Euglypha acanthophora</i>	-	-	-	8,000	-
9. <i>Euglypha rotunda</i>	-	-	19,000	8,000	-
Order Radiolarida					
Suborder Spumellaria					
10. <i>Heliodiscus phacodiscus</i>	-	-	-	-	8,000
Subphylum Ciliophora					
Class Ciliata					
Subclass Holotricha					
Order Gymnostomatida					
11. <i>Coleps</i> sp.	18,000	55,000	-	-	-
12. <i>Didinium</i> sp.	-	-	-	8,000	-
Subclass Spirotricha					
Order Tintinnida					
Family Tintinnididae					
13. <i>Tintinnidium</i> sp.	-	27,000	29,000	25,000	17,000
Family Codonellidae					
14. <i>Tintinnopsis lacustris</i>	-	-	10,000	-	-
15. <i>Tintinnopsis</i> sp.	26,000	-	-	8,000	-
Subclass Peritricha					
Order Peritrichida					
16. <i>Pyxicola</i> sp.	9,000	-	-	-	-
17. <i>Vorticella</i> sp.	-	18,000	-	-	-

ตาราง ผลการวิเคราะห์แฟลงก์ตอนสัตว์ (เก็บตัวอย่างวันที่ 1 ตุลาคม 2565)
(ต่อ)

ชนิดแฟลงก์ตอนสัตว์	ปริมาณแฟลงก์ตอนสัตว์ (หน่วยต่อลูกบาศก์เมตร)				
	22106476-1	22106476-2	22106476-3	22106476-4	22106476-5
Phylum Rotifera					
Class Monogononta					
Order Ploima					
Family Brachionidae					
18. <i>Anuraeopsis fissa</i>	9,000	27,000	-	16,000	8,000
19. <i>Colurella obtusa</i>	9,000	-	10,000	16,000	8,000
20. <i>Keratella cochlearis</i>	-	-	10,000	-	-
21. <i>Lepadell acuminata</i>	-	-	-	8,000	8,000
Family Lecanidae					
22. <i>Lecane bulla</i>	9,000	-	-	-	8,000
23. <i>Lecane closteroerca</i>	9,000	9,000	-	-	-
24. <i>Lecane decipiens</i>	9,000	-	-	-	-
25. <i>Lecane hastata</i>	-	-	-	-	8,000
26. <i>Lecane inermis</i>	-	9,000	-	-	-
27. <i>Lecane lunaris</i>	-	-	-	8,000	8,000
Family Tricocercidae					
28. <i>Trichocerca pusilla</i>	-	-	-	8,000	17,000
29. <i>Trichocerca similis</i>	26,000	-	-	-	-
Family Gastropodidae					
30. <i>Ascomorpha</i> sp.	9,000	-	-	-	-
Family Asplanchnidae					
31. <i>Asplanchna priodonta</i>	26,000	9,000	19,000	8,000	17,000
Family Synchaetidae					
32. <i>Polyarthra dolichoptera</i>	35,000	18,000	19,000	16,000	8,000
33. <i>Polyarthra vulgaris</i>	9,000	9,000	29,000	-	34,000

ตาราง ผลการวิเคราะห์แพลงก์ตอนสัตว์ (เก็บตัวอย่างวันที่ 1 ตุลาคม 2565)
(ต่อ)

ชนิดแพลงก์ตอนสัตว์	ปริมาณแพลงก์ตอนสัตว์ (หน่วยต่อลูกบาศก์เมตร)				
	22106476-1	22106476-2	22106476-3	22106476-4	22106476-5
Order Flosculariaceae					
Family Testudinellidae					
34. <i>Filinia camasacla</i>	9,000	-	-	-	-
35. <i>Filinia opoliensis</i>	9,000	-	-	-	-
36. <i>Testudinella patina</i>	-	9,000	-	-	8,000
Family Hexarthridae					
37. <i>Hexarthra mira</i>	9,000	-	-	-	-
Phylum Arthropoda					
Class Crustacea					
Subclass Copepoda					
38. Copepod nauplii	18,000	27,000	19,000	25,000	-
Order Cyclopoida					
39. Cyclopoid copepod	-	-	-	8,000	-
ชนิดแพลงก์ตอนสัตว์	19	13	13	19	16
ปริมาณแพลงก์ตอนสัตว์	292,000	235,000	222,000	226,000	275,000
ดัชนีความหลากหลายแพลงก์ตอนสัตว์	2.8107	2.3539	2.4923	2.8436	2.3846
ดัชนีความสม่ำเสมอแพลงก์ตอนสัตว์	0.9516	0.9177	0.9717	0.9658	0.8601

- Sample Location :
1. สถานี 22106476-1 : AE1 แม่น้ำมูลบริเวณเหนือจุดสูบน้ำของโครงการโรงไฟฟ้าหนองระเวียง 2 ประมาณ 500 เมตร
 2. สถานี 22106476-2 : AE2 แม่น้ำมูลบริเวณจุดสูบน้ำของโครงการโรงไฟฟ้าหนองระเวียง 2
 3. สถานี 22106476-3 : AE3 แม่น้ำมูลบริเวณเหนือจุดระบายน้ำของโครงการโรงไฟฟ้าหนองระเวียง 1 ประมาณ 500 เมตร
 4. สถานี 22106476-4 : AE4 แม่น้ำมูลบริเวณจุดระบายน้ำของโครงการโรงไฟฟ้าหนองระเวียง 1
 5. สถานี 22106476-5 : AE5 แม่น้ำมูลบริเวณท้ายจุดระบายน้ำของโครงการโรงไฟฟ้าหนองระเวียง 1 ประมาณ 500 เมตร

Condition of Sample : contained in one plastic bottle, sample containers comply to pretreatment-preservation standards (APHA, USEPA)



(นางสาวกนกวรรณ ขาวค่อน)

ผู้วิเคราะห์



(นายอลงกต อินทรชาติ)

หัวหน้าสถานีวิจัยประมงศรีราชา



สถานีวิจัยประมงศรีราชา

101/12 หมู่ 9 ต. บางพระ

อ. ศรีราชา จ. ชลบุรี 20110

โทร.โทรสาร. (038) 311379

Client : Gulf NRV2 Co., Ltd.

Address : 789 Moo 6 T. Nongraveing, A. Muang, Nakhonratchasima, Thailand, 30000

Project Name : Monitoring EIA

Project Name : GNRV2

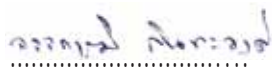
รายงานผลการวิเคราะห์ไข่ปลาและลูกปลา

ตาราง ผลการวิเคราะห์ไข่ปลาและลูกปลา (เก็บตัวอย่างวันที่ 1 ตุลาคม 2565)

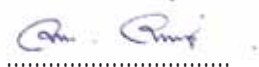
ชนิดไข่ปลาและลูกปลา	ปริมาณไข่ปลาและลูกปลา (ตัวต่อ 1,000 ลูกบาศก์เมตร)				
	22106476-1	22106476-2	22106476-3	22106476-4	22106476-5
Phylum Chordata					
Class Actinopterygii					
Order Cypriniformes					
Family Cyprinidae (กลุ่มปลาซิว)	5	-	-	-	-
Order Gobiiformes					
Family Gobiidae (กลุ่มปลานู)	-	16	17	-	5
Order Siluriformes					
Family Bagridae (กลุ่มปลาเขยง)	-	-	-	6	-
กลุ่มลูกปลา	1	1	1	1	1
ปริมาณลูกปลา	5	16	17	6	5
ค่าดัชนีความหลากหลายของลูกปลา	0.00	0.00	0.00	0.00	0.00
ปริมาณไข่ปลา	-	-	-	-	-

- Sample Location :
1. สถานี 22106476-1 : AE1 แม่น้ำมูลบริเวณเหนือจุดสูบน้ำของโครงการโรงไฟฟ้า
หนองระเวียง 2 ประมาณ 500 เมตร
 2. สถานี 22106476-2 : AE2 แม่น้ำมูลบริเวณจุดสูบน้ำของโครงการโรงไฟฟ้า
หนองระเวียง 2
 3. สถานี 22106476-3 : AE3 แม่น้ำมูลบริเวณเหนือจุดระบายน้ำของโครงการโรงไฟฟ้า
หนองระเวียง 1 ประมาณ 500 เมตร
 4. สถานี 22106476-4 : AE4 แม่น้ำมูลบริเวณจุดระบายน้ำของโครงการโรงไฟฟ้า
หนองระเวียง 1
 5. สถานี 22106476-5 : AE5 แม่น้ำมูลบริเวณท้ายจุดระบายน้ำของโครงการโรงไฟฟ้า
หนองระเวียง 1 ประมาณ 500 เมตร

Condition of Sample : contained in one plastic bottle, add 10% formalin sample containers comply to
pretreatment-preservation standards (APHA, USEPA)



(นายอรรถวุฒิ กันทะวงศ์)
ผู้วิเคราะห์



(นายอลงกต อินทรชาติ)
หัวหน้าสถานีวิจัยประมงศรีราชา

ภาพลูกปลา



ลูกปลาจิ๋ว (วงศ์ Cyprinidae)



ลูกปลาเขยง (วงศ์ Bagridae)



ลูกปลานู๋ (วงศ์ Gobiidae)



สถานีวิจัยประมงศรีราชา
101/12 หมู่ 9 ต. บางพระ
อ. ศรีราชา จ. ชลบุรี 20110
โทร./โทรสาร. (038) 311379

Client : Gulf NRV2 Co., Ltd.

Address : 789 Moo 6 T. Nongraveing, A. Muang, Nakhonratchasima, Thailand, 30000

Project Name : Monitoring EIA

Project Name : GNRV2

รายงานผลการวิเคราะห์สัตว์หน้าดิน

ตาราง ผลการวิเคราะห์สัตว์หน้าดิน (เก็บตัวอย่างวันที่ 1 ตุลาคม 2565)

ชนิดสัตว์หน้าดิน	ปริมาณสัตว์หน้าดิน (ตัวต่อตารางเมตร)				
	22106477-1	22106477-2	22106477-3	22106477-4	22106477-5
Phylum Annelida Class Clitellata Order Lumbriculida Family Lumbriculidae <i>Lumbriculus</i> sp. (ไส้เดือนน้ำจืด)	104	-	-	60	30
Phylum Arthropoda Class Insecta Order Diptera Family Ceratopogonidae <i>Culicoides</i> sp. (ตัวอ่อนริ้น)	-	-	-	-	15
Family Chironomidae <i>Chironomus</i> sp. (หนอนแดง)	30	-	60	30	-

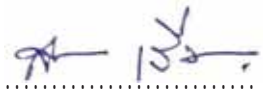
ตาราง ผลการวิเคราะห์สัตว์หน้าดิน (เก็บตัวอย่างวันที่ 1 ตุลาคม 2565) (ต่อ)

ชนิดสัตว์หน้าดิน	ปริมาณสัตว์หน้าดิน (ตัวต่อตารางเมตร)				
	22106477-1	22106477-2	22106477-3	22106477-4	22106477-5
Order Ephemeroptera Family Ephemeridae <i>Ephemer</i> sp. (ตัวอ่อนแมลงชีปะขาว)	-	60	15	-	-
Order Trichoptera Family Polycentropodidae <i>Polycentropus</i> sp. (ตัวอ่อนแมลงหนอนปลอกน้ำ)	-	-	-	15	15
Phylum Mollusca Class Gastropoda Order Architenioglossa Family Viviparidae <i>Filopaludina</i> sp. (หอยขม) <i>Trochotaia</i> sp. (หอยเวียน)	- -	- -	- -	- -	30 75
Class Bivalvia Order Veneroida Family Cyrenidae <i>Corbicula</i> sp. (หอยทราย)	30	-	-	-	-
ชนิดสัตว์หน้าดิน	3	1	2	3	5
ปริมาณสัตว์หน้าดิน	164	60	75	105	165
ค่าดัชนีความหลากหลายสัตว์หน้าดิน	0.9103	0.0000	0.5004	0.9557	1.4143

Sample Location : 1. สถานี 22106477-1 : AE1 แม่น้ำมูลบริเวณเหนือจุดสูบน้ำของโครงการโรงไฟฟ้า
หนองระเวียง 2 ประมาณ 500 เมตร
2. สถานี 22106477-2 : AE2 แม่น้ำมูลบริเวณจุดสูบน้ำของโครงการโรงไฟฟ้า
หนองระเวียง 2

3. สถานี 22106477-3 : AE3 แม่น้ำมูลบริเวณเหนือจุดระบายน้ำของโครงการโรงไฟฟ้า
หนองระเวียง 1 ประมาณ 500 เมตร
4. สถานี 22106477-4 : AE4 แม่น้ำมูลบริเวณจุดระบายน้ำของโครงการโรงไฟฟ้า
หนองระเวียง 1
5. สถานี 22106477-5 : AE5 แม่น้ำมูลบริเวณท้ายจุดระบายน้ำของโครงการโรงไฟฟ้า
หนองระเวียง 1 ประมาณ 500 เมตร

Condition of Sample : contained in one plastic zip bag



(นายสาโรจน์ เริ่มคำริห์)
ผู้วิเคราะห์



(นายอลงกต อินทชาติ)
หัวหน้าสถานีวิจัยประมงศรีราชา

ภาคผนวก ค-7

ระดับเสียงในบริเวณการทำงาน



Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่ 4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2271947

Date Received : Sep 01, 2022
Date Reported : Sep 06, 2022
Report Number: 2426340-1

Page 1 of 1

Sample Number 2271947-1
Parameter Noise (Leq 8 hrs.)
Location บริเวณ Auxiliary Cooling Tower
Measurement Date Aug 30, 2022
Measurement by Jessadin Kongsukdithai

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:35 AM - 10:35 AM	74.8	90.9	74.7
10:35 AM - 11:35 AM	74.8	75.7	74.7
11:35 AM - 12:35 PM	74.8	75.6	74.7
12:35 PM - 01:35 PM	74.7	75.5	74.6
01:35 PM - 02:35 PM	74.8	75.6	74.6
02:35 PM - 03:35 PM	74.7	75.3	74.7
03:35 PM - 04:35 PM	74.8	75.3	74.7
04:35 PM - 05:35 PM	75.0	75.5	74.9

Leq Average 8 hrs. (dB(A))

74.8

Lmax (dB(A))

90.9

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ. ๒๕๔๖

Technical Management

Saranya C.

Saranya Chalermthamrong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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

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Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่ 4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2271947

Date Received : Sep 01, 2022
Date Reported : Sep 06, 2022
Report Number: 2426341-1

Page 1 of 1

Sample Number 2271947-2
Parameter Noise (Leq 8 hrs.)
Location บริเวณ Gas Compressor 1
Measurement Date Aug 30, 2022
Measurement by xessadin wongsukdithai

Time	Leq (dJ (A))	LmaK (dJ (A))	L90 (dJ (A))
09:25 AM - 10:25 AM	75.8	90.8	73.1
10:25 AM - 11:25 AM	75.6	78.5	73.4
11:25 AM - 12:25 PM	75.7	78.4	73.2
12:25 PM - 01:25 PM	75.1	78.7	72.4
01:25 PM - 02:25 PM	75.5	78.6	72.7
02:25 PM - 03:25 PM	75.6	78.3	73.4
03:25 PM - 04:25 PM	75.8	78.5	73.8
04:25 PM - 05:25 PM	76.0	79.4	73.8

Leq Average 8 hrs. (dJ (A))

75.6

LmaK (dJ (A))

90.8

Standard (dJ (A))

90

140

Reference Method : Jased on ISB1996-1 and 1996-2

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789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2271947

Date Received : Sep 01, 2022
Date Reported : Sep 06, 2022
Report Number: 2426342-1

Page 1 of 1

Sample Number 2271947-3
Parameter Noise (Leq 8 hrs.)
Location บริเวณ Boiler Feed Pump
Measurement Date Aug 30, 2022
Measurement by Jessadin Kongsukdithai

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:26 AM - 10:26 AM	79.7	86.9	79.4
10:26 AM - 11:26 AM	79.6	81.2	79.2
11:26 AM - 12:26 PM	79.5	81.1	79.0
12:26 PM - 01:26 PM	79.5	81.5	79.0
01:26 PM - 02:26 PM	79.5	81.1	79.0
02:26 PM - 03:26 PM	79.6	81.0	79.1
03:26 PM - 04:26 PM	79.6	81.3	79.1
04:26 PM - 05:26 PM	79.5	81.1	79.1

Leq Average 8 hrs. (dB(A))

79.6

Lmax (dB(A))

86.9

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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P/O : สัญญาเลขที่ 4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2271947

Date Received : Sep 01, 2022
Date Reported : Sep 06, 2022
Report Number: 2426343-1

Page 1 of 1

Sample Number 2271947-4
Parameter Noise (Leq 8 hrs.)
Location บริเวณ Gas Turbine 1
Measurement Date Aug 30, 2022
Measurement by xessadin wongsukdithai

Time	Leq (dJ (A))	LmaK (dJ (A))	L90 (dJ (A))
09:07 AM - 10:07 AM	80.6	86.1	80.1
10:07 AM - 11:07 AM	81.6	83.0	81.1
11:07 AM - 12:07 PM	82.0	83.4	81.4
12:07 PM - 01:07 PM	81.9	83.6	81.4
01:07 PM - 02:07 PM	81.4	83.0	80.8
02:07 PM - 03:07 PM	81.6	83.0	81.1
03:07 PM - 04:07 PM	81.6	82.9	81.2
04:07 PM - 05:07 PM	81.7	82.9	81.2

Leq Average 8 hrs. (dJ (A))

81.6

LmaK (dJ (A))

86.1

Standard (dJ (A))

90

140

Reference Method : Jased on ISB1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2271947

Date Received : Sep 01, 2022
Date Reported : Sep 06, 2022
Report Number: 2426344-1

Page 1 of 1

Sample Number 2271947-5
Parameter Noise (Leq 8 hrs.)
Location บริเวณ Steam Turbine
Measurement Date Aug 30, 2022
Measurement by xessadin wongsukdithai

Time	Leq (dJ (A))	LmaK (dJ (A))	L90 (dJ (A))
09:35 AM - 10:35 AM	73.3	83.2	70.2
10:35 AM - 11:35 AM	73.2	77.3	72.2
11:35 AM - 12:35 PM	73.5	76.3	73.2
12:35 PM - 01:35 PM	73.6	76.2	73.3
01:35 PM - 02:35 PM	73.4	75.9	72.8
02:35 PM - 03:35 PM	72.3	75.2	72.0
03:35 PM - 04:35 PM	72.0	75.0	71.7
04:35 PM - 05:35 PM	72.1	75.1	71.9

Leq Average 8 hrs. (dJ (A))

73.0

LmaK (dJ (A))

83.2

Standard (dJ (A))

90

140

Reference Method : Jased on ISB1996-1 and 1996-2

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P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2271947

Date Received : Sep 01, 2022
Date Reported : Sep 06, 2022
Report Number: 2426345-1

Page 1 of 1

Sample Number 2271947-6
Parameter Noise (Leq 8 hrs.)
Location บริเวณ Air cooled condensor
Measurement Date Aug 30, 2022
Measurement by xessadin wongsukdithai

Time	Leq (dJ (A))	LmaK (dJ (A))	L90 (dJ (A))
09:37 AM - 10:37 AM	74.7	76.5	74.5
10:37 AM - 11:37 AM	74.8	79.4	74.6
11:37 AM - 12:37 PM	74.8	78.8	74.6
12:37 PM - 01:37 PM	74.7	75.9	74.5
01:37 PM - 02:37 PM	74.6	79.0	74.3
02:37 PM - 03:37 PM	74.6	75.7	74.4
03:37 PM - 04:37 PM	74.5	75.8	74.3
04:37 PM - 05:37 PM	74.8	77.2	74.6

Leq Average 8 hrs. (dJ (A))

74.7

LmaK (dJ (A))

79.4

Standard (dJ (A))

90

140

Reference Method : Jased on ISB1996-1 and 1996-2

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Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2271947

Date Received : Sep 01, 2022
Date Reported : Sep 06, 2022
Report Number: 2426346-1

Page 1 of 1

Sample Number 2271947-7
Parameter Noise (Leq 8 hrs.)
Location บริเวณ Gas Compressor 2
Measurement Date Aug 30, 2022
Measurement by xessadin wongsukdithai

Time	Leq (dJ (A))	LmaK (dJ (A))	L90 (dJ (A))
09:32 AM - 10:32 AM	76.1	79.9	73.2
10:32 AM - 11:32 AM	76.4	79.3	73.4
11:32 AM - 12:32 PM	76.6	79.7	73.0
12:32 PM - 01:32 PM	76.3	79.3	72.9
01:32 PM - 02:32 PM	76.4	80.4	72.5
02:32 PM - 03:32 PM	76.7	80.1	73.3
03:32 PM - 04:32 PM	77.0	79.9	73.6
04:32 PM - 05:32 PM	76.5	80.2	72.8

Leq Average 8 hrs. (dJ (A))

76.5

LmaK (dJ (A))

80.4

Standard (dJ (A))

90

140

Reference Method : Jased on ISB1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2271947

Date Received : Sep 01, 2022

Date Reported : Sep 06, 2022

Report Number: 2426347-1

Page 1 of 1

Sample Number 2271947-8
Parameter Noise (Leq 8 hrs.)
Location บริเวณ Gas Turbine 2
Measurement Date Aug 30, 2022
Measurement by xessadin wongsukdithai

Time	Leq (dJ (A))	LmaK (dJ (A))	L90 (dJ (A))
09:25 AM - 10:25 AM	79.6	82.3	78.9
10:25 AM - 11:25 AM	79.7	81.6	79.1
11:25 AM - 12:25 PM	79.8	81.5	79.2
12:25 PM - 01:25 PM	79.9	81.9	79.3
01:25 PM - 02:25 PM	79.7	82.2	78.7
02:25 PM - 03:25 PM	80.1	82.0	79.2
03:25 PM - 04:25 PM	80.3	82.6	79.4
04:25 PM - 05:25 PM	79.8	82.0	79.1

Leq Average 8 hrs. (dJ (A))

79.9

LmaK (dJ (A))

82.6

Standard (dJ (A))

90

140

Reference Method : Jased on ISB1996-1 and 1996-2

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Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22122464

Sate Received : Nov 25, 2022
Sate Reported : Sec 01, 2022
Report Num-er: 2508192

bage 1 of 1

Sample Number 22122464
Parameter Noise L_{eq} 8 hrs.
Location บริเวณ Auxiliary Cooling Tower
Measurement Date Nov 24, 2022
Measurement by vessadin Jongsukdithai

Time	L_{eq} L_{KPA}	L_{max} L_{KPA}	L_{90} L_{KPA}
09:51 AM D10:51 AM	71.2	72.3	70.8
10:51 AM D11:51 AM	70.7	71.6	70.5
11:51 AM D12:51 bM	70.5	71.4	70.4
12:51 bM D01:51 bM	70.4	71.3	70.2
01:51 bM D02:51 bM	70.1	72.4	70.0
02:51 bM D03:51 bM	70.2	74.9	70.0
03:51 bM D04:51 bM	70.9	71.9	70.8
04:51 bM D05:51 bM	70.8	71.6	70.7

L_{eq} Average 8 hrs. L_{KPA} 70.6
 L_{max} L_{KPA} 74.9
Btandard L_{KPA} 90 140
Reference Method : Kased on IBO1996 and 1996
Btandard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย
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Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22122464

Date Received : Nov 25, 2022
Date Reported : Dec 01, 2022
Report Number: 2508193-1

Page 1 of 1

Sample Number 22122464-2
Parameter Noise (Leq 8 hrs.)
Location บริเวณ Gas Compressor 1
Measurement Date Nov 24, 2022
Measurement by Jessadin Kongsukdithai

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:38 AM - 10:38 AM	73.8	75.9	72.1
10:38 AM - 11:38 AM	74.1	76.6	72.6
11:38 AM - 12:38 PM	74.0	76.0	72.6
12:38 PM - 01:38 PM	73.2	75.4	71.7
01:38 PM - 02:38 PM	72.8	75.7	71.8
02:38 PM - 03:38 PM	73.2	76.2	71.7
03:38 PM - 04:38 PM	74.0	76.3	72.3
04:38 PM - 05:38 PM	74.3	76.4	72.1

Leq Average 8 hrs. (dB(A))

73.7

Lmax (dB(A))

76.6

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย
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Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22122464

Date Received : Nov 25, 2022

Date Reported : Dec 01, 2022

Report Number: 2508194-1

Page 1 of 1

Sample Number 22122464-3
Parameter Noise (Leq 8 hrs.)
Location บริเวณ Boiler Feed Pump
Measurement Date Nov 24, 2022
Measurement by Jessadin Kongsukdithai

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:43 AM - 10:43 AM	80.0	81.5	79.5
10:43 AM - 11:43 AM	80.0	81.6	79.3
11:43 AM - 12:43 PM	79.9	81.4	79.3
12:43 PM - 01:43 PM	80.2	81.7	79.6
01:43 PM - 02:43 PM	80.0	84.8	79.5
02:43 PM - 03:43 PM	80.1	82.0	79.6
03:43 PM - 04:43 PM	80.2	81.7	79.7
04:43 PM - 05:43 PM	80.5	82.4	80.0

Leq Average 8 hrs. (dB(A))

80.1

Lmax (dB(A))

84.8

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

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Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22122464

Date Received : Nov 25, 2022
Date Reported : Dec 01, 2022
Report Number: 2508195-1

Page 1 of 1

Sample Number 22122464-4
Parameter Noise (Leq 8 hrs.)
Location บริเวณ Gas Turbine 1
Measurement Date Nov 24, 2022
Measurement by Jessadin Kongsukdithai

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:33 AM - 10:33 AM	79.0	80.8	78.3
10:33 AM - 11:33 AM	78.7	80.1	78.2
11:33 AM - 12:33 PM	78.4	80.1	77.9
12:33 PM - 01:33 PM	78.3	79.8	77.8
01:33 PM - 02:33 PM	78.5	83.6	77.8
02:33 PM - 03:33 PM	78.8	80.7	78.2
03:33 PM - 04:33 PM	78.7	80.1	78.0
04:33 PM - 05:33 PM	78.5	80.2	78.0

Leq Average 8 hrs. (dB(A))

78.6

Lmax (dB(A))

83.6

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย
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Scientist (4)

Approved by

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Supot Salamteh
Section Head

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P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22122464

Date Received : Nov 25, 2022
Date Reported : Dec 01, 2022
Report Number: 2508196-1

Page 1 of 1

Sample Number 22122464-5
Parameter Noise (Leq 8 hrs.)
Location บริเวณ Jteam Turbine
Measurement Date Nov 24, 2022
Measurement by Kessadin Bongsukdithai

Time	Leq (dx(A))	LmaS (dx(A))	L90 (dx(A))
09:48 AM - 10:48 AM	75.1	77.7	74.9
10:48 AM - 11:48 AM	75.0	77.5	74.8
11:48 AM - 12:48 PM	74.8	77.4	74.7
12:48 PM - 01:48 PM	74.7	77.3	74.6
01:48 PM - 02:48 PM	74.8	81.4	74.6
02:48 PM - 03:48 PM	74.9	77.7	74.7
03:48 PM - 04:48 PM	75.0	77.5	74.8
04:48 PM - 05:48 PM	75.2	77.8	75.1

Leq Average 8 hrs. (dx(A))

74.9

LmaS (dx(A))

81.4

Jstandard (dx(A))

90

140

Reference Method : based on IJO1996-1 and 1996-2

Jstandard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย
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P/O : สัญญาเลขที่ 4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22122464

Date Received : Nov 25, 2022
Date Reported : Dec 01, 2022
Report Number: 2508197-1

Page 1 of 1

Sample Number 22122464-6
Parameter Noise (Leq 8 hrs.)
Location บริเวณ Air cooled condensor
Measurement Date Nov 24, 2022
Measurement by Jessadin Kongsukdithai

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:52 AM - 10:52 AM	73.6	78.3	73.4
10:52 AM - 11:52 AM	73.6	78.7	73.4
11:52 AM - 12:52 PM	73.4	77.5	73.2
12:52 PM - 01:52 PM	73.3	79.1	73.1
01:52 PM - 02:52 PM	73.2	77.7	73.0
02:52 PM - 03:52 PM	73.5	77.4	73.2
03:52 PM - 04:52 PM	73.7	74.6	73.4
04:52 PM - 05:52 PM	73.6	79.4	73.4

Leq Average 8 hrs. (dB(A))

73.5

Lmax (dB(A))

79.4

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย
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Technical Management

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P/O : สัญญาเลขที่ 4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22122464

Date Received : Nov 25, 2022
Date Reported : Dec 01, 2022
Report Number: 2508198-1

Page 1 of 1

Sample Number 22122464-7
Parameter Noise (Leq 8 hrs.)
Location บริเวณ Gas Compressor 2
Measurement Date Nov 24, 2022
Measurement by Jessadin Kongsukdithai

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:39 AM - 10:39 AM	70.8	74.0	70.0
10:39 AM - 11:39 AM	71.1	74.4	70.4
11:39 AM - 12:39 PM	71.2	74.6	70.2
12:39 PM - 01:39 PM	70.6	73.7	69.9
01:39 PM - 02:39 PM	70.5	75.6	69.7
02:39 PM - 03:39 PM	71.0	74.4	69.8
03:39 PM - 04:39 PM	71.4	74.5	70.2
04:39 PM - 05:39 PM	71.4	74.5	70.7

Leq Average 8 hrs. (dB(A))

71.0

Lmax (dB(A))

75.6

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย
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P/O : สัญญาเลขที่ 4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22122464

Date Received : Nov 25, 2022
Date Reported : Dec 01, 2022
Report Number: 2508199-1

Page 1 of 1

Sample Number 22122464-8
Parameter Noise (Leq 8 hrs.)
Location บริเวณ Gas Turbine 2
Measurement Date Nov 24, 2022
Measurement by Jessadin Kongsukdithai

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:31 AM - 10:31 AM	79.6	81.9	78.9
10:31 AM - 11:31 AM	79.3	81.3	78.8
11:31 AM - 12:31 PM	79.2	81.1	78.7
12:31 PM - 01:31 PM	78.8	80.6	78.2
01:31 PM - 02:31 PM	78.8	85.2	78.3
02:31 PM - 03:31 PM	78.9	80.5	78.4
03:31 PM - 04:31 PM	79.2	80.9	78.7
04:31 PM - 05:31 PM	79.9	81.9	79.4

Leq Average 8 hrs. (dB(A))

79.2

Lmax (dB(A))

85.2

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย
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ภาคผนวก ค-8

ระดับความร้อนในบริเวณการทำงาน



Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่ 4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2271950

Date Received : Sep 01, 2022
Date Reported : Sep 09, 2022
Report Number: 2429331-1

Page 1 of 5

Sample Number 2271950-1
Parameter Heat Stress (Sampling Time : 01.00 PM - 03.00 PM)
Measurement Date Aug 30, 2022
Measurement by Jessadin Kongsukdithai
Location ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณ Condenser Exhaust Unit	120	28.0	25.7	33.5	33.2
Average (WBGT)		28.0			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

- Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
- Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

Note:

This Analysis test report is reissued to supersede report No 2340585-1 Reported : Sep 02, 2022 due to revise analytical information.

Technical Management

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Section Head

Approved by

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Assistant Manager

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P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2271950

Date Received : Sep 01, 2022
Date Reported : Sep 09, 2022
Report Number: 2429331-1

Page 2 of 5

Sample Number 2271950-2
Parameter Heat Stress (Sampling Time : 01.00 PM - 03.00 PM)
Measurement Date Aug 30, 2022
Measurement by Jessadin Kongsukdithai
Location ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณท่อส่งน้ำ	120	29.0	26.0	36.0	35.4
Average (WBGT)		29.0			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

- Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
- Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

Note:

This Analysis test report is reissued to supersede report No 2340585-1 Reported : Sep 02, 2022 due to revise analytical information.

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P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2271950

Date Received : Sep 01, 2022

Date Reported : Sep 09, 2022

Report Number: 2429331-1

Page 3 of 5

Sample Number 2271950-3
Parameter Heat Stress (Sampling Time : 01.00 PM - 03.00 PM)
Measurement Date Aug 30, 2022
Measurement by Jessadin Kongsukdithai
Location ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณ Air cooled condensor	120	27.7	25.1	33.8	33.4
Average (WBGT)		27.7			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

- Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
- Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

Note:

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Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2271950

Date Received : Sep 01, 2022
Date Reported : Sep 09, 2022
Report Number: 2429331-1

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Sample Number 2271950-4
Parameter Heat Stress (Sampling Time : 01.00 PM - 03.00 PM)
Measurement Date Aug 30, 2022
Measurement by Jessadin Kongsukdithai
Location ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณ Gas Turbine	120	29.9	26.7	37.7	36.8
Average (WBGT)		29.9			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

- Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
- Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

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Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2271950

Date Received : Sep 01, 2022
Date Reported : Sep 09, 2022
Report Number: 2429331-1

Page 5 of 5

Sample Number 2271950-5
Parameter Heat Stress (Sampling Time : 01.00 PM - 03.00 PM)
Measurement Date Aug 30, 2022
Measurement by Jessadin Kongsukdithai
Location ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณ Steam Turbine	120	32.2	28.2	41.5	41.3
Average (WBGT)		32.2			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

- Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
- Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

Note:

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P/O : สัญญาเลขที่ 4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22122465

Sate Received : Nov 25, 2022

Sate Reported : Nov 29, 2022

Report Number: 24544231

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Sample Number 221224651
Parameter Peat Htress (Hamplng Time : 10.00 AM D12.00 bM)
Measurement Date Nov 24, 2022
Measurement by Jessadin Kongsukdithai
Location ปรุบ่อดึงภาพ 1 (ขุดดินตามสกุล ปรุบ่อดึงภาพ : Dแพพ : D)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณ Condenser Exhaust Unit	120	26.6	25.5	29.1	29.0
Average (WBGT)		26.6			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bul- Glo- e Temperature

Guideline:

- Notification of Separtment La- our protection and Welfare on the Criteria and brocedures for Measurement and Analysis of Working Conditions in relation to Peat, Light or Noise Levels, including Suration and Types of Business that must perform (B.E. 2561)
- Ministerial Regulation on brescri- ing of Htandard for Administration and Management of Occupational Hafety, Pealth and Environmentin relation to Peat,Light and Noise, B.E.2559

Technical Management

Hupot Halamteh
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Approved by

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Assistant Manager

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P/O : สัญญาเลขที่ 4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22122465

Sate Received : Nov 25, 2022

Sate Reported : Nov 29, 2022

Report Number: 2454423D

Page 2 of 5

Sample Number 22122465D
Parameter Peat Htress (Hamplng Time : 10.00 AM D12.00 bM)
Measurement Date Nov 24, 2022
Measurement by Jessadin Kongsukdithai
Location ปลูกฝังภาพ 1 (ขุดดินมสกล ปลูกฝังภาพ : Dแพพ : D)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณท่อลำเลียงไอน้ำ	120	26.5	25.1	29.6	29.3
Average (WBGT)		26.5			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bul- Glo- e Temperature

Guideline:

- Notification of Separment La- our protection and Welfare on the Criteria and brocedures for Measurement and Analysis of Working Conditions in relation to Peat, Light or Noise Levels, including Suration and Types of Business that must perform (B.E. 2561)
- Ministerial Regulation on brescri- ing of Htandard for Administration and Management of Occupational Hafety, Pealth and Environmentin relation to Peat,Light and Noise, B.E.2559

Technical Management

Hupot Halamteh
Hection Pead

Approved by

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่ 4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22122465

Sate Received : Nov 25, 2022

Sate Reported : Nov 29, 2022

Report Num-er: 2454423D

Page 3 of 5

Sample Number 22122465D
Parameter Peat Htress (Hamplng Time : 10.00 AM D12.00 bM)
Measurement Date Nov 24, 2022
Measurement by Jessadin Kongsukdithai
Location ปฏิบัติงานที่ 1 (ข้อ D) กรมสกล ปฏิบัติงานที่ : D แพท : D

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณ Air Cooled Condensor	120	26.8	25.3	30.2	29.9
Average (WBGT)		26.8			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bul- Glo- e Temperature

Guideline:

- Notification of Separtment La- our protection and Welfare on the Criteria and brocedures for Measurement and Analysis of Working Conditions in relation to Peat, Light or Noise Levels, including Suration and Types of Business that must perform (B.E. 2561)
- Ministerial Regulation on brescri- ing of Htandard for Administration and Management of Occupational Hafety, Pealth and Environmentin relation to Peat,Light and Noise, B.E.2559

Technical Management

Hupot Halamteh
Hection Pead

Approved by

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่ 4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22122465

Sate Received : Nov 25, 2022

Sate Reported : Nov 29, 2022

Report Num-er: 2454423D

page 4 of 5

Sample Number 22122465D4
Parameter Peat Htress (Hamplng Time : 10.00 AM D12.00 bM)
Measurement Date Nov 24, 2022
Measurement by Jessadin Kongsukdithai
Location ปฏิบัติงานในพื้นที่ (ข้อ D) กรมสกล ผู้ปฏิบัติงาน : D แพทย์ : D

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณ Gas Tur-ine	120	28.0	25.9	33.4	32.0
Average (WBGT)		28.0			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bul- Glo- e Temperature

Guideline:

1. Notification of Separtment La- our protection and Welfare on the Criteria and brocedures for Measurement and Analysis of Working Conditions in relation to Peat, Light or Noise Levels, including Suration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on brescri- ing of Htandard for Administration and Management of Occupational Hafety, Pealth and Environmentin relation to Peat,Light and Noise, B.E.2559

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Hection Pead

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Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่ 4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22122465

Sate Received : Nov 25, 2022

Sate Reported : Nov 29, 2022

Report Number: 24544231

Page 5 of 5

Sample Number 22122465
Parameter Heat Stress (Sampling Time : 10.00 AM D12.00 bM)
Measurement Date Nov 24, 2022
Measurement by Jessadin Kongsukdithai
Location ปฏิบัติงานในพื้นที่ (ข้อบัญญัติกรมสวัสดิการและคุ้มครองแรงงาน : Dแผนก : D)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณ Heat treatment	120	32.1	29.7	37.7	37.3
Average (WBGT)		32.1			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

- Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
- Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

Technical Management

Hupot Halamteh
Section Head

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Wichan Choonharat
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Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima 30000
P/O : สัญญาเลขที่4600001546
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2271876

Date Received : Sep 05, 2022
Date Reported : Sep 08, 2022
Report Number : 2427052-1

Page 1 of 3

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Area - Administration Building : Ground Floor : Meeting Room 2									
1.1	2271876-1	29 Aug 2022	Day time	1	1,140	860.7	150	300	Pass
1.2	2271876-2	29 Aug 2022	Day time	2	584				
1.3	2271876-3	29 Aug 2022	Day time	3	1,580				
1.4	2271876-4	29 Aug 2022	Day time	4	298				
1.5	2271876-5	29 Aug 2022	Day time	5	351				
1.6	2271876-6	29 Aug 2022	Day time	6	802				
1.7	2271876-7	29 Aug 2022	Day time	7	573				
1.8	2271876-8	29 Aug 2022	Day time	8	386				
1.9	2271876-9	29 Aug 2022	Day time	9	572				
1.10	2271876-10	29 Aug 2022	Day time	10	498				
Spot - Administration Building : Ground Floor : Plant Manager									
2	2271876-11	29 Aug 2022	Day time	1	478	-	400-500	-	Pass
Spot - Administration Building : Ground Floor : SHE Room โต๊ะคอมฯ 1									
3	2271876-12	29 Aug 2022	Day time	1	408	-	400-500	-	Pass
Spot - Administration Building : Ground Floor : SHE Room โต๊ะคอมฯ 2									
4	2271876-13	29 Aug 2022	Day time	1	406	-	400-500	-	Pass
Area - Administration Building : Ground Floor : Meeting Room									
5.1	2271876-14	29 Aug 2022	Day time	1	334	355.5	150	300	Pass
5.2	2271876-15	29 Aug 2022	Day time	2	377				
Area - Administration Building : Ground Floor : ห้องรับแขก									
6.1	2271876-16	29 Aug 2022	Day time	1	248	338.7	50	100	Pass
6.2	2271876-17	29 Aug 2022	Day time	2	257				
6.3	2271876-18	29 Aug 2022	Day time	3	294				
6.4	2271876-19	29 Aug 2022	Day time	4	375				
6.5	2271876-20	29 Aug 2022	Day time	5	542				
6.6	2271876-21	29 Aug 2022	Day time	6	316				
Area - Administration Building : Ground Floor : Copy Room									
7.1	2271876-22	29 Aug 2022	Day time	1	389	408.0	150	300	Pass
7.2	2271876-23	29 Aug 2022	Day time	2	427				
Area - Administration Building : Ground Floor : Server Room									
8.1	2271876-24	29 Aug 2022	Day time	1	260	277.5	100	200	Pass
8.2	2271876-25	29 Aug 2022	Day time	2	295				

Technical Management

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789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima 30000
P/O : สัญญาเลขที่4600001546
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2271876

Date Received : Sep 05, 2022
Date Reported : Sep 08, 2022
Report Number : 2427052-1

Page 2 of 3

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
	Spot - Administration Building : Ground Floor : GA Manager								
9	2271876-26	29 Aug 2022	Day time	1	697	-	400-500	-	Pass
	Spot - Administration Building : Ground Floor : โต๊ะคอมฯ เจ้าหน้าที่จัดซื้อ 2 GNRV 2								
10	2271876-27	29 Aug 2022	Day time	1	467	-	400-500	-	Pass
	Spot - Administration Building : Ground Floor : โต๊ะคอมฯ เจ้าหน้าที่จัดซื้อ 1 GNRV 1								
11	2271876-28	29 Aug 2022	Day time	1	406	-	400-500	-	Pass
	Spot - Administration Building : Ground Floor : โต๊ะคอมฯ IT								
12	2271876-29	29 Aug 2022	Day time	1	589	-	400-500	-	Pass
	Spot - Administration Building : Ground Floor : โต๊ะคอมฯ GA Officer GNRV 1								
13	2271876-30	29 Aug 2022	Day time	1	604	-	400-500	-	Pass
	Spot - Administration Building : Ground Floor : โต๊ะคอมฯ GA Officer GNRV 2								
14	2271876-31	29 Aug 2022	Day time	1	490	-	400-500	-	Pass
	Area - Administration Building : Ground Floor : Corridor (จากหน้าห้องประชุมเล็กถึงห้องประชุมใหญ่)								
16.1	2271876-32	29 Aug 2022	Day time	1	104	158.5	50	100	Pass
16.2	2271876-33	29 Aug 2022	Day time	2	92				
16.3	2271876-34	29 Aug 2022	Day time	3	83				
16.4	2271876-35	29 Aug 2022	Day time	4	180				
16.5	2271876-36	29 Aug 2022	Day time	5	184				
16.6	2271876-37	29 Aug 2022	Day time	6	308				
	Area - Administration Building : Ground Floor : ห้องเก็บของ								
17.1	2271876-38	29 Aug 2022	Day time	1	304	358.5	50	100	Pass
17.2	2271876-39	29 Aug 2022	Day time	2	413				
	Area - Administration Building : Ground Floor : Electrical Control Room								
18.1	2271876-40	29 Aug 2022	Day time	1	328	327.0	100	200	Pass
18.2	2271876-41	29 Aug 2022	Day time	2	326				
	Area - Administration Building : Ground Floor : Men Toilet								
19.1	2271876-42	29 Aug 2022	Day time	1	258	302.5	50	100	Pass
19.2	2271876-43	29 Aug 2022	Day time	2	347				
	Area - Administration Building : Ground Floor : Women Toilet								
20.1	2271876-44	29 Aug 2022	Day time	1	743	639.5	50	100	Pass
20.2	2271876-45	29 Aug 2022	Day time	2	536				

Technical Management

Supot Salamteh
Section Head

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Wichan Choonharat
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Analysis / Test Report

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789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima 30000
P/O : สัญญาเลขที่4600001546
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2271876

Date Received : Sep 05, 2022
Date Reported : Sep 08, 2022
Report Number : 2427052-1

Page 3 of 3

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Area - Administration Building : Ground Floor : pantry									
21.1	2271876-46	29 Aug 2022	Day time	1	1,309	866.0	150	300	Pass
21.2	2271876-47	29 Aug 2022	Day time	2	505				
21.3	2271876-48	29 Aug 2022	Day time	3	587				
21.4	2271876-49	29 Aug 2022	Day time	4	1,063				
Spot - Administration Building : Ground Floor : โต๊ะคอมพิวเตอร์สำรอง									
22	2271876-50	29 Aug 2022	Day time	1	402	-	400-500	-	Pass

Measurement by : Jessadin Kongsukdithai Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot Salamteh
Section Head

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789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2269017

Date Received : Sep 05, 2022
Date Reported : Sep 08, 2022
Report Number : 2427093-1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Area - Control Building : 1st Floor : MCC Room									
1.1	2269017-1	29 Aug 2022	Day time	1	351	602.8	100	200	Pass
1.2	2269017-2	29 Aug 2022	Day time	2	216				
1.3	2269017-3	29 Aug 2022	Day time	3	597				
1.4	2269017-4	29 Aug 2022	Day time	4	1,248				
1.5	2269017-5	29 Aug 2022	Day time	5	538				
1.6	2269017-6	29 Aug 2022	Day time	6	459				
1.7	2269017-7	29 Aug 2022	Day time	7	1,305				
1.8	2269017-8	29 Aug 2022	Day time	8	1,128				
1.9	2269017-9	29 Aug 2022	Day time	9	521				
1.10	2269017-10	29 Aug 2022	Day time	10	438				
1.11	2269017-11	29 Aug 2022	Day time	11	1,094				
1.12	2269017-12	29 Aug 2022	Day time	12	705				
1.13	2269017-13	29 Aug 2022	Day time	13	681				
1.14	2269017-14	29 Aug 2022	Day time	14	300				
1.15	2269017-15	29 Aug 2022	Day time	15	618				
1.16	2269017-16	29 Aug 2022	Day time	16	243				
1.17	2269017-17	29 Aug 2022	Day time	17	267				
1.18	2269017-18	29 Aug 2022	Day time	18	259				

Measurement by : Jessadin Kongsukdithai Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

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Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2269024

Date Received : Sep 05, 2022
Date Reported : Sep 08, 2022
Report Number : 2427099-1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Spot - Control Building : 2nd Floor : Utility Room : หน้าตู้ควบคุม E-2DB1)									
1	2269024-1	29 Aug 2022	Day time	1	320	-	200-300	-	Pass
Area - Control Building : 2nd Floor : DCS Room									
2.1	2269024-2	29 Aug 2022	Day time	1	436	442.7	100	200	Pass
2.2	2269024-3	29 Aug 2022	Day time	2	401				
2.3	2269024-4	29 Aug 2022	Day time	3	491				
Spot - Control Building : 2nd Floor : DCS Room : โต๊ะคอม									
3	2269024-5	29 Aug 2022	Day time	1	466	-	400-500	-	Pass

Measurement by : Jessadin Kongsukdithai Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

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Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima 30000
P/O : สัญญาเลขที่4600001546
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2271878

Date Received : Sep 05, 2022
Date Reported : Sep 08, 2022
Report Number : 2427056-1

Page 1 of 2

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Area - Control Building : 2nd Floor : Corridor (ทางเดินก่อนลงบันได)									
1.1	2271878-1	29 Aug 2022	Day time	1	516	498.0	50	100	Pass
1.2	2271878-2	29 Aug 2022	Day time	2	480				
Area - Control Building : 2nd Floor : Men Toilet									
2.1	2271878-3	29 Aug 2022	Day time	1	300	486.5	50	100	Pass
2.2	2271878-4	29 Aug 2022	Day time	2	370				
2.3	2271878-5	29 Aug 2022	Day time	3	656				
2.4	2271878-6	29 Aug 2022	Day time	4	620				
Area - Control Building : 2nd Floor : Women Toilet									
3.1	2271878-7	29 Aug 2022	Day time	1	771	563.0	50	100	Pass
3.2	2271878-8	29 Aug 2022	Day time	2	355				
Area - Control Building : 2nd Floor : Pantry Room									
4.1	2271878-9	29 Aug 2022	Day time	1	1,209	974.5	150	300	Pass
4.2	2271878-10	29 Aug 2022	Day time	2	740				
Spot - Control Building : 2nd Floor : Utility Room (หน้าตู้ควบคุม C-2DB1)									
5	2271878-11	29 Aug 2022	Day time	1	680	-	200-300	-	Pass
Area - Control Building : 2nd Floor : DCS Room (บริเวณหน้าตู้ควบคุม)									
6.1	2271878-12	29 Aug 2022	Day time	1	354	499.3	100	200	Pass
6.2	2271878-13	29 Aug 2022	Day time	2	578				
6.3	2271878-14	29 Aug 2022	Day time	3	566				
Spot - Control Building : 2nd Floor : CCR จอควบคุม 1 (GNRV 1)									
7	2271878-15	29 Aug 2022	Day time	1	426	-	400-500	-	Pass
Spot - Control Building : 2nd Floor : CCR จอควบคุม 2 (GNRV 1)									
8	2271878-16	29 Aug 2022	Day time	1	410	-	400-500	-	Pass
Spot - Control Building : 2nd Floor : CCR จอควบคุม 3 (GNRV 2)									
9	2271878-17	29 Aug 2022	Day time	1	414	-	400-500	-	Pass
Spot - Control Building : 2nd Floor : CCR จอควบคุม 4 (GNRV 2)									
10	2271878-18	29 Aug 2022	Day time	1	439	-	400-500	-	Pass
Spot - Control Building : 2nd Floor : CCR โต๊ะทำงาน Shift Lead 1 (GNRV 1)									
11	2271878-19	29 Aug 2022	Day time	1	534	-	400-500	-	Pass
Spot - Control Building : 2nd Floor : CCR โต๊ะทำงาน Shift Lead 2 (GNRV 2)									
12	2271878-20	29 Aug 2022	Day time	1	485	-	400-500	-	Pass
Spot - Control Building : 2nd Floor : DCS Room โต๊ะคอมฯ (Server)									
13	2271878-21	29 Aug 2022	Day time	1	470	-	400-500	-	Pass

Technical Management

Supot Salamteh
Section Head

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Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima 30000
P/O : สัญญาเลขที่4600001546
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2271878

Date Received : Sep 05, 2022
Date Reported : Sep 08, 2022
Report Number : 2427056-1

Page 2 of 2

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot / Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
14	Spot - Control Building : 2nd Floor : DCS Room ไต้ะคอมฯ (Steam Turbine)								
	2271878-22	29 Aug 2022	Day time	1	414	-	400-500	-	Pass
15	Spot - Control Building : 2nd Floor : DCS Room ไต้ะคอมฯ (HDSR)								
	2271878-23	29 Aug 2022	Day time	1	410	-	400-500	-	Pass
16	Spot - Control Building : 2nd Floor : Operation Manager								
	2271878-24	29 Aug 2022	Day time	1	610	-	400-500	-	Pass

Measurement by : Jessadin Kongsukdithai Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot Salamteh
Section Head

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Assistant Manager

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P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2271952

Date Received : Sep 05, 2022
Date Reported : Sep 07, 2022
Report Number : 2427105-1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Area - Control Building : 1st Floor : Battery Room									
2.1	2271952-1	29 Aug 2022	Day time	1	637	653.5	100	200	Pass
2.2	2271952-2	29 Aug 2022	Day time	2	670				
Area - Control Building : 1st Floor : บันไดฝั่งหน้าอาคาร									
3.1	2271952-3	29 Aug 2022	Day time	1	101	149.0	50	100	Pass
3.2	2271952-4	29 Aug 2022	Day time	2	197				

Measurement by : Jessadin Kongsukdithai Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

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789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima 30000
P/O : สัญญาเลขที่4600001546
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2271883

Date Received : Sep 05, 2022
Date Reported : Sep 28, 2022
Report Number : 2427074-1

Page 1 of 2

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Area - Workshop : Ground Floor : Corridor : ทางเดินหน้าประตูทางเข้า Warehouse									
1.1	2271993-1	28 Aug 2022	Day time	1	168	132.5	50	100	Pass
1.2	2271993-2	28 Aug 2022	Day time	2	86				
Area - Workshop : Ground Floor : Men Toilet									
2.1	2271993-3	28 Aug 2022	Day time	1	761	630.5	50	100	Pass
2.2	2271993-4	28 Aug 2022	Day time	2	500				
Area - Workshop : Ground Floor : Women Toilet									
3.1	2271993-5	28 Aug 2022	Day time	1	517	611.5	50	100	Pass
3.2	2271993-6	28 Aug 2022	Day time	2	706				
Area - Workshop : Ground Floor : Temp Control Part Room									
4.1	2271993-7	28 Aug 2022	Day time	1	225	211.7	50	100	Pass
4.2	2271993-9	28 Aug 2022	Day time	2	204				
4.3	2271993-8	28 Aug 2022	Day time	3	206				
Area - Workshop : Ground Floor : Electrical Control Room									
6.1	2271993-12	28 Aug 2022	Day time	1	281	307.5	100	200	Pass
6.2	2271993-13	28 Aug 2022	Day time	2	324				
Area - Workshop : Ground Floor : Warehouse : Zone Consume Parts (1G)									
9.1	2271993-26	28 Aug 2022	Day time	1	261	296.0	100	200	Pass
9.2	2271993-27	28 Aug 2022	Day time	2	272				
9.3	2271993-29	28 Aug 2022	Day time	3	325				
Area - Workshop : Ground Floor : Server Room									
8.1	2271993-28	28 Aug 2022	Day time	1	206	230.5	100	200	Pass
8.2	2271993-30	28 Aug 2022	Day time	2	255				
Area - Workshop : Ground Floor : บันได									
10.1	2271993-31	28 Aug 2022	Day time	1	80	102.0	50	100	Pass
10.2	2271993-32	28 Aug 2022	Day time	2	114				
Spot - Workshop : Ground Floor : คลังพัสดุ GNRV 1									
11	2271993-33	28 Aug 2022	Day time	1	441	-	400-500	-	Pass
Spot - Workshop : Ground Floor : คลังพัสดุ GNRV 2									
12	2271993-34	28 Aug 2022	Day time	1	452	-	400-500	-	Pass
Area - Workshop : Ground Floor : Warehouse : Zone Consume Parts (1JK)									
13.1	2271993-35	28 Aug 2022	Day time	1	188	247.7	100	200	Pass
13.2	2271993-36	28 Aug 2022	Day time	2	203				
13.3	2271993-37	28 Aug 2022	Day time	3	341				

Technical Management

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789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima 30000
P/O : สัญญาเลขที่4600001546
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2271883

Date Received : Sep 05, 2022
Date Reported : Sep 28, 2022
Report Number : 2427074-1

Page 2 of 2

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Area - Workshop : Ground Floor : Warehouse : Zone จอดเครณ									
14.1	2271993-39	28 Aug 2022	Day time	1	320	353.0	100	200	Pass
14.2	2271993-38	28 Aug 2022	Day time	2	425				
14.3	2271993-40	28 Aug 2022	Day time	3	418				
14.4	2271993-41	28 Aug 2022	Day time	4	307				
14.5	2271993-42	28 Aug 2022	Day time	5	327				
14.6	2271993-43	28 Aug 2022	Day time	6	320				

Measurement by : Jessadin Kongsukdithai Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 38D dated February 21 B.E.2561 (2019)

Note : This Analysis test report is reissued to supersede report No 2427074-1 Reported : Sep 09 ,2022 due to revise analytical information.

Technical Management

Supot Salamteh
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Wichan Choonharat
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789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima 30000
P/O : สัญญาเลขที่4600001546
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2271884

Date Received : Sep 05, 2022
Date Reported : Sep 08, 2022
Report Number : 2427075-1

Page 1 of 2

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Area - Workshop : 1st Floor : Copy Room									
1.1	2271884-1	29 Aug 2022	Day time	1	328	416.5	150	300	Pass
1.2	2271884-2	29 Aug 2022	Day time	2	505				
Area - Workshop : 1st Floor : Corridor : ทางเดินหน้าห้องน้ำ									
2.1	2271884-3	29 Aug 2022	Day time	1	108	109.0	50	100	Pass
2.2	2271884-4	29 Aug 2022	Day time	2	110				
Area - Workshop : 1st Floor : Meeting Room									
4.1	2271884-5	29 Aug 2022	Day time	1	321	317.3	150	300	Pass
4.2	2271884-6	29 Aug 2022	Day time	2	298				
4.3	2271884-7	29 Aug 2022	Day time	3	307				
4.4	2271884-8	29 Aug 2022	Day time	4	343				
Area - Workshop : 1st Floor : Men Toilet									
5.1	2271884-9	29 Aug 2022	Day time	1	970	674.0	50	100	Pass
5.2	2271884-10	29 Aug 2022	Day time	2	378				
Area - Workshop : 1st Floor : Women Toilet									
6.1	2271884-11	29 Aug 2022	Day time	1	304	282.0	50	100	Pass
6.2	2271884-12	29 Aug 2022	Day time	2	260				
Spot - Workshop : 1st Floor : C&I โต๊ะทำงาน 1 (Engineer 1) GNRV 1									
7	2271884-13	29 Aug 2022	Day time	1	404	-	400-500	-	Pass
Spot - Workshop : 1st Floor : C&I โต๊ะทำงาน 2 (Engineer 2) GNRV 1									
8	2271884-14	29 Aug 2022	Day time	1	500	-	400-500	-	Pass
Spot - Workshop : 1st Floor : C&I โต๊ะทำงาน 3 (Leader) GNRV 2									
9	2271884-15	29 Aug 2022	Day time	1	523	-	400-500	-	Pass
Spot - Workshop : 1st Floor : C&I โต๊ะทำงาน 4 (Engineer 1) GNRV 2									
10	2271884-16	29 Aug 2022	Day time	1	478	-	400-500	-	Pass
Spot - Workshop : 1st Floor : Electrical โต๊ะทำงาน 1 (Leader) GNRV 2									
11	2271884-17	29 Aug 2022	Day time	1	689	-	400-500	-	Pass
Spot - Workshop : 1st Floor : Electrical โต๊ะทำงาน 2 (Engineer 1) GNRV 1									
12	2271884-18	29 Aug 2022	Day time	1	558	-	400-500	-	Pass
Spot - Workshop : 1st Floor : Electrical โต๊ะทำงาน 3 (Engineer 1) GNRV 2									
13	2271884-19	29 Aug 2022	Day time	1	461	-	400-500	-	Pass
Spot - Workshop : 1st Floor : Electrical โต๊ะทำงาน 4 (Engineer 2) GNRV 2									
14	2271884-20	29 Aug 2022	Day time	1	408	-	400-500	-	Pass

Technical Management

Supot Salamteh
Section Head

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Wichan Choonharat
Assistant Manager

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789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima 30000
P/O : สัญญาเลขที่4600001546
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 2271884

Date Received : Sep 05, 2022
Date Reported : Sep 08, 2022
Report Number : 2427075-1

Page 2 of 2

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
	Spot - Workshop : 1st Floor : Mechanical โต๊ะทำงาน 1 (Leader) GNRV 1								
15	2271884-21	29 Aug 2022	Day time	1	548	-	400-500	-	Pass
	Spot - Workshop : 1st Floor : Mechanical โต๊ะทำงาน 2 (Engineer 1) GNRV 2								
16	2271884-22	29 Aug 2022	Day time	1	556	-	400-500	-	Pass
	Spot - Workshop : 1st Floor : Mechanical โต๊ะทำงาน 3 (Engineer 1) GNRV 1								
17	2271884-23	29 Aug 2022	Day time	1	502	-	400-500	-	Pass
	Spot - Workshop : 1st Floor : Mechanical โต๊ะทำงาน 4 (Engineer 2) GNRV 2								
18	2271884-24	29 Aug 2022	Day time	1	527	-	400-500	-	Pass
	Spot - Workshop : 1st Floor : Miantenance Manager								
19	2271884-25	29 Aug 2022	Day time	1	428	-	400-500	-	Pass

Measurement by : Jessadin Kongsukdithai Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

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P/O : สัญญาเลขที่4600001546
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22119696

Date Received : Oct 03, 2022
Date Reported : Oct 05, 2022
Report Number : 2454380-1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Area - Workshop : Ground Floor : Control & Instument Workshop									
5.1	22119696-1	29 Sep 2022	Day time	1	306	310.0	150	300	Pass
5.2	22119696-2	29 Sep 2022	Day time	2	314				
Area - Workshop : Ground Floor : Electrical & Mechanical Workshop									
7.1	22119696-3	29 Sep 2022	Day time	1	310	319.2	150	300	Pass
7.2	22119696-4	29 Sep 2022	Day time	2	365				
7.3	22119696-5	29 Sep 2022	Day time	3	336				
7.4	22119696-6	29 Sep 2022	Day time	4	339				
7.5	22119696-7	29 Sep 2022	Day time	5	307				
7.6	22119696-8	29 Sep 2022	Day time	6	294				
7.7	22119696-9	29 Sep 2022	Day time	7	302				
7.8	22119696-10	29 Sep 2022	Day time	8	293				
7.9	22119696-11	29 Sep 2022	Day time	9	275				
7.10	22119696-12	29 Sep 2022	Day time	10	349				
7.11	22119696-13	29 Sep 2022	Day time	11	336				
7.12	22119696-14	29 Sep 2022	Day time	12	324				

Measurement by : Jessadin Kongsukdithai Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

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789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : GNRV2-4211200239
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22122178

Date Received : Nov 28, 2022
Date Reported : Dec 22, 2022
Report Number : 2506801-1C11

Page 1 of 2

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
	Area - Workshop : Ground Floor : Corridor : ทางเดินหน้าประตูทางเข้า Warehouse								
1.1	22122178-1	23 Nov 2022	Day time	1	176	141.0	50	100	Pass
1.2	22122178-2	23 Nov 2022	Day time	2	106				
	Area - Workshop : Ground Floor : Men Toilet								
2.1	22122178-3	23 Nov 2022	Day time	1	432	535.0	50	100	Pass
2.2	22122178-4	23 Nov 2022	Day time	2	638				
	Area - Workshop : Ground Floor : Women Toilet								
3.1	22122178-5	23 Nov 2022	Day time	1	695	578.5	50	100	Pass
3.2	22122178-6	23 Nov 2022	Day time	2	462				
	Area - Workshop : Ground Floor : Temp Control Part Room								
4.1	22122178-7	23 Nov 2022	Day time	1	202	191.0	50	100	Pass
4.2	22122178-8	23 Nov 2022	Day time	2	186				
4.3	22122178-9	23 Nov 2022	Day time	3	185				
	Area - Workshop : Ground Floor : Control & Instument Workshop								
5.1	22122178-11	23 Nov 2022	Day time	1	339	328.5	150	300	Pass
5.2	22122178-10	23 Nov 2022	Day time	2	318				
	Area - Workshop : Ground Floor : Electrical Control Room								
6.1	22122178-12	23 Nov 2022	Day time	1	253	232.5	100	200	Pass
6.2	22122178-13	23 Nov 2022	Day time	2	212				
	Area - Workshop : Ground Floor : Electrical & Mechanical Workshop								
7.1	22122178-14	23 Nov 2022	Day time	1	359	309.6	150	300	Pass
7.2	22122178-15	23 Nov 2022	Day time	2	269				
7.3	22122178-16	23 Nov 2022	Day time	3	273				
7.4	22122178-17	23 Nov 2022	Day time	4	313				
7.5	22122178-18	23 Nov 2022	Day time	5	323				
7.6	22122178-19	23 Nov 2022	Day time	6	354				
7.7	22122178-20	23 Nov 2022	Day time	7	357				
7.8	22122178-21	23 Nov 2022	Day time	8	305				
7.9	22122178-22	23 Nov 2022	Day time	9	302				
7.10	22122178-23	23 Nov 2022	Day time	10	342				
7.11	22122178-24	23 Nov 2022	Day time	11	253				
7.12	22122178-25	23 Nov 2022	Day time	12	265				

Technical Management

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789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : GNRV2-4211200239
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22122178

Date Received : Nov 28, 2022
Date Reported : Dec 22, 2022
Report Number : 2506801-1C11

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Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
	Area - Workshop : Ground Floor : Warehouse : Zone Consume Parts (1G)								
8.1	22122178-26	23 Nov 2022	Day time	1	276	278.0	100	200	Pass
8.2	22122178-27	23 Nov 2022	Day time	2	265				
8.3	22122178-28	23 Nov 2022	Day time	3	293				
	Area - Workshop : Ground Floor : Server Room								
9.1	22122178-29	23 Nov 2022	Day time	1	205	230.5	100	200	Pass
9.2	22122178-30	23 Nov 2022	Day time	2	256				
	Area - Workshop : Ground Floor : บันได								
10.1	22122178-31	23 Nov 2022	Day time	1	81	107.5	50	100	Pass
10.2	22122178-32	23 Nov 2022	Day time	2	134				
	Spot - Workshop : Ground Floor : คลังพัสดุ GNRV 1								
11	22122178-33	23 Nov 2022	Day time	1	543	-	400-500	-	Pass
	Spot - Workshop : Ground Floor : คลังพัสดุ GNRV 2								
12	22122178-34	23 Nov 2022	Day time	1	503	-	400-500	-	Pass
	Area - Workshop : Ground Floor : Warehouse : Zone Consume Parts (1JK)								
13.1	22122178-35	23 Nov 2022	Day time	1	162	251.3	100	200	Pass
13.2	22122178-36	23 Nov 2022	Day time	2	239				
13.3	22122178-37	23 Nov 2022	Day time	3	353				
	Area - Workshop : Ground Floor : Warehouse : Zone จอดเคอร์น								
14.1	22122178-38	23 Nov 2022	Day time	1	838	745.3	100	200	Pass
14.2	22122178-39	23 Nov 2022	Day time	2	725				
14.3	22122178-40	23 Nov 2022	Day time	3	835				
14.4	22122178-41	23 Nov 2022	Day time	4	723				
14.5	22122178-42	23 Nov 2022	Day time	5	665				
14.6	22122178-43	23 Nov 2022	Day time	6	686				

Measurement by : Jessadin Kongsukdithai Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot Salamteh
Section Head

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Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : GNRV2-4211200239
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22122169

Date Received : Nov 28, 2022
Date Reported : Dec 15, 2022
Report Number : 2506789-1C11

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Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
	Area - Administration Building : Ground Floor : Meeting Room 2								
1.1	22122169-1	23 Nov 2022	Day time	1	2,280	1,464	150	300	Pass
1.2	22122169-2	23 Nov 2022	Day time	2	606				
1.3	22122169-3	23 Nov 2022	Day time	3	2,290				
1.4	22122169-4	23 Nov 2022	Day time	4	225				
1.5	22122169-5	23 Nov 2022	Day time	5	421				
1.6	22122169-6	23 Nov 2022	Day time	6	793				
1.7	22122169-7	23 Nov 2022	Day time	7	413				
1.8	22122169-8	23 Nov 2022	Day time	8	505				
1.9	22122169-9	23 Nov 2022	Day time	9	494				
1.10	22122169-10	23 Nov 2022	Day time	10	581				
	Spot - Administration Building : Ground Floor : Plant Manager								
2	22122169-11	23 Nov 2022	Day time	1	460	-	400-500	-	Pass
	Spot - Administration Building : Ground Floor : SHE Room โต๊ะคอมฯ 1								
3	22122169-12	23 Nov 2022	Day time	1	577	-	400-500	-	Pass
	Spot - Administration Building : Ground Floor : SHE Room โต๊ะคอมฯ 2								
4	22122169-13	23 Nov 2022	Day time	1	410	-	400-500	-	Pass
	Area - Administration Building : Ground Floor : Meeting Room								
5.1	22122169-14	23 Nov 2022	Day time	1	330	322.5	150	300	Pass
5.2	22122169-15	23 Nov 2022	Day time	2	315				
	Area - Administration Building : Ground Floor : ห้องรับแขก								
6.1	22122169-16	23 Nov 2022	Day time	1	171	260.2	50	100	Pass
6.2	22122169-17	23 Nov 2022	Day time	2	319				
6.3	22122169-18	23 Nov 2022	Day time	3	343				
6.4	22122169-19	23 Nov 2022	Day time	4	249				
6.5	22122169-20	23 Nov 2022	Day time	5	245				
6.6	22122169-21	23 Nov 2022	Day time	6	234				
	Area - Administration Building : Ground Floor : Copy Room								
7.1	22122169-22	23 Nov 2022	Day time	1	437	444.5	150	300	Pass
7.2	22122169-23	23 Nov 2022	Day time	2	452				
	Area - Administration Building : Ground Floor : Server Room								
8.1	22122169-24	23 Nov 2022	Day time	1	170	215.0	100	200	Pass
8.2	22122169-25	23 Nov 2022	Day time	2	260				

Technical Management

Supot S

Supot Salamteh
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Wichan Choonharat
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Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : GNRV2-4211200239
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22122169

Date Received : Nov 28, 2022
Date Reported : Dec 15, 2022
Report Number : 2506789-1C11

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Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
9	Spot - Administration Building : Ground Floor : GA Manager								
9	22122169-26	23 Nov 2022	Day time	1	863	-	400-500	-	Pass
10	Spot - Administration Building : Ground Floor : โต๊ะคอมฯ เจ้าหน้าที่จัดซื้อ 2 GNRV 2								
10	22122169-27	23 Nov 2022	Day time	1	418	-	400-500	-	Pass
11	Spot - Administration Building : Ground Floor : โต๊ะคอมฯ เจ้าหน้าที่จัดซื้อ 1 GNRV 1								
11	22122169-28	23 Nov 2022	Day time	1	404	-	400-500	-	Pass
12	Spot - Administration Building : Ground Floor : โต๊ะคอมฯ IT								
12	22122169-29	23 Nov 2022	Day time	1	645	-	400-500	-	Pass
13	Spot - Administration Building : Ground Floor : โต๊ะคอมฯ GA Officer GNRV 1								
13	22122169-30	23 Nov 2022	Day time	1	557	-	400-500	-	Pass
14	Spot - Administration Building : Ground Floor : โต๊ะคอมฯ GA Officer GNRV 2								
14	22122169-31	23 Nov 2022	Day time	1	591	-	400-500	-	Pass
16.1	Area - Administration Building : Ground Floor : Corridor (จากหน้าห้องประชุมเล็กถึงห้องประชุมใหญ่)								
16.1	22122169-32	23 Nov 2022	Day time	1	248	148.2	50	100	Pass
16.2	22122169-33	23 Nov 2022	Day time	2	165				
16.3	22122169-34	23 Nov 2022	Day time	3	106				
16.4	22122169-35	23 Nov 2022	Day time	4	130				
16.5	22122169-36	23 Nov 2022	Day time	5	81				
16.6	22122169-37	23 Nov 2022	Day time	6	159				
17.1	Area - Administration Building : Ground Floor : ห้องเก็บของ								
17.1	22122169-38	23 Nov 2022	Day time	1	613	529.0	50	100	Pass
17.2	22122169-39	23 Nov 2022	Day time	2	445				
18.1	Area - Administration Building : Ground Floor : Electrical Control Room								
18.1	22122169-40	23 Nov 2022	Day time	1	448	584.5	100	200	Pass
18.2	22122169-41	23 Nov 2022	Day time	2	721				
19.1	Area - Administration Building : Ground Floor : Men Toilet								
19.1	22122169-42	23 Nov 2022	Day time	1	721	605.0	50	100	Pass
19.2	22122169-43	23 Nov 2022	Day time	2	489				
20.1	Area - Administration Building : Ground Floor : Women Toilet								
20.1	22122169-44	23 Nov 2022	Day time	1	823	608.0	50	100	Pass
20.2	22122169-45	23 Nov 2022	Day time	2	393				

Technical Management

Supot S

Supot Salamteh
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Wichan Choonharat
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Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : GNRV2-4211200239
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22122169

Date Received : Nov 28, 2022
Date Reported : Dec 15, 2022
Report Number : 2506789-1C11

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Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Area - Administration Building : Ground Floor : pantry									
21.1	22122169-46	23 Nov 2022	Day time	1	963	770.8	150	300	Pass
21.2	22122169-47	23 Nov 2022	Day time	2	613				
21.3	22122169-48	23 Nov 2022	Day time	3	909				
21.4	22122169-49	23 Nov 2022	Day time	4	598				
Spot - Administration Building : Ground Floor : โต๊ะคอมพิวเตอร์สำรอง									
22	22122169-50	23 Nov 2022	Day time	1	416	-	400-500	-	Pass

Measurement by : Jessadin Kongsukdithai Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot Salamteh
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789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : GNRV2-4211200239
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22122170

Date Received : Nov 28, 2022
Date Reported : Dec 15, 2022
Report Number : 2506791-1C11

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Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Area - Control Building : 1st Floor : Battery Room									
1.1	22122170-1	24 Nov 2022	Day time	1	516	425.0	100	200	Pass
1.2	22122170-2	24 Nov 2022	Day time	2	334				
Area - Control Building : 1st Floor : บันได (ทางเดินหน้าห้อง MCC)									
2.1	22122170-3	24 Nov 2022	Day time	1	160	233.0	50	100	Pass
2.2	22122170-4	24 Nov 2022	Day time	2	306				
Area - Control Building : 1st Floor : MCC Room									
3.1	22122170-5	24 Nov 2022	Day time	1	355	314.5	100	200	Pass
3.2	22122170-6	24 Nov 2022	Day time	2	203				
3.3	22122170-7	24 Nov 2022	Day time	3	310				
3.4	22122170-8	24 Nov 2022	Day time	4	474				
3.5	22122170-9	24 Nov 2022	Day time	5	385				
3.6	22122170-10	24 Nov 2022	Day time	6	357				
3.7	22122170-11	24 Nov 2022	Day time	7	401				
3.8	22122170-12	24 Nov 2022	Day time	8	215				
3.9	22122170-13	24 Nov 2022	Day time	9	294				
3.10	22122170-14	24 Nov 2022	Day time	10	208				
3.11	22122170-15	24 Nov 2022	Day time	11	402				
3.12	22122170-16	24 Nov 2022	Day time	12	227				
3.13	22122170-17	24 Nov 2022	Day time	13	331				
3.14	22122170-18	24 Nov 2022	Day time	14	255				
3.15	22122170-19	24 Nov 2022	Day time	15	414				
3.16	22122170-20	24 Nov 2022	Day time	16	426				
3.17	22122170-21	24 Nov 2022	Day time	17	207				
3.18	22122170-22	24 Nov 2022	Day time	18	231				

Measurement by : Sessadin Hongsukdithai Personnel of ALW Laboratory Group zThailand/ Co., Ltd.

Guideline : Notification of Department of Labour Protection and (elfare,) .E.2560 z2017/ dated November 27,) .E.2560 z2017/, and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21) .E.2561 z2018/

Technical Management

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Section Head

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Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : GNRV2-4211200239
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22122171

Date Received : Nov 28, 2022
Date Reported : Dec 15, 2022
Report Number : 2506793-1C11

Page 1 of 2

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
	Area - Control Building : 2nd Floor : Corridor (ทางเดินก่อนลงบันได)								
1.1	22122171-1	24 Nov 2022	Day time	1	432	460.5	50	100	Pass
1.2	22122171-2	24 Nov 2022	Day time	2	489				
	Area - Control Building : 2nd Floor : Men Toilet								
2.1	22122171-3	24 Nov 2022	Day time	1	338	450.3	50	100	Pass
2.2	22122171-4	24 Nov 2022	Day time	2	316				
2.3	22122171-5	24 Nov 2022	Day time	3	724				
2.4	22122171-6	24 Nov 2022	Day time	4	423				
	Area - Control Building : 2nd Floor : Women Toilet								
3.1	22122171-7	24 Nov 2022	Day time	1	488	382.0	50	100	Pass
3.2	22122171-8	24 Nov 2022	Day time	2	276				
	Area - Control Building : 2nd Floor : Pantry Room								
4.1	22122171-9	24 Nov 2022	Day time	1	884	799.0	150	300	Pass
4.2	22122171-10	24 Nov 2022	Day time	2	714				
	Spot - Control Building : 2nd Floor : Utility Room (หน้าตู้ควบคุม C-2DB1)								
5	22122171-11	24 Nov 2022	Day time	1	653	-	200-300	-	Pass
	Area - Control Building : 2nd Floor : DCS Room (บริเวณหน้าตู้ควบคุม)								
6.1	22122171-12	24 Nov 2022	Day time	1	354	482.3	100	200	Pass
6.2	22122171-13	24 Nov 2022	Day time	2	535				
6.3	22122171-14	24 Nov 2022	Day time	3	558				
	Spot - Control Building : 2nd Floor : CCR จอควบคุม 1 (GNRV 1)								
7	22122171-15	24 Nov 2022	Day time	1	423	-	400-500	-	Pass
	Spot - Control Building : 2nd Floor : CCR จอควบคุม 2 (GNRV 1)								
8	22122171-16	24 Nov 2022	Day time	1	415	-	400-500	-	Pass
	Spot - Control Building : 2nd Floor : CCR จอควบคุม 3 (GNRV 2)								
9	22122171-17	24 Nov 2022	Day time	1	407	-	400-500	-	Pass
	Spot - Control Building : 2nd Floor : CCR จอควบคุม 4 (GNRV 2)								
10	22122171-18	24 Nov 2022	Day time	1	411	-	400-500	-	Pass
	Spot - Control Building : 2nd Floor : CCR โต๊ะทำงาน Shift Lead 1 (GNRV 1)								
11	22122171-19	24 Nov 2022	Day time	1	557	-	400-500	-	Pass
	Spot - Control Building : 2nd Floor : CCR โต๊ะทำงาน Shift Lead 2 (GNRV 2)								
12	22122171-20	24 Nov 2022	Day time	1	531	-	400-500	-	Pass
	Spot - Control Building : 2nd Floor : DCS Room โต๊ะคอมฯ (Server)								
13	22122171-21	24 Nov 2022	Day time	1	602	-	400-500	-	Pass

Technical Management

Supot Salamteh
Section Head

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Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : GNRV2-4211200239
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22122171

Date Received : Nov 28, 2022
Date Reported : Dec 15, 2022
Report Number : 2506793-1C11

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Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
14	Spot - Control Building : 2nd Floor : DCS Room ไต้ะคณมา (Steam Turbine)								
	22122171-22	24 Nov 2022	Day time	1	409	-	400-500	-	Pass
15	Spot - Control Building : 2nd Floor : DCS Room ไต้ะคณมา (HDSR)								
	22122171-23	24 Nov 2022	Day time	1	406	-	400-500	-	Pass
16	Spot - Control Building : 2nd Floor : Operation Manager								
	22122171-24	24 Nov 2022	Day time	1	503	-	400-500	-	Pass

Measurement by : Jessadin Kongsukdithai Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

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789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22122466

Date Received : Nov 29, 2022
Date Reported : Dec 14, 2022
Report Number : 2508086-1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Area - Control Building : 1st Floor : MCC Room									
1.1	22122466-1	24 Nov 2022	Day time	1	683	800.6	100	200	Pass
1.2	22122466-2	24 Nov 2022	Day time	2	327				
1.3	22122466-3	24 Nov 2022	Day time	3	605				
1.4	22122466-4	24 Nov 2022	Day time	4	981				
1.5	22122466-5	24 Nov 2022	Day time	5	541				
1.6	22122466-6	24 Nov 2022	Day time	6	837				
1.7	22122466-7	24 Nov 2022	Day time	7	975				
1.8	22122466-8	24 Nov 2022	Day time	8	938				
1.9	22122466-9	24 Nov 2022	Day time	9	430				
1.10	22122466-10	24 Nov 2022	Day time	10	322				
1.11	22122466-11	24 Nov 2022	Day time	11	559				
1.12	22122466-12	24 Nov 2022	Day time	12	685				
1.13	22122466-13	24 Nov 2022	Day time	13	399				
1.14	22122466-14	24 Nov 2022	Day time	14	885				
1.15	22122466-15	24 Nov 2022	Day time	15	1,235				
1.16	22122466-16	24 Nov 2022	Day time	16	858				
1.17	22122466-17	24 Nov 2022	Day time	17	923				
1.18	22122466-18	24 Nov 2022	Day time	18	1,330				
Area - Control Building : 1st Floor : Battery Room									
2.1	22122466-19	24 Nov 2022	Day time	1	536	529.0	100	200	Pass
2.2	22122466-20	24 Nov 2022	Day time	2	522				

Measurement by : Jessadin Kongsukdithai Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

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Analysis / Test Report

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789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : สัญญาเลขที่4600001547
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22122467

Date Received : Nov 28, 2022
Date Reported : Dec 14, 2022
Report Number : 2508088-1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Spot - Control Building : 2nd Floor : Utility Room : หน้าตู้ควบคุม E-2DB1)									
1	22122467-1	24 Nov 2022	Day time	1	262	-	200-300	-	Pass
Area - Control Building : 2nd Floor : DCS Room									
2.1	22122467-2	24 Nov 2022	Day time	1	515	507.7	100	200	Pass
2.2	22122467-3	24 Nov 2022	Day time	2	567				
2.3	22122467-4	24 Nov 2022	Day time	3	441				
Spot - Control Building : 2nd Floor : DCS Room : โต๊ะคอม									
3	22122467-5	24 Nov 2022	Day time	1	487	-	400-500	-	Pass

Measurement by : Jessadin Kongsukdithai Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot Salamteh
Section Head

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Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : GNRV2-4211200239
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22122177

Date Received : Nov 28, 2022
Date Reported : Dec 15, 2022
Report Number : 2506799-1C11

Page 1 of 2

Page 2 of 3

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Area - Workshop : 1st Floor : Copy Room									
1.1	22122177-1	23 Nov 2022	Day time	1	353	395.0	150	300	Pass
1.2	22122177-2	23 Nov 2022	Day time	2	437				
Area - Workshop : 1st Floor : Corridor : ทางเดินหน้าห้องน้ำ									
2.1	22122177-3	23 Nov 2022	Day time	1	89	103.5	50	100	Pass
2.2	22122177-4	23 Nov 2022	Day time	2	118				
Area - Workshop : 1st Floor : Meeting Room									
4.1	22122177-5	23 Nov 2022	Day time	1	530	576.8	150	300	Pass
4.2	22122177-6	23 Nov 2022	Day time	2	460				
4.3	22122177-7	23 Nov 2022	Day time	3	657				
4.4	22122177-8	23 Nov 2022	Day time	4	660				
Area - Workshop : 1st Floor : Men Toilet									
5.1	22122177-9	23 Nov 2022	Day time	1	567	467.0	50	100	Pass
5.2	22122177-10	23 Nov 2022	Day time	2	367				
Area - Workshop : 1st Floor : Women Toilet									
6.1	22122177-11	23 Nov 2022	Day time	1	263	234.5	50	100	Pass
6.2	22122177-12	23 Nov 2022	Day time	2	206				
Spot - Workshop : 1st Floor : C&I โต๊ะทำงาน 1 (Engineer 1) GNRV 1									
7	22122177-13	23 Nov 2022	Day time	1	431	-	400-500	-	Pass
Spot - Workshop : 1st Floor : C&I โต๊ะทำงาน 2 (Engineer 2) GNRV 1									
8	22122177-14	23 Nov 2022	Day time	1	526	-	400-500	-	Pass
Spot - Workshop : 1st Floor : C&I โต๊ะทำงาน 3 (Leader) GNRV 2									
9	22122177-15	23 Nov 2022	Day time	1	514	-	400-500	-	Pass
Spot - Workshop : 1st Floor : C&I โต๊ะทำงาน 4 (Engineer 1) GNRV 2									
10	22122177-16	23 Nov 2022	Day time	1	461	-	400-500	-	Pass
Spot - Workshop : 1st Floor : Electrical โต๊ะทำงาน 1 (Leader) GNRV 2									
11	22122177-17	23 Nov 2022	Day time	1	665	-	400-500	-	Pass
Spot - Workshop : 1st Floor : Electrical โต๊ะทำงาน 2 (Engineer 1) GNRV 1									
12	22122177-18	23 Nov 2022	Day time	1	592	-	400-500	-	Pass
Spot - Workshop : 1st Floor : Electrical โต๊ะทำงาน 3 (Engineer 1) GNRV 2									
13	22122177-19	23 Nov 2022	Day time	1	424	-	400-500	-	Pass
Spot - Workshop : 1st Floor : Electrical โต๊ะทำงาน 4 (Engineer 2) GNRV 2									
14	22122177-20	23 Nov 2022	Day time	1	407	-	400-500	-	Pass

Technical Management

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Analysis / Test Report

Client : Gulf NRV2 Co., Ltd.
789 Moo 6, T. Nongraveing, A. Muang, Nakhonratchasima Thailand 30000
P/O : GNRV2-4211200239
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22122177

Date Received : Nov 28, 2022
Date Reported : Dec 15, 2022
Report Number : 2506799-1C11

Page 2 of 2

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
	Spot - Workshop : 1st Floor : Mechanical โต๊ะทำงาน 1 (Leader) GNRV 1								
15	22122177-21	23 Nov 2022	Day time	1	494	-	400-500	-	Pass
	Spot - Workshop : 1st Floor : Mechanical โต๊ะทำงาน 2 (Engineer 1) GNRV 2								
16	22122177-22	23 Nov 2022	Day time	1	608	-	400-500	-	Pass
	Spot - Workshop : 1st Floor : Mechanical โต๊ะทำงาน 3 (Engineer 1) GNRV 1								
17	22122177-23	23 Nov 2022	Day time	1	487	-	400-500	-	Pass
	Spot - Workshop : 1st Floor : Mechanical โต๊ะทำงาน 4 (Engineer 2) GNRV 2								
18	22122177-24	23 Nov 2022	Day time	1	512	-	400-500	-	Pass
	Spot - Workshop : 1st Floor : Miantenance Manager								
19	22122177-25	23 Nov 2022	Day time	1	497	-	400-500	-	Pass

Measurement by : Jessadin Kongsukdithai Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

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P/O : GNRV2-4211200239
Project Name : Monitoring EIA
Project Location : GNRV2

Lot ID: 22122178

Date Received : Nov 28, 2022
Date Reported : Dec 22, 2022
Report Number : 2506801-1C11

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Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
	Area - Workshop : Ground Floor : Corridor : ทางเดินหน้าประตูทางเข้า Warehouse								
1.1	22122178-1	23 Nov 2022	Day time	1	176	141.0	50	100	Pass
1.2	22122178-2	23 Nov 2022	Day time	2	106				
	Area - Workshop : Ground Floor : Men Toilet								
2.1	22122178-3	23 Nov 2022	Day time	1	432	535.0	50	100	Pass
2.2	22122178-4	23 Nov 2022	Day time	2	638				
	Area - Workshop : Ground Floor : Women Toilet								
3.1	22122178-5	23 Nov 2022	Day time	1	695	578.5	50	100	Pass
3.2	22122178-6	23 Nov 2022	Day time	2	462				
	Area - Workshop : Ground Floor : Temp Control Part Room								
4.1	22122178-7	23 Nov 2022	Day time	1	202	191.0	50	100	Pass
4.2	22122178-8	23 Nov 2022	Day time	2	186				
4.3	22122178-9	23 Nov 2022	Day time	3	185				
	Area - Workshop : Ground Floor : Control & Instument Workshop								
5.1	22122178-11	23 Nov 2022	Day time	1	339	328.5	150	300	Pass
5.2	22122178-10	23 Nov 2022	Day time	2	318				
	Area - Workshop : Ground Floor : Electrical Control Room								
6.1	22122178-12	23 Nov 2022	Day time	1	253	232.5	100	200	Pass
6.2	22122178-13	23 Nov 2022	Day time	2	212				
	Area - Workshop : Ground Floor : Electrical & Mechanical Workshop								
7.1	22122178-14	23 Nov 2022	Day time	1	359	309.6	150	300	Pass
7.2	22122178-15	23 Nov 2022	Day time	2	269				
7.3	22122178-16	23 Nov 2022	Day time	3	273				
7.4	22122178-17	23 Nov 2022	Day time	4	313				
7.5	22122178-18	23 Nov 2022	Day time	5	323				
7.6	22122178-19	23 Nov 2022	Day time	6	354				
7.7	22122178-20	23 Nov 2022	Day time	7	357				
7.8	22122178-21	23 Nov 2022	Day time	8	305				
7.9	22122178-22	23 Nov 2022	Day time	9	302				
7.10	22122178-23	23 Nov 2022	Day time	10	342				
7.11	22122178-24	23 Nov 2022	Day time	11	253				
7.12	22122178-25	23 Nov 2022	Day time	12	265				

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Lot ID: 22122178

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Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
	Area - Workshop : Ground Floor : Warehouse : Zone Consume Parts (1G)								
8.1	22122178-26	23 Nov 2022	Day time	1	276	278.0	100	200	Pass
8.2	22122178-27	23 Nov 2022	Day time	2	265				
8.3	22122178-28	23 Nov 2022	Day time	3	293				
	Area - Workshop : Ground Floor : Server Room								
9.1	22122178-29	23 Nov 2022	Day time	1	205	230.5	100	200	Pass
9.2	22122178-30	23 Nov 2022	Day time	2	256				
	Area - Workshop : Ground Floor : บันได								
10.1	22122178-31	23 Nov 2022	Day time	1	81	107.5	50	100	Pass
10.2	22122178-32	23 Nov 2022	Day time	2	134				
	Spot - Workshop : Ground Floor : คลังพัสดุ GNRV 1								
11	22122178-33	23 Nov 2022	Day time	1	543	-	400-500	-	Pass
	Spot - Workshop : Ground Floor : คลังพัสดุ GNRV 2								
12	22122178-34	23 Nov 2022	Day time	1	503	-	400-500	-	Pass
	Area - Workshop : Ground Floor : Warehouse : Zone Consume Parts (1JK)								
13.1	22122178-35	23 Nov 2022	Day time	1	162	251.3	100	200	Pass
13.2	22122178-36	23 Nov 2022	Day time	2	239				
13.3	22122178-37	23 Nov 2022	Day time	3	353				
	Area - Workshop : Ground Floor : Warehouse : Zone จอดเคอร์น								
14.1	22122178-38	23 Nov 2022	Day time	1	838	745.3	100	200	Pass
14.2	22122178-39	23 Nov 2022	Day time	2	725				
14.3	22122178-40	23 Nov 2022	Day time	3	835				
14.4	22122178-41	23 Nov 2022	Day time	4	723				
14.5	22122178-42	23 Nov 2022	Day time	5	665				
14.6	22122178-43	23 Nov 2022	Day time	6	686				

Measurement by : Jessadin Kongsukdithai Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

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