

Request No. LA65-R0537

Report No. R6505-0612

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd

ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

SAMPLE SOURCE : EOEG Plant

SAMPLE POINT : Waste Heat Boiler

SAMPLING DATE : 06/05/2022

RECEIVED DATE : 06/05/2022

STACK DESCRIPTION

Height : 23.00 m	Type of Process : Combustion
Diameter : 0.80 m	Type of Fuel : Natural Gas
Temperature : 173.00 °C	Oxygen Content : 5.07 %
Air Velocity : 6.32 m/s	Barometric Pressure : 751.75 mm.Hg
Flow rate ³ : 1.51 m ³ /s	Atmospheric Temperature : 33.00 °C
Moisture Content : 27.93 %	

PARAMETER*	TEST METHOD	TIME	RESULT ³		STD ¹	UNIT
			5.07 % O ₂	7 % O ₂		
Oxides of Nitrogen	US.EPA Method 7E	10:31-11:30	44.0	38.6	376, 85.0 ²	mg/m ³
(NO _x as NO ₂)			23.4	20.5	200, 45.2 ²	ppm
			0.0664	-	0.068 ²	g/s

REMARK:¹ Notification of The Ministry of Industry B.E. 2549 (2006)² ค่าที่กำหนดไว้ในรายงานการเปลี่ยนแปลงรายละเอียดโครงการในรายงานการวิเคราะห์ผลกระทบสิ่งแวดล้อม (EIA) ของโครงการโรงงานผลิตเอทิลีนออกไซด์และเอทิลีนไกลคอล (ครั้งที่ 4) ของบริษัท จีซี ไกลคอล จำกัด พ.ศ. 2561³ DRY BASIS (25°C, 760 mm.Hg)

* Sampling By Mr. Metee Sukprasert



Approved By.....

(MR. THONGCHAI BOONSAK)

13/05/2022

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA65-R0678

Report No. R6506-3213

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd

ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

SAMPLE SOURCE : EOEG Plant

SAMPLE POINT : Waste Heat Boiler

SAMPLE NO. : 13497

SAMPLING DATE : 14/06/2022

SAMPLING TIME : 10:31-11:30

RECEIVED DATE : 14/06/2022

REPORTED DATE : 21/06/2022

STACK DESCRIPTION

Height :	23.00	m	Type of Process :	Combustion
Diameter :	0.80	m	Type of Fuel :	Natural Gas
Temperature :	180.00	°C	Oxygen Content :	4.80 %
Air Velocity :	6.14	m/s	Barometric Pressure :	754.00 mm.Hg
Flow rate ³ :	1.45	m ³ /s	Atmospheric Temperature :	33.00 °C
Moisture Content :	28.17	%		

PARAMETER*	TEST METHOD	TIME	RESULT ³		STD ¹	UNIT
			4.80 % O ₂	7 % O ₂		
Oxides of Nitrogen	US.EPA Method 7E	10:31-11:30	41.2	35.6	376, 85.0 ²	mg/m ³
(NO _x as NO ₂)			21.9	18.9	200, 45.2 ²	ppm
			0.0597	-	0.068 ²	g/s

REMARK:¹ Notification of The Ministry of Industry B.E. 2549 (2006)² ค่าที่กำหนดไว้ในรายงานการเปลี่ยนแปลงรายละเอียดโครงการในรายงานการวิเคราะห์ผลกระทบสิ่งแวดล้อม (EIA) ของโครงการโรงงานผลิตเอทิลีนออกไซด์และเอทิลีนไกลคอล (ครั้งที่ 4) ของบริษัท จีซี ไกลคอล จำกัด พ.ศ. 2561³ DRY BASIS (25°C, 760 mm.Hg)

* Sampling By Mr. Metee Sukprasert



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By Thongchai Boonsak

(MR. THONGCHAI BOONSAK)

21/06/2022

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Request No. LA65-R0555

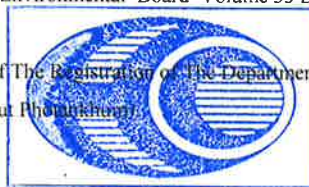
Report No. R6505-0873 – R6505-0879

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
SAMPLE SOURCE : EOEG Plant
SAMPLE POINT : บ้านหนองแฟบ
PARAMETER* : Nitrogen Dioxide
DETERMINATION METHOD : Chemiluminescence
INSTRUMENT : API Model T200 S/N 6756

SAMPLE NO. : 07761-07767
SAMPLING DATE : 06-13/05/2022
RECEIVED DATE : 13/05/2022
REPORTED DATE : 18/05/2022

TIME / DATE	06-07/05/2022	07-08/05/2022	08-09/05/2022	UNIT
08:00 – 09:00 ²	0.002	0.006	0.001	ppm
09:00 – 10:00	<0.001	0.026	0.002	ppm
10:00 – 11:00	0.006	0.016	0.002	ppm
11:00 – 12:00	0.016	0.016	0.002	ppm
12:00 – 13:00	0.015	0.012	0.002	ppm
13:00 – 14:00	0.013	0.009	0.002	ppm
14:00 – 15:00	0.011	0.007	0.002	ppm
15:00 – 16:00	0.012	0.004	0.003	ppm
16:00 – 17:00	0.009	0.010	0.003	ppm
17:00 – 18:00	0.021	0.026	0.003	ppm
18:00 – 19:00	0.013	0.018	0.003	ppm
19:00 – 20:00	0.015	0.015	0.005	ppm
20:00 – 21:00	0.018	0.010	0.004	ppm
21:00 – 22:00	0.016	0.009	0.002	ppm
22:00 – 23:00	0.018	0.008	0.003	ppm
23:00 – 00:00	0.016	0.006	0.007	ppm
00:00 – 01:00	0.014	0.004	0.007	ppm
01:00 – 02:00	0.018	0.005	0.002	ppm
02:00 – 03:00	0.015	0.004	0.003	ppm
03:00 – 04:00	0.011	0.004	0.004	ppm
04:00 – 05:00	0.010	0.003	0.005	ppm
05:00 – 06:00	0.012	0.002	0.005	ppm
06:00 – 07:00	0.007	0.002	0.004	ppm
07:00 – 08:00	0.006	0.001	0.003	ppm
Maximum 1 hr.	0.021	0.026	0.007	ppm
Average 24 hr.	0.012	0.009	0.003	ppm
Standard (1 hr.) ¹	0.17	0.17	0.17	ppm

REMARK : ¹ Notification of The National Environmental Board Volume 33 B.E. 2552 (2009)² Start Time* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Measurement By Mr. Tummarat Phomkham)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By: 

(MS. THANATPORN KLINSOPON)

18/05/2022

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Request No. LA65-R0555

Report No. R6505-0873 – R6505-0879

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd
 ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
 Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
 SAMPLE SOURCE : EOEG Plant
 SAMPLE POINT : บ้านหนองแฟบ
 PARAMETER* : Nitrogen Dioxide
 DETERMINATION METHOD : Chemiluminescence
 INSTRUMENT : API Model T200 S/N 6756

SAMPLE NO. : 07761-07767
 SAMPLING DATE : 06-13/05/2022
 RECEIVED DATE : 13/05/2022
 REPORTED DATE : 18/05/2022

TIME / DATE	09-10/05/2022	10-11/05/2022	11-12/05/2022	UNIT
08:00 – 09:00 ²	0.004	0.004	0.003	ppm
09:00 – 10:00	0.004	0.003	0.001	ppm
10:00 – 11:00	0.006	0.002	<0.001	ppm
11:00 – 12:00	0.003	0.001	0.001	ppm
12:00 – 13:00	0.004	<0.001	0.001	ppm
13:00 – 14:00	0.003	<0.001	0.001	ppm
14:00 – 15:00	0.004	<0.001	0.001	ppm
15:00 – 16:00	0.002	<0.001	0.001	ppm
16:00 – 17:00	0.002	<0.001	0.001	ppm
17:00 – 18:00	0.003	0.001	0.003	ppm
18:00 – 19:00	0.002	0.003	0.002	ppm
19:00 – 20:00	0.002	0.003	0.003	ppm
20:00 – 21:00	0.002	0.003	0.002	ppm
21:00 – 22:00	0.002	0.004	0.001	ppm
22:00 – 23:00	0.001	0.003	<0.001	ppm
23:00 – 00:00	0.003	0.006	<0.001	ppm
00:00 – 01:00	0.001	0.004	<0.001	ppm
01:00 – 02:00	0.001	0.002	<0.001	ppm
02:00 – 03:00	0.001	0.001	<0.001	ppm
03:00 – 04:00	0.001	0.001	<0.001	ppm
04:00 – 05:00	0.005	<0.001	<0.001	ppm
05:00 – 06:00	0.002	0.001	<0.001	ppm
06:00 – 07:00	0.004	0.002	0.001	ppm
07:00 – 08:00	0.005	0.003	0.004	ppm
Maximum 1 hr.	0.006	0.006	0.004	ppm
Average 24 hr.	0.003	0.002	0.001	ppm
Standard (1 hr.) ¹	0.17	0.17	0.17	ppm

REMARK : ¹ Notification of The National Environmental Board Volume 33 B.E. 2552 (2009)² Start Time* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Measurement By Mr. Tummarut Phrakhanas)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(MS. THANATPORN KLINSOPON)

18/05/2022

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Request No. LA65-R0555

Report No. R6505-0873 – R6505-0879

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd
 ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
 Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
 SAMPLE SOURCE : EOEG Plant
 SAMPLE POINT : บ้านหนองแพ้ว
 PARAMETER* : Nitrogen Dioxide
 DETERMINATION METHOD : Chemiluminescence
 INSTRUMENT : API Model T200 S/N 6756

SAMPLE NO. : 07761-07767
 SAMPLING DATE : 06-13/05/2022
 RECEIVED DATE : 13/05/2022
 REPORTED DATE : 18/05/2022

TIME / DATE	12-13/05/2022	UNIT
08:00 – 09:00 ²	0.003	ppm
09:00 – 10:00	0.001	ppm
10:00 – 11:00	<0.001	ppm
11:00 – 12:00	<0.001	ppm
12:00 – 13:00	<0.001	ppm
13:00 – 14:00	0.001	ppm
14:00 – 15:00	0.001	ppm
15:00 – 16:00	0.001	ppm
16:00 – 17:00	0.001	ppm
17:00 – 18:00	0.001	ppm
18:00 – 19:00	0.002	ppm
19:00 – 20:00	0.003	ppm
20:00 – 21:00	0.002	ppm
21:00 – 22:00	0.001	ppm
22:00 – 23:00	0.001	ppm
23:00 – 00:00	0.001	ppm
00:00 – 01:00	<0.001	ppm
01:00 – 02:00	<0.001	ppm
02:00 – 03:00	<0.001	ppm
03:00 – 04:00	<0.001	ppm
04:00 – 05:00	<0.001	ppm
05:00 – 06:00	<0.001	ppm
06:00 – 07:00	0.001	ppm
07:00 – 08:00	0.001	ppm
Maximum 1 hr.	0.003	ppm
Average 24 hr.	0.001	ppm
Standard (1 hr.) ¹	0.17	ppm

REMARK : ¹ Notification of The National Environmental Board Volume 33 B.E. 2552 (2009)² Start Time* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Measurement By Mr. Tummarat Phatankhuan)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MS. THANATPORN KLINSOPON)

18/05/2022

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Request No. LA65-R0555

Report No. R6505-0887 – R6505-0893

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
SAMPLE SOURCE : EOEG Plant
SAMPLE POINT : วัดมาบชูด
PARAMETER* : Nitrogen Dioxide
DETERMINATION METHOD : Chemiluminescence
INSTRUMENT : API Model T200 S/N 6758

SAMPLE NO. : 07775-07781
SAMPLING DATE : 06-13/05/2022
RECEIVED DATE : 13/05/2022
REPORTED DATE : 18/05/2022

TIME / DATE	06-07/05/2022	07-08/05/2022	08-09/05/2022	UNIT
09:00 – 10:00 ²	0.002	0.015	0.008	ppm
10:00 – 11:00	0.002	0.012	0.010	ppm
11:00 – 12:00	0.013	0.012	0.009	ppm
12:00 – 13:00	0.021	0.017	0.010	ppm
13:00 – 14:00	0.018	0.014	0.014	ppm
14:00 – 15:00	0.017	0.012	0.016	ppm
15:00 – 16:00	0.021	0.012	0.015	ppm
16:00 – 17:00	0.024	0.014	0.017	ppm
17:00 – 18:00	0.026	0.015	0.019	ppm
18:00 – 19:00	0.029	0.018	0.019	ppm
19:00 – 20:00	0.022	0.019	0.009	ppm
20:00 – 21:00	0.013	0.018	0.010	ppm
21:00 – 22:00	0.013	0.018	0.014	ppm
22:00 – 23:00	0.013	0.014	0.014	ppm
23:00 – 00:00	0.014	0.014	0.011	ppm
00:00 – 01:00	0.016	0.011	0.007	ppm
01:00 – 02:00	0.014	0.010	0.007	ppm
02:00 – 03:00	0.012	0.009	0.007	ppm
03:00 – 04:00	0.011	0.010	0.007	ppm
04:00 – 05:00	0.012	0.009	0.008	ppm
05:00 – 06:00	0.012	0.008	0.008	ppm
06:00 – 07:00	0.013	0.010	0.010	ppm
07:00 – 08:00	0.016	0.010	0.010	ppm
08:00 – 09:00	0.016	0.009	0.011	ppm
Maximum 1 hr.	0.029	0.019	0.019	ppm
Average 24 hr.	0.015	0.013	0.011	ppm
Standard (1 hr.) ¹	0.17	0.17	0.17	ppm

REMARK : ¹ Notification of The National Environmental Board Volume 33 B.E. 2552 (2009)² Start Time* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Measurement By Mr. Tummarut Photan) from

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MS. THANATPORN KLINSOPON)

18/05/2022

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Request No. LA65-R0555

Report No. R6505-0887 – R6505-0893

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd
 ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
 Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
 SAMPLE SOURCE : EOEG Plant
 SAMPLE POINT : วัดมาบขุด
 PARAMETER* : Nitrogen Dioxide
 DETERMINATION METHOD : Chemiluminescence
 INSTRUMENT : API Model T200 S/N 6758

SAMPLE NO. : 07775-07781
 SAMPLING DATE : 06-13/05/2022
 RECEIVED DATE : 13/05/2022
 REPORTED DATE : 18/05/2022

TIME / DATE	09-10/05/2022	10-11/05/2022	11-12/05/2022	UNIT
09:00 – 10:00 ²	0.010	0.013	0.008	ppm
10:00 – 11:00	0.009	0.008	0.008	ppm
11:00 – 12:00	0.008	0.008	0.007	ppm
12:00 – 13:00	0.007	0.010	0.007	ppm
13:00 – 14:00	0.007	0.007	0.007	ppm
14:00 – 15:00	0.007	0.006	0.008	ppm
15:00 – 16:00	0.010	0.007	0.007	ppm
16:00 – 17:00	0.012	0.007	0.009	ppm
17:00 – 18:00	0.010	0.008	0.008	ppm
18:00 – 19:00	0.011	0.010	0.008	ppm
19:00 – 20:00	0.012	0.008	0.008	ppm
20:00 – 21:00	0.009	0.008	0.008	ppm
21:00 – 22:00	0.011	0.011	0.007	ppm
22:00 – 23:00	0.012	0.014	0.007	ppm
23:00 – 00:00	0.010	0.011	0.007	ppm
00:00 – 01:00	0.008	0.009	0.007	ppm
01:00 – 02:00	0.010	0.008	0.007	ppm
02:00 – 03:00	0.007	0.007	0.007	ppm
03:00 – 04:00	0.009	0.006	0.005	ppm
04:00 – 05:00	0.008	0.005	0.005	ppm
05:00 – 06:00	0.007	0.007	0.005	ppm
06:00 – 07:00	0.006	0.007	0.005	ppm
07:00 – 08:00	0.008	0.008	0.007	ppm
08:00 – 09:00	0.012	0.010	0.007	ppm
Maximum 1 hr.	0.012	0.014	0.009	ppm
Average 24 hr.	0.009	0.008	0.007	ppm
Standard (1 hr.) ¹	0.17	0.17	0.17	ppm

REMARK : ¹ Notification of The National Environmental Board Volume 33 B.E. 2552 (2009)² Start Time* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Measurement By Mr. Tummaru Phorankham)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 

(MS. THANATPORN KLINSOPON)

18/05/2022

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Request No. LA65-R0555

Report No. R6505-0887 – R6505-0893

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
SAMPLE SOURCE : EOEG Plant
SAMPLE POINT : วัดมาบชูด
PARAMETER* : Nitrogen Dioxide
DETERMINATION METHOD : Chemiluminescence
INSTRUMENT : API Model T200 S/N 6758

SAMPLE NO. : 07775-07781
SAMPLING DATE : 06-13/05/2022
RECEIVED DATE : 13/05/2022
REPORTED DATE : 18/05/2022

TIME / DATE	12-13/05/2022	UNIT
09:00 – 10:00 ²	0.007	ppm
10:00 – 11:00	0.008	ppm
11:00 – 12:00	0.009	ppm
12:00 – 13:00	0.008	ppm
13:00 – 14:00	0.008	ppm
14:00 – 15:00	0.008	ppm
15:00 – 16:00	0.008	ppm
16:00 – 17:00	0.008	ppm
17:00 – 18:00	0.008	ppm
18:00 – 19:00	0.007	ppm
19:00 – 20:00	0.008	ppm
20:00 – 21:00	0.008	ppm
21:00 – 22:00	0.007	ppm
22:00 – 23:00	0.008	ppm
23:00 – 00:00	0.007	ppm
00:00 – 01:00	0.007	ppm
01:00 – 02:00	0.006	ppm
02:00 – 03:00	0.005	ppm
03:00 – 04:00	0.005	ppm
04:00 – 05:00	0.005	ppm
05:00 – 06:00	0.004	ppm
06:00 – 07:00	0.004	ppm
07:00 – 08:00	0.005	ppm
08:00 – 09:00	0.007	ppm
Maximum 1 hr.	0.009	ppm
Average 24 hr.	0.007	ppm
Standard (1 hr.) ¹	0.17	ppm

REMARK : ¹ Notification of The National Environmental Board Volume 33 B.E. 2552 (2009)² Start Time* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Measurement By Mr. Tummarut Photankhum)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 

(MS. THANATPORN KLINSOPON)

18/05/2022

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Request No. LA65-R0555

Report No. R6505-0880 – R6505-0886

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd
 ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
 Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
 SAMPLE SOURCE : EOEG Plant
 SAMPLE POINT : สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอ ตะวันออก (มาบตาพุด)
 PARAMETER* : Nitrogen Dioxide SAMPLE NO. : 07768-07774
 DETERMINATION METHOD : Chemiluminescence SAMPLING DATE : 06-13/05/2022
 INSTRUMENT : API Model T200 S/N 6757 RECEIVED DATE : 13/05/2022
 REPORTED DATE : 18/05/2022

TIME / DATE	06-07/05/2022	07-08/05/2022	08-09/05/2022	UNIT
09:00 – 10:00 ²	0.010	0.016	0.009	ppm
10:00 – 11:00	0.011	0.016	0.013	ppm
11:00 – 12:00	0.015	0.013	0.012	ppm
12:00 – 13:00	0.016	0.024	0.013	ppm
13:00 – 14:00	0.013	0.013	0.014	ppm
14:00 – 15:00	0.013	0.008	0.017	ppm
15:00 – 16:00	0.020	0.013	0.019	ppm
16:00 – 17:00	0.010	0.014	0.019	ppm
17:00 – 18:00	0.019	0.018	0.024	ppm
18:00 – 19:00	0.023	0.022	0.024	ppm
19:00 – 20:00	0.030	0.024	0.010	ppm
20:00 – 21:00	0.017	0.021	0.012	ppm
21:00 – 22:00	0.019	0.021	0.010	ppm
22:00 – 23:00	0.019	0.017	0.014	ppm
23:00 – 00:00	0.017	0.016	0.015	ppm
00:00 – 01:00	0.018	0.016	0.011	ppm
01:00 – 02:00	0.018	0.017	0.011	ppm
02:00 – 03:00	0.016	0.010	0.010	ppm
03:00 – 04:00	0.014	0.012	0.013	ppm
04:00 – 05:00	0.010	0.010	0.010	ppm
05:00 – 06:00	0.012	0.007	0.010	ppm
06:00 – 07:00	0.013	0.007	0.010	ppm
07:00 – 08:00	0.016	0.008	0.012	ppm
08:00 – 09:00	0.016	0.006	0.017	ppm
Maximum 1 hr.	0.030	0.024	0.024	ppm
Average 24 hr.	0.016	0.015	0.014	ppm
Standard (1 hr.) ¹	0.17	0.17	0.17	ppm

REMARK : ¹ Notification of The National Environmental Board Volume 33 B.E. 2552 (2009)² Start Time* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Measurement By Mr. Tummarut Phorakham)

บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Approved By

(MS. THANATPORN KLINSOPON)

18/05/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL
 WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA65-R0555

Report No. R6505-0880 – R6505-0886

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd
 ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
 Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
 SAMPLE SOURCE : EOEG Plant
 SAMPLE POINT : สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอ ตะวันออก (มาบตาพุด)
 PARAMETER* : Nitrogen Dioxide
 DETERMINATION METHOD : Chemiluminescence
 INSTRUMENT : API Model T200 S/N 6757

SAMPLE NO. : 07768-07774
 SAMPLING DATE : 06-13/05/2022
 RECEIVED DATE : 13/05/2022
 REPORTED DATE : 18/05/2022

TIME / DATE	09-10/05/2022	10-11/05/2022	11-12/05/2022	UNIT
09:00 – 10:00 ²	0.016	0.024	0.011	ppm
10:00 – 11:00	0.014	0.014	0.009	ppm
11:00 – 12:00	0.008	0.008	0.007	ppm
12:00 – 13:00	0.007	0.011	0.007	ppm
13:00 – 14:00	0.005	0.006	0.006	ppm
14:00 – 15:00	0.005	0.007	0.006	ppm
15:00 – 16:00	0.005	0.007	0.007	ppm
16:00 – 17:00	0.009	0.007	0.009	ppm
17:00 – 18:00	0.008	0.006	0.010	ppm
18:00 – 19:00	0.005	0.016	0.010	ppm
19:00 – 20:00	0.009	0.009	0.012	ppm
20:00 – 21:00	0.008	0.005	0.011	ppm
21:00 – 22:00	0.013	0.008	0.010	ppm
22:00 – 23:00	0.018	0.013	0.008	ppm
23:00 – 00:00	0.015	0.017	0.008	ppm
00:00 – 01:00	0.009	0.007	0.007	ppm
01:00 – 02:00	0.007	0.006	0.007	ppm
02:00 – 03:00	0.007	0.006	0.007	ppm
03:00 – 04:00	0.010	0.006	0.008	ppm
04:00 – 05:00	0.012	0.006	0.007	ppm
05:00 – 06:00	0.015	0.005	0.008	ppm
06:00 – 07:00	0.021	0.010	0.009	ppm
07:00 – 08:00	0.020	0.011	0.009	ppm
08:00 – 09:00	0.021	0.009	0.010	ppm
Maximum 1 hr.	0.021	0.024	0.012	ppm
Average 24 hr.	0.011	0.009	0.008	ppm
Standard (1 hr.) ¹	0.17	0.17	0.17	ppm

REMARK :

¹ Notification of The National Environmental Board Volume 33 B.E. 2552 (2009)² Start Time

* Parameter Outside The Scope of The Registration of The Department of Industrial Works
 (Measurement By Mr. Tummarut Photankur)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(MS. THANATPORN KLINSOPON)

18/05/2022

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 WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA65-R0555

Report No. R6505-0880 – R6505-0886

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd
 ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
 Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
 SAMPLE SOURCE : EOEG Plant
 SAMPLE POINT : สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอ ตะวันออก (มาบตาพุด)
 PARAMETER* : Nitrogen Dioxide SAMPLE NO. : 07768-07774
 DETERMINATION METHOD : Chemiluminescence SAMPLING DATE : 06-13/05/2022
 INSTRUMENT : API Model T200 S/N 6757 RECEIVED DATE : 13/05/2022
 REPORTED DATE : 18/05/2022

TIME / DATE	12-13/05/2022	UNIT
09:00 – 10:00 ²	0.008	ppm
10:00 – 11:00	0.007	ppm
11:00 – 12:00	0.008	ppm
12:00 – 13:00	0.007	ppm
13:00 – 14:00	0.006	ppm
14:00 – 15:00	0.021	ppm
15:00 – 16:00	0.009	ppm
16:00 – 17:00	0.009	ppm
17:00 – 18:00	0.007	ppm
18:00 – 19:00	0.009	ppm
19:00 – 20:00	0.010	ppm
20:00 – 21:00	0.011	ppm
21:00 – 22:00	0.009	ppm
22:00 – 23:00	0.010	ppm
23:00 – 00:00	0.009	ppm
00:00 – 01:00	0.008	ppm
01:00 – 02:00	0.006	ppm
02:00 – 03:00	0.007	ppm
03:00 – 04:00	0.007	ppm
04:00 – 05:00	0.007	ppm
05:00 – 06:00	0.007	ppm
06:00 – 07:00	0.007	ppm
07:00 – 08:00	0.009	ppm
08:00 – 09:00	0.010	ppm
Maximum 1 hr.	0.021	ppm
Average 24 hr.	0.009	ppm
Standard (1 hr.) ¹	0.17	ppm

REMARK : ¹ Notification of The National Environmental Board Volume 33 B.E. 2552 (2009)² Start Time* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Measurement By Mr. Tummarut Photakham)

Approved By

(MS. THANATPORN KLINSOPON)

18/05/2022

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
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Wind Speed & Wind Direction

Request No. LA65-R0555

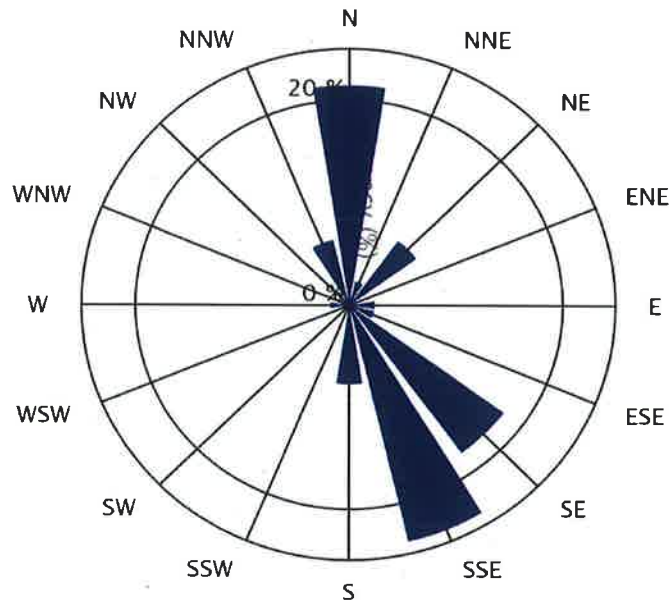
GC Glycol Co., Ltd. (EOEG Plant)

Sample No. 07796

Sampling Source : สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอ ตะวันออก (มาบตาพุด)

Sampling Date : May 6-13, 2022

Calm 3.6 %



0.4-1.9 2.0-3.9 4.0-5.9 6.0-7.9 8.0-9.9 > 9.9 (m/s)

WD/WS	Percentage of Occurrence of Wind Direct Grouped in Various Wind Speed						Total
	0.4-1.9 m/s	2.0-3.9 m/s	4.0-5.9 m/s	6.0-7.9 m/s	8.0-9.9 m/s	> 9.9 m/s	
N	21.4	0.0	0.0	0.0	0.0	0.0	21.4
NNE	2.4	0.0	0.0	0.0	0.0	0.0	2.4
NE	7.7	0.0	0.0	0.0	0.0	0.0	7.7
ENE	0.6	0.0	0.0	0.0	0.0	0.0	0.6
E	2.4	0.0	0.0	0.0	0.0	0.0	2.4
ESE	2.4	0.0	0.0	0.0	0.0	0.0	2.4
SE	17.9	0.0	0.0	0.0	0.0	0.0	17.9
SSE	23.8	0.0	0.0	0.0	0.0	0.0	23.8
S	7.7	0.0	0.0	0.0	0.0	0.0	7.7
SSW	0.6	0.0	0.0	0.0	0.0	0.0	0.6
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	1.8	0.0	0.0	0.0	0.0	0.0	1.8
WNW	0.6	0.0	0.0	0.0	0.0	0.0	0.6
NW	0.6	0.0	0.0	0.0	0.0	0.0	0.6
NNW	6.6	0.0	0.0	0.0	0.0	0.0	6.6
Calm	3.6						



Wind Speed & Wind Direction

Request No. LA65-R0555

GC Glycol Co., Ltd. (EOEG Plant)

Sample No. 07796

Sampling Source : สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอ ตะวันออก (มาตาคุด)

Sampling Date : May 6-13, 2022

Time	May 6-7, 2022		May 7-8, 2022		May 8-9, 2022		May 9-10, 2022		May 10-11, 2022		May 11-12, 2022		May 12-13, 2022	
	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction
09:00-10:00	0.4	NE	0.9	N	1.3	N	1.3	N	0.4	NNW	0.4	SSE	0.4	SSE
10:00-11:00	0.9	NNE	0.9	N	1.3	N	0.9	N	0.9	SE	0.4	S	0.4	S
11:00-12:00	0.9	SSE	0.9	E	1.3	N	1.3	N	1.3	SSE	0.9	SE	0.9	S
12:00-13:00	0.9	E	0.9	SSE	0.4	NE	1.3	SSE	1.3	SSE	0.9	SE	1.3	S
13:00-14:00	0.9	SE	0.9	SSE	0.9	NE	1.3	SE	0.9	SSE	0.9	SE	0.9	S
14:00-15:00	0.9	ESE	0.4	S	0.9	SE	1.3	SSE	0.4	S	0.9	SSE	0.9	S
15:00-16:00	0.9	ESE	0.4	N	0.9	SSE	1.3	SE	0.9	SSE	0.9	S	0.9	S
16:00-17:00	0.9	SE	0.4	N	0.4	SE	1.3	SSE	0.9	SSE	0.4	S	0.9	S
17:00-18:00	0.4	ESE	0.4	N	0.9	SSE	1.3	SE	0.4	SE	0.9	SE	0.4	SSE
18:00-19:00	0.4	E	0.9	N	0.4	E	1.3	SE	0.0	-	0.4	SE	0.4	SSE
19:00-20:00	0.4	NE	0.9	N	0.4	NE	0.9	SE	0.4	SE	0.4	SSE	0.4	SE
20:00-21:00	0.4	NE	0.4	N	0.4	NE	0.9	SE	0.9	SE	0.4	N	0.4	SSE
21:00-22:00	0.4	NE	0.4	N	0.4	N	0.4	NE	0.4	SE	0.4	SSE	0.4	SSE
22:00-23:00	0.4	NE	0.4	N	0.4	NNE	0.4	NE	0.4	N	0.4	SSE	0.4	SSE
23:00-00:00	0.4	NE	0.4	WNW	0.9	N	0.4	ENE	0.4	N	0.4	SSE	0.4	SSE
00:00-01:00	0.4	N	0.4	N	0.4	N	0.9	ESE	0.4	SE	0.4	SE	0.4	SSE
01:00-02:00	0.4	NNE	0.4	NNW	0.0	-	0.9	SE	0.4	SE	0.4	SSE	0.4	SSE
02:00-03:00	0.4	N	0.9	NNW	0.4	NNW	0.4	SE	0.4	SE	0.9	SSE	0.4	SSE
03:00-04:00	0.9	N	0.9	N	0.4	NNW	0.4	W	0.4	SSW	0.4	SSE	0.4	SSE
04:00-05:00	0.9	N	0.4	NNW	0.4	NNW	1.3	N	0.4	S	0.9	SSE	0.4	SSE
05:00-06:00	0.9	N	0.4	N	0.4	NW	0.4	NE	0.0	-	0.4	SSE	0.4	SE
06:00-07:00	0.4	W	1.3	N	0.9	NNW	0.4	NNW	0.0	-	0.4	SSE	0.4	SSE
07:00-08:00	0.4	W	1.3	N	0.9	N	0.4	NNE	0.0	-	0.4	SE	0.4	N
08:00-09:00	1.3	N	1.8	NNW	0.9	NNW	0.0	-	0.9	SE	0.9	SSE	0.4	SSE



PTT GLOBAL CHEMICAL PUBLIC COMPANY LIMITED

LABORATORY OPERATION SERVICES, Laboratory Operations I

Branch 9 : 24/9 Pakorn Songkrorat Road, Map Ta Phut, Mueang Rayong, Rayong 21150 Thailand

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Tel : +66 (0) 3897-7531-3 Fax: +66 (0) 3897-7509

Page 1 of 1

LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2202-01388
WASTE WATER EFFLUENT GC GLYCOL		Job No. : -
Customer / Requester : GC Glycol Company Limited		For : -
Address :	9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150	
Telephone :	038-977140	Fax : 038-977144
Contact Name :	K.Amporn Ketcharung	Email : amporn.k@pttgcgroup.com

Sample Description

Sample ID :	EG1-ENV-R-2201007600	Sampling Point :	F-1801
Sample Name/Type :	Waste Water Effluent		
Sampling By :	GC Glycol, Watcharin	Sampling Date/Time :	January 05, 2022 / 09:00
Received Date :	January 05, 2022 / 13:22	Test Date :	January 05, 2022
Sample Condition :	Clear Liquid / Amber Glass Bottle		

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 22nd, 2012)	pH unit	Report	8.1	
Formaldehyde	ASTM D6303-98	mg/L	Report	0.1	
Oil & Grease	Gravimetric Method	mg/L	Report	<0.5	
Total Suspended Solids	APHA 2540 D (Edition 22nd, 2012)	mg/L	Report	6.0	
Chemical Oxygen Demand	APHA 5220 D (Edition 22nd, 2012)	mg/L	Report	51	
Chloride as Cl ₂	APHA 4500-Cl- D (Edition 22nd, 2012)	mg/L	Report	252	01
Temperature	APHA 2550 A (Edition 22nd, 2012)	°C	Report	25.0	

Notes :

01 รายการนี้อยู่นอกขอบข่ายการขอการรับรองจากกรมโรงงานอุตสาหกรรม

Reported By :

ว-226-จ-6625

(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

February 23, 2022

Approved By :

ว-226-ค-7912

(Mr. Nattakrit Sirikham)
(Senior Chemist)

Approved Date :

February 23, 2022

Remark :

- Reported results are as-received sample which is in good conditions, no contamination and shall be drawn using appropriate sampling procedure by non-laboratory staff except mentioned in the reference document.
- This test report is valid only when approved by authorized person and shall not be reproduced except in full, without written approval of PTT Global Chemical Public Company Limited authorized person
- * In this certificate indicates changed or additional, ** in this certificate indicates tested by outside, (!) in this certificate indicates Inhouse Method.
- For purposed of determining conformance with these specifications, an observed of a calculated result shall be rounded, in accordance with the rounding method of ASTM Practice E29, for Using Significant Digits in Test Data to Determine Conformance with Specifications.



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LABORATORY OPERATION SERVICES, Laboratory Operations I

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Page 1 of 1

LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2202-01391
WASTE WATER EFFLUENT GC GLYCOL		Job No. : -
		Replacement for Report No. : -
Customer / Requester : GC Glycol Company Limited For : -		
Address : 9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150		
Telephone : 038-977140 Fax : 038-977144		
Contact Name : K.Amporn Ketcharung Email : amporn.k@pttgcgroup.com		

Sample Description

Sample ID :	EG1-ENV-R-2201020151	Sampling Point :	F-1801
Sample Name/Type :	Waste Water Effluent		
Sampling By :	GC Glycol, Watcharin	Sampling Date/Time :	January 12, 2022 / 09:00
Received Date :	January 12, 2022 / 10:08	Test Date :	January 12, 2022
Sample Condition :	Clear Liquid / Amber Glass Bottle		

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 22nd, 2012)	pH unit	Report	7.9	
Formaldehyde	ASTM D6303-98	mg/L	Report	<0.1	
Oil & Grease	Gravimetric Method	mg/L	Report	<0.5	
Total Suspended Solids	APHA 2540 D (Edition 22nd, 2012)	mg/L	Report	4.7	
Chloride as Cl ₂	APHA 4500-Cl- D (Edition 22nd, 2012)	mg/L	Report	252	01
Chemical Oxygen Demand	APHA 5220 D (Edition 22nd, 2012)	mg/L	Report	50	
Temperature	APHA 2550 A (Edition 22nd, 2012)	°C	Report	25.0	

Notes :

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Reported By :

ว-226-จ-6625

(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

February 23, 2022

Approved By :

ว-226-ค-7912

(Mr. Nattakrit Sirikham)
(Senior Chemist)

Approved Date :

February 23, 2022

Remark :

1. Reported results are as-received sample which is in good conditions, no contamination and shall be drawn using appropriate sampling procedure by non-laboratory staff except mentioned in the reference document.
2. This test report is valid only when approved by authorized person and shall not be reproduced except in full, without written approval of PTT Global Chemical Public Company Limited authorized person
3. * in this certificate indicates changed or additional, ** in this certificate indicates tested by outside, (!) in this certificate indicates Inhouse Method.
4. For purposes of determining conformance with these specifications, an observed or a calculated result shall be rounded, in accordance with the rounding method of ASTM Practice E29, for Using Significant Digits in Test Data to Determine Conformance with Specifications.



PTT GLOBAL CHEMICAL PUBLIC COMPANY LIMITED

LABORATORY OPERATION SERVICES, Laboratory Operations I

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Page 1 of 1

LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2202-01405
WASTE WATER EFFLUENT GC GLYCOL		Job No. : -
		Replacement for Report No. : -
Customer / Requester : GC Glycol Company Limited For : -		
Address : 9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150		
Telephone : 038-977140 Fax : 038-977144		
Contact Name : K.Amporn Ketcharung Email : amporn.k@pttgcgroup.com		

Sample Description

Sample ID :	EG1-ENV-R-2201032807	Sampling Point :	F-1801
Sample Name/Type :	Waste Water Effluent		
Sampling By :	Gc Glycol, Watcharin	Sampling Date/Time :	January 19, 2022 / 09:00
Received Date :	January 19, 2022 / 11:02	Test Date :	January 19, 2022
Sample Condition :	Clear Liquid / Amber Glass Bottle		

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 22nd, 2012)	pH unit	Report	7.5	
Formaldehyde	ASTM D6303-98	mg/L	Report	<0.1	
Oil & Grease	Gravimetric Method	mg/L	Report	<0.5	
Total Suspended Solids	APHA 2540 D (Edition 22nd, 2012)	mg/L	Report	8.0	
Chloride as Cl ₂	APHA 4500-Cl ₂ D (Edition 22nd, 2012)	mg/L	Report	216	01
Chemical Oxygen Demand	APHA 5220 D (Edition 22nd, 2012)	mg/L	Report	58	
Temperature	APHA 2550 A (Edition 22nd, 2012)	°C	Report	26.1	

Notes :

01 รายการนี้อยู่นอกขอบข่ายการขอการรับรองจากกรมโรงงานอุตสาหกรรม

Reported By :

ว-226-จ-6625

(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

February 23, 2022

Approved By :

ว-226-ค-7912

(Mr. Nattakrit Sirikham)
(Senior Chemist)

Approved Date :

February 23, 2022

Remark :

1. Reported results are as-received sample which is in good conditions, no contamination and shall be drawn using appropriate sampling procedure by non-laboratory staff except mentioned in the reference document.
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4. For purposed of determining conformance with these specifications, an observed of a calculated result shall be rounded, in accordance with the rounding method of ASTM Practice E29, for Using Significant Digits in Test Data to Determine Conformance with Specifications.



PTT GLOBAL CHEMICAL PUBLIC COMPANY LIMITED

LABORATORY OPERATION SERVICES, Laboratory Operations I

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Page 1 of 1

LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2202-01407
WASTE WATER EFFLUENT GC GLYCOL		Job No. : -
		Replacement for Report No. : -
Customer / Requester : GC Glycol Company Limited For : -		
Address : 9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150		
Telephone : 038-977140 Fax : 038-977144		
Contact Name : K.Amporn Ketcharung Email : amporn.k@pttgcgroup.com		

Sample Description

Sample ID :	EG1-ENV-R-2201045200	Sampling Point :	F-1801
Sample Name/Type :	Waste Water Effluent		
Sampling By :	Gc Glycol, Watcharin	Sampling Date/Time :	January 26, 2022 / 09:00
Received Date :	January 26, 2022 / 10:37	Test Date :	January 26, 2022
Sample Condition :	Clear Liquid / Amber Glass Bottle		

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 22nd, 2012)	pH unit	Report	7.4	
Formaldehyde	ASTM D6303-98	mg/L	Report	<0.1	
Oil & Grease	Gravimetric Method	mg/L	Report	<0.5	
Total Suspended Solids	APHA 2540 D (Edition 22nd, 2012)	mg/L	Report	5.6	
Chloride as Cl ₂	APHA 4500-Cl ₂ D (Edition 22nd, 2012)	mg/L	Report	214	01
Chemical Oxygen Demand	APHA 5220 D (Edition 22nd, 2012)	mg/L	Report	49	
Temperature	APHA 2550 A (Edition 22nd, 2012)	°C	Report	25.0	

Notes :

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Reported By :

ว-226-จ-6625

(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

February 23, 2022

Approved By :

ว-226-ค-7912

(Mr. Nattakrit Sirikham)
(Senior Chemist)

Approved Date :

February 23, 2022

Remark :

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Page 1 of 1

LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2202-01409
WASTE WATER EFFLUENT GC GLYCOL		Job No. : -
		Replacement for Report No. : -
Customer / Requester : GC Glycol Company Limited		For : -
Address : 9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150		
Telephone : 038-977140		Fax : 038-977144
Contact Name : K.Amporn Ketcharung		Email : amporn.k@pttgcgroup.com

Sample Description

Sample ID :	EG1-ENV-R-2202002810	Sampling Point :	F-1801
Sample Name/Type :	Waste Water Effluent		
Sampling By :	Gc Glycol, Watcharin	Sampling Date/Time :	February 02, 2022 / 09:00
Received Date :	February 02, 2022 / 11:25	Test Date :	February 02, 2022
Sample Condition :	Light Yellow Liquid / Amber Glass Bottle		

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 22nd, 2012)	pH unit	Report	7.8	
Formaldehyde	ASTM D6303-98	mg/L	Report	<0.1	
Oil & Grease	Gravimetric Method	mg/L	Report	<0.5	
Total Suspended Solids	APHA 2540 D (Edition 22nd, 2012)	mg/L	Report	3.6	
Chloride as Cl ₂	APHA 4500-Cl ₂ D (Edition 22nd, 2012)	mg/L	Report	236	01
Chemical Oxygen Demand	APHA 5220 D (Edition 22nd, 2012)	mg/L	Report	46	
Temperature	APHA 2550 A (Edition 22nd, 2012)	°C	Report	25.0	

Notes :

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Reported By :

ว-226-จ-6625

(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

February 23, 2022

Approved By :

ว-226-ค-7912

(Mr. Nattakrit Sirikham)
(Senior Chemist)

Approved Date :

February 23, 2022

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Page 1 of 1

LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2204-00690
WASTE WATER EFFLUENT GC GLYCOL		Job No. : -
		Replacement for Report No. : -
Customer / Requester : GC Glycol Company Limited For : -		
Address : 9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150		
Telephone : 038-977140 Fax : 038-977144		
Contact Name : K.Amporn Ketcharung Email : amporn.k@pttgcgroup.com		

Sample Description

Sample ID :	EG1-ENV-R-2203015144	Sampling Point :	F-1801
Sample Name/Type :	Waste Water Effluent		
Sampling By :	Watcharin, GC Glycol	Sampling Date/Time :	March 09, 2022 / 09:00
Received Date :	March 09, 2022 / 11:11	Test Date :	March 09, 2022
Sample Condition :	Clear Liquid / Amber Glass Bottle		

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 23nd, 2017)	pH unit	Report	7.5	
Formaldehyde	ASTM D6303-98	mg/L	Report	0.2	
Oil & Grease	Gravimetric Method	mg/L	Report	<0.5	
Total Suspended Solids	APHA 2540 D (Edition 23nd, 2017)	mg/L	Report	18	01
Chemical Oxygen Demand	APHA 5220 D (Edition 23nd, 2017)	mg/L	Report	304	
Chloride as Cl ₂	APHA 4500-Cl ₂ D (Edition 22nd, 2012)	mg/L	Report	102	01
Temperature	APHA 2550 A (Edition 23nd, 2017)	°C	Report	25.0	

Notes :

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Reported By :

ว-226-จ-6625

(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

April 12, 2022

Approved By :

ว-226-ค-5327

(Miss Panida Sivasen)
(Chemist)

Approved Date :

April 12, 2022

Remark :

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Page 1 of 1

LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2204-00695
WASTE WATER EFFLUENT GC GLYCOL		Job No. : -
		Replacement for Report No. : -
Customer / Requester : GC Glycol Company Limited For : -		
Address : 9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150		
Telephone : 038-977140 Fax : 038-977144		
Contact Name : K.Amporn Ketcharung Email : amporn.k@pttgcgroup.com		

Sample Description

Sample ID :	EG1-ENV-R-2203027919	Sampling Point :	F-1801
Sample Name/Type :	Waste Water Effluent		
Sampling By :	Watcharin, GC Glycol	Sampling Date/Time :	March 16, 2022 / 09:00
Received Date :	March 16, 2022 / 13:42	Test Date :	March 16, 2022
Sample Condition :	Clear Liquid / Amber Glass Bottle		

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 23nd, 2017)	pH unit	Report	7.9	
Formaldehyde	ASTM D6303-98	mg/L	Report	<0.2	
Oil & Grease	Gravimetric Method	mg/L	Report	<0.5	
Total Suspended Solids	APHA 2540 D (Edition 23nd, 2017)	mg/L	Report	11	01
Chemical Oxygen Demand	APHA 5220 D (Edition 23nd, 2017)	mg/L	Report	60	
Chloride as Cl ₂	APHA 4500-Cl ₂ D (Edition 22nd, 2012)	mg/L	Report	260	01
Temperature	APHA 2550 A (Edition 23nd, 2017)	°C	Report	25.0	

Notes :

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Reported By :

ว-226-จ-6625

(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

April 12, 2022

Approved By :

ว-226-ค-5327

(Miss Panida Sivasen)
(Chemist)

Approved Date :

April 12, 2022

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Page 1 of 1

LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2204-01258
WASTE WATER EFFLUENT GC GLYCOL		Job No. : -
		Replacement for Report No. : -
Customer / Requester : GC Glycol Company Limited For : -		
Address : 9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150		
Telephone : 038-977140 Fax : 038-977144		
Contact Name : K.Amporn Ketcharung Email : amporn.k@pttgcgroup.com		

Sample Description

Sample ID :	EG1-ENV-R-2203040549	Sampling Point :	F-1801
Sample Name/Type :	Waste Water Effluent		
Sampling By :	Watcharin, GC Glycol	Sampling Date/Time :	March 23, 2022 / 09:00
Received Date :	March 23, 2022 / 14:15	Test Date :	March 23, 2022
Sample Condition :	Brown Viscous Liquid / Amber Glass Bottle		

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 23nd, 2017)	pH unit	Report	7.0	
Formaldehyde	ASTM D6303-98	mg/L	Report	0.2	
Oil & Grease	Gravimetric Method	mg/L	Report	<0.5	
Total Suspended Solids	APHA 2540 D (Edition 23nd, 2017)	mg/L	Report	15	01
Chloride as Cl ₂	APHA 4500-Cl- D (Edition 22nd, 2012)	mg/L	Report	254	01
Chemical Oxygen Demand	APHA 5220 D (Edition 23nd, 2017)	mg/L	Report	91	
Temperature	APHA 2550 A (Edition 23nd, 2017)	°C	Report	25.0	

Notes :

01 รายการนี้อยู่นอกขอบข่ายการรับรองจากกรมโรงงานอุตสาหกรรม

Reported By :

ว-226-จ-6625

(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

May 03, 2022

Approved By :

ว-226-ค-7912

(Mr. Nattakrit Sirikham)
(Senior Chemist)

Approved Date :

May 03, 2022

Remark :

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Page 1 of 1

LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2204-01260
WASTE WATER EFFLUENT GC GLYCOL		Job No. : -
		Replacement for Report No. : -
Customer / Requester : GC Glycol Company Limited For : -		
Address : 9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150		
Telephone : 038-977140 Fax : 038-977144		
Contact Name : K.Amporn Ketcharung Email : amporn.k@pttgcgroup.com		

Sample Description

Sample ID :	EG1-ENV-R-2203052905	Sampling Point :	F-1801
Sample Name/Type :	Waste Water Effluent		
Sampling By :	Watcharin, GC Glycol	Sampling Date/Time :	March 30, 2022 / 09:00
Received Date :	March 30, 2022 / 13:25	Test Date :	March 30, 2022
Sample Condition :	Clear Liquid / Amber Glass Bottle		

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 23nd, 2017)	pH unit	Report	7.2	
Formaldehyde	ASTM D6303-98	mg/L	Report	<0.2	
Oil & Grease	Gravimetric Method	mg/L	Report	<0.5	
Total Suspended Solids	APHA 2540 D (Edition 23nd, 2017)	mg/L	Report	13	01
Chloride as Cl ₂	APHA 4500-Cl- D (Edition 22nd, 2012)	mg/L	Report	260	01
Chemical Oxygen Demand	APHA 5220 D (Edition 23nd, 2017)	mg/L	Report	82	
Temperature	APHA 2550 A (Edition 23nd, 2017)	°C	Report	25.0	

Notes :

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Reported By :

ว-226-จ-6625

(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

May 03, 2022

Approved By :

ว-226-ค-7912

(Mr. Nattakrit Sirikham)
(Senior Chemist)

Approved Date :

May 03, 2022

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Page 1 of 1

LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2204-01261
WASTE WATER EFFLUENT GC GLYCOL		Job No. : -
		Replacement for Report No. : -
Customer / Requester : GC Glycol Company Limited For : -		
Address : 9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150		
Telephone : 038-977140 Fax : 038-977144		
Contact Name : K.Amporn Ketcharung Email : amporn.k@pttgcgroup.com		

Sample Description			
Sample ID :	EG1-ENV-R-2204009600	Sampling Point :	F-1801
Sample Name/Type :	Waste Water Effluent		
Sampling By :	Watcharin, GC Glycol	Sampling Date/Time :	April 06, 2022 / 09:00
Received Date :	April 06, 2022 / 11:18	Test Date :	April 06, 2022
Sample Condition :	Clear Liquid / Amber Glass Bottle		

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 23nd, 2017)	pH unit	Report	7.2	
Formaldehyde	ASTM D6303-98	mg/L	Report	0.2	
Oil & Grease	Gravimetric Method	mg/L	Report	<0.5	
Total Suspended Solids	APHA 2540 D (Edition 23nd, 2017)	mg/L	Report	10	01
Chloride as Cl ₂	APHA 4500-Cl- D (Edition 22nd, 2012)	mg/L	Report	254	01
Chemical Oxygen Demand	APHA 5220 D (Edition 23nd, 2017)	mg/L	Report	79	
Temperature	APHA 2550 A (Edition 23nd, 2017)	°C	Report	25.0	

Notes :

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Reported By :

ว-226-จ-6625

(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

May 03, 2022

Approved By :

ว-226-ค-7912

(Mr. Nattakrit Sirikham)
(Senior Chemist)

Approved Date :

May 03, 2022

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Page 1 of 1

LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2204-01265
WASTE WATER EFFLUENT GC GLYCOL		Job No. : -
Customer / Requester : GC Glycol Company Limited		For : -
Address :	9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150	
Telephone :	038-977140	Fax : 038-977144
Contact Name :	K.Amporn Ketcharung	Email : amporn.k@pttgcgroup.com

Sample Description

Sample ID :	EG1-ENV-R-2204022122	Sampling Point :	F-1801
Sample Name/Type :	Waste Water Effluent		
Sampling By :	Watcharin, GC Glycol	Sampling Date/Time :	April 13, 2022 / 09:00
Received Date :	April 13, 2022 / 10:10	Test Date :	April 13, 2022
Sample Condition :	Clear Liquid / Amber Glass Bottle		

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 23nd, 2017)	pH unit	Report	7.2	
Formaldehyde	ASTM D6303-98	mg/L	Report	0.4	
Oil & Grease	Gravimetric Method	mg/L	Report	<0.5	
Total Suspended Solids	APHA 2540 D (Edition 23nd, 2017)	mg/L	Report	8.4	01
Chloride as Cl ₂	APHA 4500-Cl- D (Edition 22nd, 2012)	mg/L	Report	214	01
Chemical Oxygen Demand	APHA 5220 D (Edition 23nd, 2017)	mg/L	Report	81	
Temperature	APHA 2550 A (Edition 23nd, 2017)	°C	Report	25.0	

Notes :

01 รายการนี้อยู่นอกขอบข่ายการรับรองจากกรมโรงงานอุตสาหกรรม

Reported By :

ว-226-จ-6625

(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

May 03, 2022

Approved By :

ว-226-ค-7912

(Mr. Nattakrit Sirikham)
(Senior Chemist)

Approved Date :

May 03, 2022

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Page 1 of 1

LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2204-01266
WASTE WATER EFFLUENT GC GLYCOL		Job No. : -
		Replacement for Report No. : -
Customer / Requester : GC Glycol Company Limited For : -		
Address : 9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150		
Telephone : 038-977140 Fax : 038-977144		
Contact Name : K.Amporn Ketcharung Email : amporn.k@pttgcgroup.com		

Sample Description

Sample ID :	EG1-ENV-R-2204034447	Sampling Point :	F-1801
Sample Name/Type :	Waste Water Effluent		
Sampling By :	Watcharin, GC Glycol	Sampling Date/Time :	April 20, 2022 / 09:00
Received Date :	April 20, 2022 / 10:29	Test Date :	April 20, 2022
Sample Condition :	Clear Liquid / Amber Glass Bottle		

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 23nd, 2017)	pH unit	Report	7.5	
Formaldehyde	ASTM D6303-98	mg/L	Report	0.3	
Oil & Grease	Gravimetric Method	mg/L	Report	<0.5	
Total Suspended Solids	APHA 2540 D (Edition 23nd, 2017)	mg/L	Report	8.4	01
Chloride as Cl ₂	APHA 4500-Cl- D (Edition 22nd, 2012)	mg/L	Report	198	01
Chemical Oxygen Demand	APHA 5220 D (Edition 23nd, 2017)	mg/L	Report	59	
Temperature	APHA 2550 A (Edition 23nd, 2017)	°C	Report	25.0	

Notes :

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Reported By :

ว-226-จ-6625

(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

May 03, 2022

Approved By :

ว-226-ค-7912

(Mr. Nattakrit Sirikham)
(Senior Chemist)

Approved Date :

May 03, 2022

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PTT GLOBAL CHEMICAL PUBLIC COMPANY LIMITED

LABORATORY OPERATION SERVICES, Laboratory Operations I

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Page 1 of 1

LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2205-00698
WASTE WATER EFFLUENT GC GLYCOL		Job No. : -
		Replacement for Report No. : -
Customer / Requester : GC Glycol Company Limited For : -		
Address : 9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhrarat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150		
Telephone : 038-977140 Fax : 038-977144		
Contact Name : K.Amporn Ketcharung Email : amporn.k@pttgcgroup.com		

Sample Description

Sample ID :	EG1-ENV-R-2204047062	Sampling Point :	F-1801
Sample Name/Type :	Waste Water Effluent		
Sampling By :	GC Glycol, Watcharin	Sampling Date/Time :	April 27, 2022 / 09:00
Received Date :	April 27, 2022 / 14:02	Test Date :	April 27, 2022
Sample Condition :	Clear Liquid / Glass Bottle		

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 23nd, 2017)	pH unit	Report	7.8	
Formaldehyde	ASTM D6303-98	mg/L	Report	<0.2	
Oil & Grease	Gravimetric Method	mg/L	Report	<0.5	
Total Suspended Solids	APHA 2540 D (Edition 23nd, 2017)	mg/L	Report	6.0	01
Chloride as Cl ₂	APHA 4500-Cl- D (Edition 22nd, 2012)	mg/L	Report	314	01
Chemical Oxygen Demand	APHA 5220 D (Edition 23nd, 2017)	mg/L	Report	57	
Temperature	APHA 2550 A (Edition 23nd, 2017)	°C	Report	25.0	

Notes :

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Reported By :

ว-226-จ-6625

(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

May 12, 2022

Approved By :

ว-226-ค-7912

(Mr. Nattakrit Sirikham)
(Senior Chemist)

Approved Date :

May 12, 2022

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LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2205-00699
WASTE WATER EFFLUENT GC GLYCOL		Job No. : -
		Replacement for Report No. : -
Customer / Requester :	GC Glycol Company Limited	For : -
Address :	9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150	
Telephone :	038-977140	Fax : 038-977144
Contact Name :	K.Amporn Ketcharung	Email : amporn.k@pttgcgroup.com

Sample Description

Sample ID :	EG1-ENV-R-2205006339	Sampling Point :	F-1801
Sample Name/Type :	Waste Water Effluent		
Sampling By :	GC Glycol, Watcharin	Sampling Date/Time :	May 04, 2022 / 09:00
Received Date :	May 04, 2022 / 14:20	Test Date :	May 04, 2022
Sample Condition :	Clear Liquid / Glass Bottle		

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 23nd, 2017)	pH unit	Report	7.7	
Formaldehyde	ASTM D6303-98	mg/L	Report	<0.2	
Oil & Grease	Gravimetric Method	mg/L	Report	<0.5	
Total Suspended Solids	APHA 2540 D (Edition 23nd, 2017)	mg/L	Report	7.5	01
Chloride as Cl ₂	APHA 4500-Cl ₂ D (Edition 22nd, 2012)	mg/L	Report	220	01
Chemical Oxygen Demand	APHA 5220 D (Edition 23nd, 2017)	mg/L	Report	52	
Temperature	APHA 2550 A (Edition 23nd, 2017)	°C	Report	25.0	

Notes :

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Reported By :

ว-226-จ-6625

(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

May 12, 2022

Approved By :

ว-226-ค-7912

(Mr. Nattakrit Sirikham)
(Senior Chemist)

Approved Date :

May 12, 2022

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Page 1 of 1

LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2205-00708
WASTE WATER EFFLUENT GC GLYCOL		Job No. : -
		Replacement for Report No. : -
Customer / Requester : GC Glycol Company Limited For : -		
Address : 9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150		
Telephone : 038-977140 Fax : 038-977144		
Contact Name : K.Amporn Ketcharung Email : amporn.k@pttgcgroup.com		

Sample Description

Sample ID :	EG1-ENV-R-2205019033	Sampling Point :	F-1801
Sample Name/Type :	Waste Water Effluent		
Sampling By :	GC Glycol, Watcharin	Sampling Date/Time :	May 11, 2022 / 09:00
Received Date :	May 11, 2022 / 10:48	Test Date :	May 11, 2022
Sample Condition :	Clear Liquid / Glass Bottle		

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 23nd, 2017)	pH unit	Report	7.0	
Formaldehyde	ASTM D6303-98	mg/L	Report	<0.2	
Oil & Grease	Gravimetric Method	mg/L	Report	<0.5	
Total Suspended Solids	APHA 2540 D (Edition 23nd, 2017)	mg/L	Report	14	01
Chloride as Cl ₂	APHA 4500-Cl- D (Edition 22nd, 2012)	mg/L	Report	180	01
Chemical Oxygen Demand	APHA 5220 D (Edition 23nd, 2017)	mg/L	Report	49	
Temperature	APHA 2550 A (Edition 23nd, 2017)	°C	Report	25.0	

Notes :

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Reported By :

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(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

May 12, 2022

Approved By :

ว-226-ค-7912

(Mr. Nattakrit Sirikham)
(Senior Chemist)

Approved Date :

May 12, 2022

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LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2206-00917
WASTE WATER EFFLUENT GC GLYCOL		Job No. : -
		Replacement for Report No. : -
Customer / Requester : GC Glycol Company Limited For : -		
Address : 9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150		
Telephone : 038-977140 Fax : 038-977144		
Contact Name : K.Amporn Ketcharung Email : amporn.k@pttgcgroup.com		

Sample Description

Sample ID :	EG1-ENV-R-2205032002	Sampling Point :	F-1801
Sample Name/Type :	Waste Water Effluent		
Sampling By :	GC Glycol, Watcharin	Sampling Date/Time :	May 18, 2022 / 09:00
Received Date :	May 18, 2022 / 13:41	Test Date :	May 18, 2022
Sample Condition :	Clear Liquid / Amber Glass Bottle		

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 23nd, 2017)	pH unit	Report	7.8	
Formaldehyde	ASTM D6303-98	mg/L	Report	<0.2	
Oil & Grease	Gravimetric Method	mg/L	Report	0.6	
Total Suspended Solids	APHA 2540 D (Edition 23nd, 2017)	mg/L	Report	7.6	01
Chloride as Cl ₂	APHA 4500-Cl ₂ D (Edition 22nd, 2012)	mg/L	Report	324	01
Chemical Oxygen Demand	APHA 5220 D (Edition 23nd, 2017)	mg/L	Report	47	
Temperature	APHA 2550 A (Edition 23nd, 2017)	°C	Report	25.0	

Notes :

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Reported By :

จ-226-จ-6625

(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

June 17, 2022

Approved By :

จ-226-ค-7912

(Mr. Nattakrit Sirikham)
(Senior Chemist)

Approved Date :

June 17, 2022

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LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2206-00909
WASTE WATER EFFLUENT GC GLYCOL		Job No. : -
		Replacement for Report No. : -
Customer / Requester : GC Glycol Company Limited For : -		
Address : 9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150		
Telephone : 038-977140 Fax : 038-977144		
Contact Name : K.Amporn Ketcharung Email : amporn.k@pttgcgroup.com		

Sample Description

Sample ID :	EG1-ENV-R-2205044651	Sampling Point :	F-1801
Sample Name/Type :	Waste Water Effluent		
Sampling By :	GC Glycol, Watcharin	Sampling Date/Time :	May 25, 2022 / 09:00
Received Date :	May 25, 2022 / 13:05	Test Date :	May 25, 2022
Sample Condition :	Clear Liquid / Amber Glass Bottle		

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 23nd, 2017)	pH unit	Report	7.8	
Formaldehyde	ASTM D6303-98	mg/L	Report	<0.2	
Oil & Grease	Gravimetric Method	mg/L	Report	0.8	
Total Suspended Solids	APHA 2540 D (Edition 23nd, 2017)	mg/L	Report	17	01
Chloride as Cl ₂	APHA 4500-Cl- D (Edition 22nd, 2012)	mg/L	Report	274	01
Chemical Oxygen Demand	APHA 5220 D (Edition 23nd, 2017)	mg/L	Report	41	
Temperature	APHA 2550 A (Edition 23nd, 2017)	°C	Report	25.0	

Notes :

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Reported By :

ว-226-จ-6625

(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

June 17, 2022

Approved By :

ว-226-ค-7912

(Mr. Nattakrit Sirikham)
(Senior Chemist)

Approved Date :

June 17, 2022

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LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2206-00910
WASTE WATER EFFLUENT GC GLYCOL		Job No. : -
		Replacement for Report No. : -
Customer / Requester : GC Glycol Company Limited		For : -
Address : 9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhrarat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150		
Telephone : 038-977140		Fax : 038-977144
Contact Name : K.Amporn Ketcharung		Email : amporn.k@pttgcgroup.com

Sample Description

Sample ID :	EG1-ENV-R-2206000815	Sampling Point :	F-1801
Sample Name/Type :	Waste Water Effluent		
Sampling By :	GC Glycol, Watcharin	Sampling Date/Time :	June 01, 2022 / 09:00
Received Date :	June 01, 2022 / 13:13	Test Date :	June 01, 2022
Sample Condition :	Clear Liquid / Amber Glass Bottle		

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 23nd, 2017)	pH unit	Report	7.8	
Formaldehyde	ASTM D6303-98	mg/L	Report	<0.2	
Oil & Grease	Gravimetric Method	mg/L	Report	1.3	
Total Suspended Solids	APHA 2540 D (Edition 23nd, 2017)	mg/L	Report	11	01
Chloride as Cl ₂	APHA 4500-Cl ₂ D (Edition 22nd, 2012)	mg/L	Report	284	01
Chemical Oxygen Demand	APHA 5220 D (Edition 23nd, 2017)	mg/L	Report	55	
Temperature	APHA 2550 A (Edition 23nd, 2017)	°C	Report	25.0	

Notes :

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Reported By :

ว-226-จ-6625

(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

June 17, 2022

Approved By :

ว-226-ค-7912

(Mr. Nattakrit Sirikham)
(Senior Chemist)

Approved Date :

June 17, 2022

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LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2206-00912
WASTE WATER EFFLUENT GC GLYCOL		Job No. : -
		Replacement for Report No. : -
Customer / Requester : GC Glycol Company Limited		For : -
Address : 9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150		
Telephone : 038-977140		Fax : 038-977144
Contact Name : K.Amporn Ketcharung		Email : amporn.k@pttgcgroup.com

Sample Description

Sample ID :	EG1-ENV-R-2206013463	Sampling Point :	F-1801
Sample Name/Type :	Waste Water Effluent		
Sampling By :	GC Glycol, Watcharin	Sampling Date/Time :	June 08, 2022 / 09:00
Received Date :	June 08, 2022 / 13:32	Test Date :	June 08, 2022
Sample Condition :	Clear Liquid / Amber Glass Bottle		

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 23nd, 2017)	pH unit	Report	7.5	
Formaldehyde	ASTM D6303-98	mg/L	Report	0.2	
Oil & Grease	Gravimetric Method	mg/L	Report	<0.5	
Total Suspended Solids	APHA 2540 D (Edition 23nd, 2017)	mg/L	Report	12	01
Chloride as Cl ₂	APHA 4500-Cl- D (Edition 22nd, 2012)	mg/L	Report	256	01
Chemical Oxygen Demand	APHA 5220 D (Edition 23nd, 2017)	mg/L	Report	62	
Temperature	APHA 2550 A (Edition 23nd, 2017)	°C	Report	25.0	

Notes :

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Reported By :

จ-226-จ-6625

(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

June 17, 2022

Approved By :

จ-226-ค-7912

(Mr. Nattakrit Sirikham)
(Senior Chemist)

Approved Date :

June 17, 2022

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LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2206-01045
WASTE WATER EFFLUENT GC GLYCOL		Job No. : -
		Replacement for Report No. : -
Customer / Requester : GC Glycol Company Limited For : -		
Address : 9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150		
Telephone : 038-977140 Fax : 038-977144		
Contact Name : K.Amporn Ketcharung Email : amporn.k@pttgcgroup.com		

Sample Description

Sample ID : EG1-ENV-R-2206025932 **Sampling Point :** F-1801
Sample Name/Type : Waste Water Effluent
Sampling By : GC Glycol, Watcharin **Sampling Date/Time :** June 15, 2022 / 09:00
Received Date : June 15, 2022 / 13:49 **Test Date :** June 15, 2022
Sample Condition : Yellow Liquid / Amber Glass Bottle

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 23nd, 2017)	pH unit	Report	7.8	
Formaldehyde	ASTM D6303-98	mg/L	Report	<0.2	
Oil & Grease	Gravimetric Method	mg/L	Report	0.8	
Total Suspended Solids	APHA 2540 D (Edition 23nd, 2017)	mg/L	Report	8.8	01
Chloride as Cl ₂	APHA 4500-Cl ₂ D (Edition 22nd, 2012)	mg/L	Report	236	01
Chemical Oxygen Demand	APHA 5220 D (Edition 23nd, 2017)	mg/L	Report	55	
Temperature	APHA 2550 A (Edition 23nd, 2017)	°C	Report	25.0	

Notes :

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Reported By :

ว-226-จ-6625

(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

June 20, 2022

Approved By :

ว-226-ค-5327

(Miss Panida Sivasen)
(Chemist)

Approved Date :

June 20, 2022

Remark :

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Page 1 of 1

LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2207-00594
WASTE WATER EFFLUENT GC GLYCOL		Job No. : -
		Replacement for Report No. : -
Customer / Requester : GC Glycol Company Limited For : -		
Address : 9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150		
Telephone : 038-977140 Fax : 038-977144		
Contact Name : K.Amporn Ketcharung Email : amporn.k@pttgcgroup.com		

Sample Description

Sample ID :	EG1-ENV-R-2206038098	Sampling Point :	F-1801
Sample Name/Type :	Waste Water Effluent		
Sampling By :	Watcharin, GC Glycol	Sampling Date/Time :	June 22, 2022 / 09:00
Received Date :	June 22, 2022 / 16:21	Test Date :	June 22, 2022
Sample Condition :	Clear Liquid / Amber Glass Bottle		

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 23nd, 2017)	pH unit	Report	7.5	
Formaldehyde	ASTM D6303-98	mg/L	Report	<0.2	
Oil & Grease	Gravimetric Method	mg/L	Report	<0.5	
Total Suspended Solids	APHA 2540 D (Edition 23nd, 2017)	mg/L	Report	4.4	01
Chloride as Cl ₂	APHA 4500-Cl- D (Edition 22nd, 2012)	mg/L	Report	282	01
Chemical Oxygen Demand	APHA 5220 D (Edition 23nd, 2017)	mg/L	Report	50	
Temperature	APHA 2550 A (Edition 23nd, 2017)	°C	Report	25.0	

Notes :

01 รายการนี้อ่อนนอกขอบข่ายการขอการรับรองจากกรมโรงงานอุตสาหกรรม

Reported By :

ว-226-จ-6625

(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

July 11, 2022

Approved By :

ว-226-ค-7912

(Mr. Nattakrit Sirikham)
(Senior Chemist)

Approved Date :

July 11, 2022

Remark :

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4. For purposes of determining conformance with these specifications, an observed or a calculated result shall be rounded, in accordance with the rounding method of ASTM Practice E29, for Using Significant Digits in Test Data to Determine Conformance with Specifications.



PTT GLOBAL CHEMICAL PUBLIC COMPANY LIMITED

LABORATORY OPERATION SERVICES, Laboratory Operations I

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Page 1 of 1

LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2207-00596			
WASTE WATER EFFLUENT GC GLYCOL		Job No. : -			
Replacement for Report No. : -					
Customer / Requester : GC Glycol Company Limited		For : -			
Address : 9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150					
Telephone : 038-977140		Fax : 038-977144			
Contact Name : K.Amporn Ketcharung		Email : amporn.k@pttggroup.com			
Sample Description					
Sample ID :	EG1-ENV-R-2206049836	Sampling Point :	F-1801		
Sample Name/Type :	Waste Water Effluent				
Sampling By :	Watcharin, GC Glycol	Sampling Date/Time :	June 29, 2022 / 09:00		
Received Date :	June 29, 2022 / 14:19	Test Date :	June 29, 2022		
Sample Condition :	Clear Liquid / Amber Glass Bottle				
Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 23nd, 2017)	pH unit	Report	7.9	
Formaldehyde	ASTM D6303-98	mg/L	Report	<0.2	
Oil & Grease	Gravimetric Method	mg/L	Report	<0.5	
Total Suspended Solids	APHA 2540 D (Edition 23nd, 2017)	mg/L	Report	6.0	01
Chloride as Cl ₂	APHA 4500-Cl ₂ D (Edition 22nd, 2012)	mg/L	Report	290	01
Chemical Oxygen Demand	APHA 5220 D (Edition 23nd, 2017)	mg/L	Report	53	
Temperature	APHA 2550 A (Edition 23nd, 2017)	°C	Report	25.0	

Notes :

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Reported By :

ว-226-จ-6625

(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

July 11, 2022

Approved By :

ว-226-ค-7912

(Mr. Nattakrit Sirikham)
(Senior Chemist)

Approved Date :

July 11, 2022

Remark :

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Page 1 of 1

LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2202-01404
METERING TO EIE GC GLYCOL		Job No. : -
		Replacement for Report No. : -
Customer / Requester : GC Glycol Company Limited For : -		
Address : 9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhaorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150		
Telephone : 038-977140 Fax : 038-977144		
Contact Name : K.Amporn Ketcharung Email : amporn.k@pttgcgroup.com		

Sample Description

Sample ID :	EG1-ENV-R-2201007602	Sampling Point :	Metering to EIE
Sample Name/Type :	Metering to EIE		
Sampling By :	GC Glycol, Watcharin	Sampling Date/Time :	January 13, 2022 / 14:30
Received Date :	January 13, 2022 / 15:43	Test Date :	January 13, 2022
Sample Condition :	Clear Liquid / Amber Glass Bottle		

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 22nd, 2012)	pH unit	5.5-9.0	7.9	
Formaldehyde	ASTM D6303-98	mg/L	1 Max	0.1	
Oil & Grease	Gravimetric Method	mg/L	10 Max	<0.5	
Total Suspended Solids	APHA 2540 D (Edition 22nd, 2012)	mg/L	200 Max	6.0	
Total Dissolve Solids	APHA 2540 C (Edition 22nd, 2012)	mg/L	3000 Max	642	
Biochemical Oxygen Demand	APHA 5210 B (Edition 22nd, 2012)	mg/L	500 Max	3.5	
Chemical Oxygen Demand	APHA 5220 D (Edition 22nd, 2012)	mg/L	750 Max	91	
Chloride as Cl ₂	APHA 4500-Cl- D (Edition 22nd, 2012)	mg/L	2000 Max	256	01
Color(at pH 7.0)	APHA 2120 F (Edition 22nd, 2012)	ADMI	600 Max	17	
Color(at original pH)	APHA 2120 F (Edition 22nd, 2012)	ADMI	600 Max	17	
Temperature	APHA 2550 A (Edition 22nd, 2012)	°C	45 Max	25.0	

Notes :

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Reported By :

(Miss Watcharin Srijula)
(Laboratory Analyst)

Approved By :

(Mr. Nattakrit Sirikham)
(Senior Chemist)

Issued Date :

February 23, 2022

Approved Date :

February 23, 2022

Remark :

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Page 1 of 1

LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2202-01411
METERING TO EIE GC GLYCOL		Job No. : -
		Replacement for Report No. : -
Customer / Requester : GC Glycol Company Limited For : -		
Address : 9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150		
Telephone : 038-977140 Fax : 038-977144		
Contact Name : K.Amporn Ketcharung Email : amporn.k@pttgcgroup.com		

Sample Description

Sample ID :	EG1-ENV-R-2202002812	Sampling Point :	Metering to EIE
Sample Name/Type :	Metering to EIE		
Sampling By :	Gc Glycol, Watcharin	Sampling Date/Time :	February 10, 2022 / 09:00
Received Date :	February 10, 2022 / 11:23	Test Date :	February 10, 2022
Sample Condition :	Clear Liquid / Amber Glass Bottle		

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 22nd, 2012)	pH unit	5.5-9.0	7.6	
Formaldehyde	ASTM D6303-98	mg/L	1 Max	0.3	
Oil & Grease	Gravimetric Method	mg/L	10 Max	<0.5	
Total Suspended Solids	APHA 2540 D (Edition 22nd, 2012)	mg/L	200 Max	36	
Biochemical Oxygen Demand	APHA 5210 B (Edition 22nd, 2012)	mg/L	500 Max	8.1	
Chemical Oxygen Demand	APHA 5220 D (Edition 22nd, 2012)	mg/L	750 Max	97	
Total Dissolve Solids	APHA 2540 C (Edition 22nd, 2012)	mg/L	3000 Max	518	
Chloride as Cl ₂	APHA 4500-Cl- D (Edition 22nd, 2012)	mg/L	2000 Max	190	01
Color(at pH 7.0)	APHA 2120 F (Edition 22nd, 2012)	ADMI	600 Max	37	
Color(at original pH)	APHA 2120 F (Edition 22nd, 2012)	ADMI	600 Max	38	
Temperature	APHA 2550 A (Edition 22nd, 2012)	°C	45 Max	25.0	

Notes :

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Reported By :

ว-226-จ-6625

(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

February 23, 2022

Approved By :

ว-226-ค-7912

(Mr. Nattakrit Sirikham)
(Senior Chemist)

Approved Date :

February 23, 2022

Remark :

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Page 1 of 1

LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2204-00694
METERING TO EIE GC GLYCOL		Job No. : -
		Replacement for Report No. : -
Customer / Requester : GC Glycol Company Limited For : -		
Address : 9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhrarat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150		
Telephone : 038-977140 Fax : 038-977144		
Contact Name : K.Amporn Ketcharung Email : amporn.k@pttgcgroup.com		

Sample Description

Sample ID :	EG1-ENV-R-2203002652	Sampling Point :	Metering to EIE
Sample Name/Type :	Metering to EIE		
Sampling By :	GC Glycol, Watcharin	Sampling Date/Time :	March 10, 2022 / 15:00
Received Date :	March 10, 2022 / 16:25	Test Date :	April 10, 2022
Sample Condition :	Brown Viscous Liquid / Amber Glass Bottle		

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 23nd, 2017)	pH unit	5.5-9.0	7.2	
Formaldehyde	ASTM D6303-98	mg/L	1 Max	0.2	
Oil & Grease	Gravimetric Method	mg/L	10 Max	<0.5	
Total Suspended Solids	APHA 2540 D (Edition 23nd, 2017)	mg/L	200 Max	16	01
Biochemical Oxygen Demand	APHA 5210 B (Edition 23nd, 2017)	mg/L	500 Max	8.6	01
Chemical Oxygen Demand	APHA 5220 D (Edition 23nd, 2017)	mg/L	750 Max	87	
Total Dissolve Solids	APHA 2540 C (Edition 23nd, 2017)	mg/L	3000 Max	432	
Chloride as Cl ₂	APHA 4500-Cl- D (Edition 22nd, 2012)	mg/L	2000 Max	138	01
Color(at pH 7.0)	APHA 2120 F (Edition 23nd, 2017)	ADMI	600 Max	13	
Color(at original pH)	APHA 2120 F (Edition 23nd, 2017)	ADMI	600 Max	14	
Temperature	APHA 2550 A (Edition 23nd, 2017)	°C	45 Max	25.0	

Notes :

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Reported By :

ว-226-จ-6625

(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

April 12, 2022

Approved By :

ว-226-ค-5327

(Miss Panida Sivasen)
(Chemist)

Approved Date :

April 12, 2022

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Page 1 of 1

LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2204-01264
METERING TO EIE GC GLYCOL		Job No. : -
		Replacement for Report No. : -
Customer / Requester :	GC Glycol Company Limited	
Address :	9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150	
Telephone :	038-977140	Fax : 038-977144
Contact Name :	K.Amporn Ketcharung	Email : amporn.k@pttgcgroup.com

Sample Description

Sample ID :	EG1-ENV-R-2204009602	Sampling Point :	Metering to EIE
Sample Name/Type :	Metering to EIE		
Sampling By :	Watcharin, GC Glycol	Sampling Date/Time :	April 06, 2022 / 14:00
Received Date :	April 06, 2022 / 15:29	Test Date :	April 06, 2022
Sample Condition :	Clear Liquid / Amber Glass Bottle		

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 23nd, 2017)	pH unit	5.5-9.0	7.0	
Formaldehyde	ASTM D6303-98	mg/L	1 Max	0.2	
Oil & Grease	Gravimetric Method	mg/L	10 Max	<0.5	
Total Suspended Solids	APHA 2540 D (Edition 23nd, 2017)	mg/L	200 Max	8.0	01
Biochemical Oxygen Demand	APHA 5210 B (Edition 23nd, 2017)	mg/L	500 Max	6.6	
Chemical Oxygen Demand	APHA 5220 D (Edition 23nd, 2017)	mg/L	750 Max	73	
Total Dissolve Solids	APHA 2540 C (Edition 23nd, 2017)	mg/L	3000 Max	728	
Chloride as Cl2	APHA 4500-Cl- D (Edition 22nd, 2012)	mg/L	2000 Max	264	01
Color(at pH 7.0)	APHA 2120 F (Edition 23nd, 2017)	ADMI	600 Max	21	
Color(at original pH)	APHA 2120 F (Edition 23nd, 2017)	ADMI	600 Max	22	
Temperature	APHA 2550 A (Edition 23nd, 2017)	°C	45 Max	25.0	

Notes :

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Reported By :

ว-226-จ-6625

(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

May 03, 2022

Approved By :

ว-226-ค-7912

(Mr. Nattakrit Sirikham)
(Senior Chemist)

Approved Date :

May 03, 2022

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Page 1 of 1

LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2206-00908
METERING TO EIE GC GLYCOL		Job No. : -
		Replacement for Report No. : -
Customer / Requester :	GC Glycol Company Limited	For : -
Address :	9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150	
Telephone :	038-977140	Fax : 038-977144
Contact Name :	K.Amporn Ketcharung	Email : amporn.k@pttgcgroup.com

Sample Description

Sample ID :	EG1-ENV-R-2205021332	Sampling Point :	Metering to EIE
Sample Name/Type :	Metering to EIE		
Sampling By :	GC Glycol, Watcharin	Sampling Date/Time :	May 12, 2022 / 11:00
Received Date :	May 12, 2022 / 13:27	Test Date :	May 12, 2022
Sample Condition :	Clear Liquid / Amber Glass Bottle		

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 23nd, 2017)	pH unit	5.5-9.0	7.2	
Formaldehyde	ASTM D6303-98	mg/L	1 Max	0.3	
Oil & Grease	Gravimetric Method	mg/L	10 Max	0.6	
Total Suspended Solids	APHA 2540 D (Edition 23nd, 2017)	mg/L	200 Max	8.0	01
Total Dissolve Solids	APHA 2540 C (Edition 23nd, 2017)	mg/L	3000 Max	608	
Biochemical Oxygen Demand	APHA 5210 B (Edition 23nd, 2017)	mg/L	500 Max	<2.0	01
Chemical Oxygen Demand	APHA 5220 D (Edition 23nd, 2017)	mg/L	750 Max	99	
Chloride as Cl ₂	APHA 4500-Cl- D (Edition 22nd, 2012)	mg/L	2000 Max	222	01
Color(at pH 7.0)	APHA 2120 F (Edition 23nd, 2017)	ADMI	600 Max	14	
Color(at original pH)	APHA 2120 F (Edition 23nd, 2017)	ADMI	600 Max	16	
Temperature	APHA 2550 A (Edition 23nd, 2017)	°C	45 Max	27.0	

Notes :

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Reported By :

ว-226-จ-6625

(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

June 17, 2022

Approved By :

ว-226-ค-7912

(Mr. Nattakrit Sirikham)
(Senior Chemist)

Approved Date :

June 17, 2022

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LABORATORY ANALYSIS REPORT FOR		Report No. : LAR-ENV-2206-00914
METERING TO EIE GC GLYCOL		Job No. : -
		Replacement for Report No. : -
Customer / Requester : GC Glycol Company Limited For : -		
Address : 9 Soi G-12, Eastern Industrial Estate, Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150		
Telephone : 038-977140 Fax : 038-977144		
Contact Name : K.Amporn Ketcharung Email : amporn.k@pttgcgroup.com		

Sample Description

Sample ID :	EG1-ENV-R-2206014090	Sampling Point :	Metering to EIE
Sample Name/Type :	Metering to EIE		
Sampling By :	GC Glycol, Watcharin	Sampling Date/Time :	June 08, 2022 / 15:00
Received Date :	June 08, 2022 / 15:35	Test Date :	June 08, 2022
Sample Condition :	Clear Liquid / Amber Glass Bottle		

Test Item	Test Method	Unit	Specification	Result	Note
pH @ 25 °C	APHA 4500 -H+B (Edition 23nd, 2017)	pH unit	5.5-9.0	7.2	
Formaldehyde	ASTM D6303-98	mg/L	1 Max	0.3	
Oil & Grease	Gravimetric Method	mg/L	10 Max	<0.5	
Biochemical Oxygen Demand	APHA 5210 B (Edition 23nd, 2017)	mg/L	500 Max	5.4	01
Chemical Oxygen Demand	APHA 5220 D (Edition 23nd, 2017)	mg/L	750 Max	41	
Total Dissolve Solids	APHA 2540 C (Edition 23nd, 2017)	mg/L	3000 Max	736	
Total Suspended Solids	APHA 2540 D (Edition 23nd, 2017)	mg/L	200 Max	8.0	01
Chloride as Cl ₂	APHA 4500-Cl- D (Edition 22nd, 2012)	mg/L	2000 Max	256	01
Color(at pH 7.0)	APHA 2120 F (Edition 23nd, 2017)	ADMI	600 Max	24	
Color(at original pH)	APHA 2120 F (Edition 23nd, 2017)	ADMI	600 Max	27	
Temperature	APHA 2550 A (Edition 23nd, 2017)	°C	45 Max	27.0	

Notes :

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Reported By :

ว-226-จ-6625

(Miss Watcharin Srijula)
(Laboratory Analyst)

Issued Date :

June 17, 2022

Approved By :

ว-226-ค-7912

(Mr. Nattakrit Sirikham)
(Senior Chemist)

Approved Date :

June 17, 2022

Remark :

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Request No : W6503624

Report No : 6505-0610

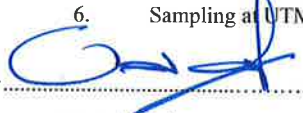
TEST REPORT

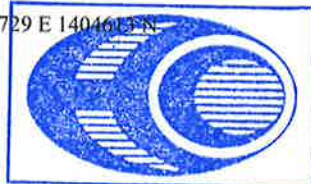
Customer : GC Glycol Company Limited
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
Sampling Source : EOEG Plant
Sample Name : จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสีย ##
Sampling By : ETC
Sampling Method : Grab
Tested Date : 30/03/2022 – 11/05/2022
Sample No. : W 65032387
Sampling Date : 29/03/2022
Sampling Time : 9:40 AM
Received Date : 30/03/2022
Reported Date : 16/05/2022

Parameter	Unit	Method	Result	Standard ¹⁾
Arsenic *	mg/l	Continuous Hydride Generation/AAS Method (SM:3114B)	0.0046	≤ 0.25
Barium *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.15	≤ 1
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	15.8	≤ 500
Cadmium *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤ 0.03
Chemical Oxygen Demand *	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	67	≤ 750
Color (Original) *	ADMI	ADMI Weighted Ordinate Spectrophotometric Method (SM:2120F)	21	≤ 600
Color (pH 7.0) *	ADMI	ADMI Weighted Ordinate Spectrophotometric Method (SM:2120F)	21	≤ 600


Physical Appearance :
1. Sample : yellowish, lightly SS, nonsmelling
2. Container : Normal [PE 0.5 L* (6 Bottle) , PE 1.0 L (2 Bottle), PE 1.8 L, G 1.0 L, G 2.5 L]

Remark :
1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)
2. @ = ISO/IEC 17025:2017 Accredited by TISI, # = ISO/IEC 17025:2017 Accredited by DSS,
SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
4. * = Test Report/Sampling marked Not Accredited, Sampling By Miss Janthanee Saiphan (จ-003-ก-7281)*
5. ## จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสียของนิคมอุตสาหกรรม ดับบลิวเอชเอ ตะวันออก (มาบตาพุด)
6. Sampling at UTM 47 P 0730729 E 1404613 N

Examined By 
(Miss Apiradee Chuen-arom)
(จ-003-ก-4377)
16 / 05 / 2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 
(Mr. Kawee Suthasub)
(จ-003-ก-2205)
16 / 05 / 2022

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL
WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No : W6503624

Report No : 6505-0610

TEST REPORT

Customer : GC Glycol Company Limited
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
Sampling Source : EOEG Plant
Sample Name : จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสีย ##
Sampling By : ETC
Sampling Method : Grab
Tested Date : 30/03/2022 – 11/05/2022
Sample No. : W 65032387
Sampling Date : 29/03/2022
Sampling Time : 9:40 AM
Received Date : 30/03/2022
Reported Date : 16/05/2022

Parameter	Unit	Method	Result	Standard ¹
Copper *	mg/l	Digestion, Direct Air-Acetylene Flame Method (SM:3030F, 3111B)	< 0.10	≤ 2
Cyanide *	mg/l as HCN	Distillation, Colorimetric Method (SM:4500 CN- C,E)	< 0.020	≤ 0.2
Formaldehyde *	mg/l	Distillation, Colorimetric Method	< 0.50	≤ 1
Free Chlorine *	mg/l as Cl ₂	Iodometric Method (SM:4500 -Cl B)	0.6	≤ 1
Hexavalent Chromium *	mg/l as Cr ⁶⁺	Filtration, Colorimetric Method (SM:3500 -Cr B)	< 0.050	≤ 0.25
Lead *	mg/l	Digestion, Direct Air-Acetylene Flame Method (SM:3030F, 3111B)	< 0.10	≤ 0.2
Manganese *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.11	≤ 5
Mercury *	mg/l	Cold-Vapor Atomic Absorption Spectrometric Method (SM:3112B)	< 0.0010	≤ 0.005

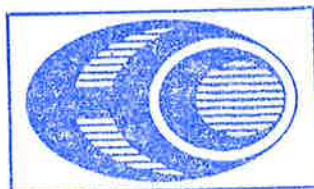
Physical Appearance : 1. Sample : yellowish, lightly SS, nonsmelling
2. Container : Normal [PE 0.5 L* (6 Bottle) , PE 1.0 L (2 Bottle), PE 1.8 L, G 1.0 L, G 2.5 L]

Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)
2. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,
SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
4. * = Test Report/Sampling marked Not Accredited, Sampling By Miss Janthanee Saiphan (จ-003-ค-7281)*
5. ## จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสียของนิคมอุตสาหกรรม ดับบลิวเอชเอ ตะวันออก (มาบตาพุด)
6. Sampling at UTM 47 P 0730729 E 1404613 N


Examined By : 
(Miss Apiradee Chuen-arom)

(จ-003-ค-4377)

16 / 05 / 2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By : 
(Mr. Kawee Suthasub)

(จ-003-ค-2205)

16 / 05 / 2022

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL
WITHOUT THE WRITTEN APPROVAL LABORATORY

TEST REPORT

Customer : GC Glycol Company Limited
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
Sampling Source : EOEG Plant
Sample Name : จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสีย ##
Sampling By : ETC
Sampling Method : Grab
Tested Date : 30/03/2022 – 11/05/2022
Sample No. : W 65032387
Sampling Date : 29/03/2022
Sampling Time : 9:40 AM
Received Date : 30/03/2022
Reported Date : 16/05/2022

Parameter	Unit	Method	Result	Standard ¹⁾
Nickel *	mg/l	Digestion, Direct Air-Acetylene Flame Method (SM:3030F, 3111B)	< 0.10	≤ 1
Oil and Grease @	mg/l	Partition-Gravimetric Method (SM:5520B)	< 3.0	≤ 10
pH (on site) *		Electrometric Method	7.8	5.5-9.0
Phenol *	mg/l	Distillation, Direct Photometric Method (SM:5530B,D)	0.019	≤ 1
Selenium *	mg/l	Digestion, Hydride Generation/AAS Method (SM:3030F, 3114B&C)	< 0.0050	≤ 0.02
Sulfide *	mg/l as H ₂ S	ZnS Precipitation, Iodometric Method (SM:4500 -S2- F)	< 0.50	≤ 1
Temperature *	°C	Laboratory and Field Method	34	≤ 45
Total Dissolved Solids #	mg/l	Dried at 180 C (SM:2540C)	700	≤ 3,000
Total Kjeldahl Nitrogen *	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500 -Norg B)	< 5	≤ 100
Total Suspended Solids #	mg/l	Dried at 103-105 C (SM:2540D)	7	≤ 200

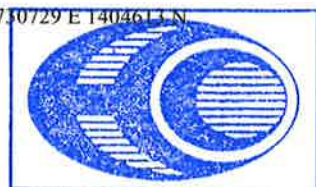
Physical Appearance : 1. Sample : yellowish, lightly SS, nonsmelling
2. Container : Normal [PE 0.5 L* (6 Bottle) , PE 1.0 L (2 Bottle), PE 1.8 L, G 1.0 L, G 2.5 L]

Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)
2. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,
SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
4. * = Test Report/Sampling marked Not Accredited, Sampling By Miss Janthanee Saiphan (จ-003-ก-7281)*
5. ## จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสียของนิคมอุตสาหกรรม ดับบลิวเอชเอ ตะวันออก (มาบตาพุด)
6. Sampling at NTM 47 P 07.10729 E 1404613 N


Examined By 
(Miss Apiradee Chuen-arom)

(จ-003-ก-4377)

16 / 05 / 2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 
(Mr. Kawee Suthasub)

(จ-003-ก-2205)

16 / 05 / 2022


REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY
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WITHOUT THE WRITTEN APPROVAL LABORATORY

TEST REPORT


Customer : GC Glycol Company Limited
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
Sampling Source : EOEG Plant
Sample Name : จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสีย ##
Sampling By : ETC
Sampling Method : Grab
Tested Date : 30/03/2022 – 11/05/2022
Sample No. : W 65032387
Sampling Date : 29/03/2022
Sampling Time : 9:40 AM
Received Date : 30/03/2022
Reported Date : 16/05/2022

Parameter	Unit	Method	Result	Standard ¹⁾
Trivalent Chromium *	mg/l as Cr ³⁺	Digestion, Direct AAS Method; Filtration, Colorimetric Method; Calculation (SM:3500 -Cr B, 3111B)	< 0.10	≤ 0.75
Zinc *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.40	≤ 5

- Physical Appearance : 1. Sample : yellowish, lightly SS, nonsmelling
2. Container : Normal [PE 0.5 L* (6 Bottle) , PE 1.0 L (2 Bottle), PE 1.8 L, G 1.0 L, G 2.5 L]
- Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)
2. @ = ISO/IEC 17025:2017 Accredited by TISI, # = ISO/IEC 17025:2017 Accredited by DSS,
SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
4. * = Test Report/Sampling marked Not Accredited, Sampling By Miss Janthanee Saiphan (ว-003-ค-7281)*
5. ## จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสียของนิคมอุตสาหกรรม ดับบลิวเอชเอ ตะวันออก (มาบตาพุด)
6. Sampling at UTM 47 P 0730729 E 1404613 N

Examined By 
(Miss Apiradee Chuen-arom)
(ว-003-ค-4377)
16 / 05 / 2022



Approved By 
(Mr. Kawee Suthasub)
(ว-003-ค-2205)
16 / 05 / 2022

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY
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WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No : W6503624

Report No : 6505-0610

TEST REPORT

Customer : GC Glycol Company Limited
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
Sampling Source : EOEG Plant
Sample Name : จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสีย ##
Sampling By : ETC
Sampling Method : Grab
Tested Date : 30/03/2022 – 11/05/2022
Sample No. : W 65032387
Sampling Date : 29/03/2022
Sampling Time : 9:40 AM
Received Date : 30/03/2022
Reported Date : 16/05/2022

Parameter	Unit	Method	Result	Standard ¹⁾
Fluoride	mg/l as F-	Ion-Selective Electrode Method (SM:4500 -F- C)	1.09	≤ 5
Iron	mg/l	Digestion, Direct Air-Acetylene Flame Method (SM:3030F, 3111B)	0.87	≤ 10
Silver	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.05	≤ 1
Surfactants	mg/l as MBAS	Anionic Surfactants as MBAS Method (SM:5540C)	< 0.40	≤ 30

Physical Apperance :
1. Sample : yellowish, lightly SS, nonsmelling
2. Container : Normal [PE 0.5 L (3 Bottle) , PE 1.0 L , PE 1.8 L, G 1.0 L, G 2.5 L]
Remark :
1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)
2. Parameter Outside The Scope of The Registration of Department of Industrial Works
3. Sampling at UTM 47 P 0730729 E 1404613 N
4. ## จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสียของนิคมอุตสาหกรรม คับบลิวเอชเอ ตะวันออก (มาบตาพุด)
5. Sampling By Miss Janthanee Saiphan (ว-003-ค-7281)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By 
(Miss Apiradee Chuen-arom)

16 / 05 / 2022

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL
WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No : W6503624

Report No : 6505-0610

TEST REPORT

Customer : GC Glycol Company Limited
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
Sampling Source : EOEG Plant
Sample Name : จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสีย ##
Sampling By : ETC
Sampling Method : Grab
Tested Date : 30/03/2022 – 11/05/2022
Sample No. : W 65032387
Sampling Date : 29/03/2022
Sampling Time : 9:40 AM
Received Date : 30/03/2022
Reported Date : 16/05/2022

Parameter	Unit	Method	Result	Standard ¹
Organochlorine Pesticide group ***				
alpha-BHC	µg/l	3510C/8081 B	ND	Not Detected
gamma-BHC	µg/l	3510C/8081 B	ND	Not Detected
Heptachlor	µg/l	3510C/8081 B	ND	Not Detected
Aldrin	µg/l	3510C/8081 B	ND	Not Detected
beta-BHC	µg/l	3510C/8081 B	ND	Not Detected
delta-BHC	µg/l	3510C/8081 B	ND	Not Detected
Heptachlor epoxide	µg/l	3510C/8081 B	ND	Not Detected
o,p'-DDE	µg/l	3510C/8081 B	ND	Not Detected
Endosulfan I	µg/l	3510C/8081 B	ND	Not Detected
gamma-Chlordane	µg/l	3510C/8081 B	ND	Not Detected
alpha-Chlordane	µg/l	3510C/8081 B	ND	Not Detected
p,p'-DDE	µg/l	3510C/8081 B	ND	Not Detected
Dieldrin	µg/l	3510C/8081 B	ND	Not Detected
o,p'-DDD	µg/l	3510C/8081 B	ND	Not Detected
Endrin	µg/l	3510C/8081 B	ND	Not Detected
o,p'-DDT	µg/l	3510C/8081 B	ND	Not Detected
p,p'-DDD	µg/l	3510C/8081 B	ND	Not Detected
Endosulfan II	µg/l	3510C/8081 B	ND	Not Detected
p,p'-DDT	µg/l	3510C/8081 B	ND	Not Detected
Endrin aldehyde	µg/l	3510C/8081 B	ND	Not Detected
Endosulfan sulfate	µg/l	3510C/8081 B	ND	Not Detected
Endrin ketone	µg/l	3510C/8081 B	ND	Not Detected

Physical Appearance : 1. Sample : yellowish, lightly SS, nonsmelling
2. Container : Normal [PE 0.5 L (8 Bottle) , PE 1.0 L (2 Bottle) , PE 1.8 L , G 1.0 L, G 2.5 L]

Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)
2. *** Tested by SECOT Co.,Ltd.
3. Sampling at UTM 47 P 0730729 E 1404613 N
4. ## จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสียของนิคมอุตสาหกรรม คับบลิเวอชเอด ตะวันออก (มาบตาพุด)
5. Sampling By Miss Jantane Saphan (063-11-7281)
6. ND = Non Detectable



Examined By: 
(Miss Apiradee Chuen-arom)

16 / 05 / 2022

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY
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TEST REPORT

Customer : GC Glycol Company Limited**
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150**
Sampling Source : EOEG Plant**
Sample Name : จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสีย ##**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 12/05/2022 – 15/06/2022
Sample No. : W 65051037
Sampling Date : 11/05/2022**
Sampling Time : 11:55 AM**
Received Date : 12/05/2022
Reported Date : 17/06/2022

Parameter	Unit	Method	Result	Standard ¹
Arsenic *	mg/l	Continuous Hydride Generation/AAS Method (SM:3114B)	0.0060	≤ 0.25
Barium @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.12	≤ 1
Color (Original) *	ADMI	ADMI Weighted Ordinate Spectrophotometric Method (SM:2120F)	29	≤ 600
Color (pH 7.0) *	ADMI	ADMI Weighted Ordinate Spectrophotometric Method (SM:2120F)	23	≤ 600
Free Chlorine *	mg/l as Cl ₂	Iodometric Method (SM:4500 -Cl B)	0.6	≤ 1
Manganese @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.12	≤ 5

Physical Apperance : 1. Sample : lightly SS
2. Container : Normal [PE 0.5 L (3 Bottle) , PE 1.0 L , PE 1.8 L, G 1.0 L, G 2.5 L]


Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)
2. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,
SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2018
3. Miss Apiradee Chuen-arom is Section Head / Mrs. Wanpen Lhaochindawat is Technical Management.
4. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang (จ-003-จ-5637)*
5 ** = These data are non laboratory data. / Sampling at UTM 47 P 0730729 E 1404613 N
6. ## จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสียของนิคมอุตสาหกรรม คับพลีวเอชเอ ตะวันออก (มาบตาพุด)

Examined By 
(Miss Apiradee Chuen-arom)

(จ-003-จ-4377)
17 / 06 / 2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 
(Mrs. Wanpen Lhaochindawat)

(จ-003-ค-2183)
17 / 06 / 2022

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL
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TEST REPORT

Customer : GC Glycol Company Limited**
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150**
Sampling Source : EOEG Plant**
Sample Name : จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสีย ##**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 12/05/2022 – 15/06/2022
Sample No. : W 65051037
Sampling Date : 11/05/2022**
Sampling Time : 11:55 AM**
Received Date : 12/05/2022
Reported Date : 17/06/2022

Parameter	Unit	Method	Result	Standard ¹⁾
Mercury #	mg/l	Cold-Vapor Atomic Absorption Spectrometric Method (SM:3112B)	< 0.0010	≤ 0.005
Nickel @	mg/l	Digestion, Direct Air-Acetylene Flame Method (SM:3030F, 3111B)	< 0.10	≤ 1
pH (on site) *		Electrometric Method	7.7	5.5-9.0
Phenol *	mg/l	Distillation, Direct Photometric Method (SM:5530B,D)	0.043	≤ 1
Temperature *	°C	Laboratory and Field Method	33	≤ 45
Total Kjeldahl Nitrogen *	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500 -Norg B)	< 5	≤ 100
Zinc @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.61	≤ 5

Physical Appearance : 1. Sample : lightly SS
2. Container : Normal [PE 0.5 L (3 Bottle) , PE 1.0 L , PE 1.8 L, G 1.0 L, G 2.5 L]

Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)
2. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,
SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2018
3. Miss Apiradee Chuen-arom is Section Head / Mrs. Wanpen Lhaochindawat is Technical Management.
4. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang (จ-003-จ-5637)*
5. ** = These data are non laboratory data. / Sampling at UTM 47 P 0730729 E 1404613 N
6. ## จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสียของนิคมอุตสาหกรรม ดับบลิวเอชเอ ตะวันออก (มาบตาพุด)

Examined By

(Miss Apiradee Chuen-arom)

(จ-003-จ-4377)

17 / 06 / 2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mrs. Wanpen Lhaochindawat)

(จ-003-จ-2183)

17 / 06 / 2022

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL
WITHOUT THE WRITTEN APPROVAL LABORATORY

TEST REPORT

Customer : GC Glycol Company Limited**

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150**

Sampling Source : EOEG Plant**

Sample Name : จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสีย ##**

Sampling By : ETC**

Sampling Method : Grab**

Tested Date : 12/05/2022 – 15/06/2022

Sample No. : W 65051037

Sampling Date : 11/05/2022**

Sampling Time : 11:55 AM**

Received Date : 12/05/2022

Reported Date : 17/06/2022

Parameter	Unit	Method	Result	Standard ¹
Fluoride *	mg/l	Ion-Selective Electrode Method (SM:4500 -F- C)	0.90	≤ 5
Iron @	mg/l	Digestion, Direct Air-Acetylene Flame Method (SM:3030F, 3111B)	0.60	≤ 10
Surfactants *	mg/l as MBAS	Anionic Surfactants as MBAS Method (SM:5540C)	< 0.40	≤ 30

Physical Apperance : 1. Sample : lightly SS

2. Container : Normal [PE 0.5 L (3 Bottle) , PE 1.0 L , PE 1.8 L, G 1.0 L, G 2.5 L]

Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)

2. Parameter Outside The Scope of The Registration of Department of Industrial Works

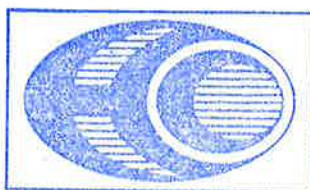
3. @ = ISO/IEC 17025:2017 Accredited by TISI., SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2018

4. Mrs. Wanpen Lhaochindawat is Technical Management.

5. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang (ว-003-จ-5637)*

6. ** = These data are non laboratory data. / Sampling at UTM 47 P 0730729 E 1404613 N

7. ## จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสียของนิคมอุตสาหกรรม ดับบลิวเอชเอ ตะวันออก (มาบตาพุด)



Examined By.....

(Mrs. Wanpen Lhaochindawat)

17 / 06 / 2022

บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด
REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY
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Request No. W6505268

Report No. 6506-0116

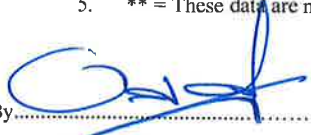
TEST REPORT

Customer : GC Glycol Company Limited**
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150**
Sampling Source : EOEG Plant**
Sample Name : บ่อสังกะการณ 1 (TOCGC MW01)**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 12/05/2022 – 06/06/2022
Sample No. : W 65051038
Sampling Date : 11/05/2022**
Sampling Time : 09:25 AM**
Received Date : 12/05/2022
Reported Date : 06/06/2022


Parameter	Unit	Method	Result	Standard ¹
Arsenic *	mg/l	Continuous Hydride Generation/AAS Method (SM:3114B)	< 0.0020	≤ 0.1
Beryllium *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.01	≤ 0.01
Cadmium @		Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.003	≤ 2.0
Chromium @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤ 6.0
Hexavalent Chromium *	mg/l as Cr ⁶⁺	Filtration, Colorimetric Method (SM:3500 -Cr B)	< 0.050	≤ 6.0
Lead @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.010	≤ 4.0
Manganese @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.22	≤ 33
Mercury #	mg/l	Cold-Vapor Atomic Absorption Spectrometric Method (SM:3112B)	< 0.0010	≤ 0.7

Physical Appearance : 1. Sample : lightly SS
2. Container : Normal [PE 0.5 L [3 Bottle], G 1.0 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,
SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2018
3. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
4. * = Test Report/Sampling marked Not Accredited, Sampling By Miss Pompinan Viriyakusolkul (จ-003-จ-8334)*
5. ** = These data are non laboratory data. / Sampling At UTM 47 P 731078 E 1405208 N

Examined By 
(Miss Apiradee Chuen-arom)
(จ-003-จ-4377)
06 / 06 / 2022



Approved By 
(Mr. Kawee Suthasub)
(จ-003-จ-2205)
06 / 06 / 2022

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL
WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. W6505268

Report No. 6506-0116


TEST REPORT

Customer	: GC Glycol Company Limited**	Sample No.	: W 65051038
Address	: 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150**	Sampling Date	: 11/05/2022**
Sampling Source	: EOEG Plant**	Sampling Time	: 09:25 AM**
Sample Name	: บ่อสังเคราะห์ 1 (TOCGC MW01)**	Received Date	: 12/05/2022
Sampling By	: ETC**	Reported Date	: 06/06/2022
Sampling Method	: Grab**		
Tested Date	: 12/05/2022 – 06/06/2022		

Parameter	Unit	Method	Result	Standard ¹⁾
Nickel @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤ 5.0
Selenium *	mg/l	Digestion, Hydride Generation/AAS Method (SM:3030F, 3114B&C)	< 0.0050	≤ 12
Vanadium *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.02	≤ 17


Physical Appearance : 1. Sample : lightly SS
2. Container : Normal [PE 0.5 L [3 Bottle], G 1.0 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,
SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2018
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4. * = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (จ-003-จ-8334)*
5. ** = These data are non laboratory data. / Sampling At UTM 47 P 731078 E 1405208 N

Examined By 
(Miss Apiradee Chuen-arom)
(จ-003-จ-4377)
06 / 06 / 2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 
(Mr. Kawee Suthasub)
(จ-003-จ-2205)
06 / 06 / 2022

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Request No. W6505268

Report No. 6506-0116

TEST REPORT

Customer : GC Glycol Company Limited**
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150**
Sampling Source : EOEG Plant**
Sample Name : บ่อสังเคราะห์ 1 (TOCGC MW01)**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 12/05/2022 – 06/06/2022

Sample No. : W 65051038
Sampling Date : 11/05/2022**
Sampling Time : 09:25 AM**
Received Date : 12/05/2022
Reported Date : 06/06/2022

Parameter	Unit	Method	Result	Standard ^{/1}
Boron *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.02	-
Cobalt *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.02	-
Copper @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	-
Iron *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	8.45	-
Titanium *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.02	-

Physical Appearance : 1. Sample : lightly SS
2. Container : Normal [PE 0.5 L [3 Bottle], G 1.0 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. Parameter Outside The Scope of The Registration of Department of Industrial Works
3. @ = ISO/IEC 17025:2017 Accredited by TISI., SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2018
4. Mr. Kawee Suthasub is Technical Management.
5. * = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (จ-003-จ-8334)*
6. ** = These data are non laboratory data. / Sampling At UTM 47 P 731078 E 1405208 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....
(Mr. Kawee Suthasub)

06 / 06 / 2022

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Request No. W6505268

Report No. 6506-0116

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051038

Sample Name : บ่อสังเกตการณ์ 1 (TOCGC MW01) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 9:25 AM

Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 06/06/2022 Reported Date : 06/06/2022

Parameter	Unit	Method	Results	Standard ¹⁾
Volatile Organic Compounds				
- Benzene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.2
- Carbon tetrachloride	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.4
- 1,2-Dichloroethane	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.5
- 1,1-Dichloroethylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.1
- cis-1,2-Dichloroethylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 2.0
- trans-1,2-Dichloroethylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 5.0
- Ethylbenzene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 2.0
- Styrene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 24
- Tetrachloroethylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.9
- Toluene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 5.0
- 1,2,4 - Trichlorobenzene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 24
- 1,1,1-Trichloroethane	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.2


Physical Apperance : 1. Sample : lightly SS

2. Container : Normal [PE 0.5 L [3 Bottle], G 1.0 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)

2. Sampling By Miss Pornpinan Viriyakusolkul (ว-003-จ-8334)

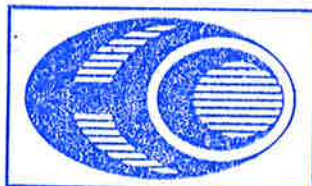
3. Sampling At UTM 47 P 731078 E 1405208 N

Examined By 

(Miss Apiradee Chuen-arom)

(ว-003-ค-4377)

06/06/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 

(Mr. Kawee Suthasub)

(ว-003-ค-2205)

06/06/2022

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY

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WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. W6505268

Report No. 6506-0116

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051038

Sample Name : บ่อสังเคราะห์ 1 (TOCGC MW01) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 9:25 AM

Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 06/06/2022 Reported Date : 06/06/2022

Parameter	Unit	Method	Results	Standard ¹⁾
Volatile Organic Compounds				
- 1,1,2-Trichloroethane	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.8
- Trichloroethylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 4.4
- p,m-Xylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 24
- o-Xylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 24
- Xylene Total	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 24
- Vinyl Chloride	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.03
- Dichloromethane	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 6.0


Physical Appearance : 1. Sample : lightly SS

2. Container : Normal [PE 0.5 L [3 Bottle], G 1.0 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)

2. Sampling By Miss Pornpinan Viriyakusolkul (ว-003-จ-8334)

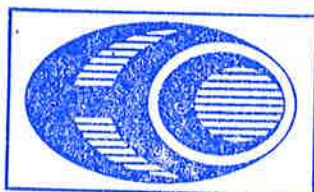
3. Sampling At UTM 47 P 731078 E 1405208 N

Examined By 

(Miss Apiradee Chuen-arom)

(ว-003-ค-4377)

06/06/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 

(Mr. Kawee Suthasub)

(ว-003-ค-2205)

06/06/2022

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Request No. W6505268

Report No. 6506-0116

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051038

Sample Name : บ่อสังเกตการณ์ 1 (TOCGC MW01) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 9:25 AM

Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 06/06/2022 Reported Date : 06/06/2022

Parameter	Unit	Method	Result	Standard ¹⁾
Total Petroleum Hydrocarbons ***				
- TPH (C ₈ -C ₁₆)	mg/l	3510 C / 8015 D	ND	≤ 1.7
- n-Nonane				
- n-Decane				
- n-Dodecane				
- n-Tetradecane				
- n-Hexadecane				

Physical Apperance : 1. Sample : lightly SS

2. Container : Normal [PE 0.5 L [3 Bottle], G 1.0 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)

2. Sampling By Eastern Thai Consulting 1992 Co., Ltd., (Miss Pornpinan Viriyakusolkul (จ-003-จ-8334))

3. *** Tested by SECOT Co.,Ltd. (จ-239)

4. MDL = Method Detection Limit [MDL of TPH (C₈-C₁₆) = < 0.025 mg/l]

5. ND = non-detectable / Sampling At UTM 47 P 731078 E 1405208 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By



(Miss Apiradee Chuen-arom)

06 / 06 / 2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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Request No. W6505268

Report No. 6506-0117

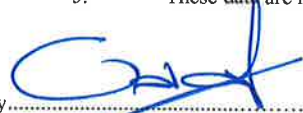
TEST REPORT

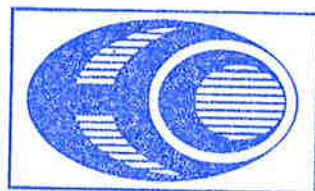
Customer : GC Glycol Company Limited**
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150**
Sampling Source : EOEG Plant**
Sample Name : บ่อสังเคราะห์ 2 (TOCGC MW05)**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 12/05/2022 – 06/06/2022
Sample No. : W 65051039
Sampling Date : 11/05/2022**
Sampling Time : 11:40 AM**
Received Date : 12/05/2022
Reported Date : 06/06/2022

Parameter	Unit	Method	Result	Standard ¹⁾
Arsenic *	mg/l	Continuous Hydride Generation/AAS Method (SM:3114B)	< 0.0020	≤ 0.1
Beryllium *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.01	≤ 0.01
Cadmium @		Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.003	≤ 2.0
Chromium @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤ 6.0
Hexavalent Chromium *	mg/l as Cr ⁶⁺	Filtration, Colorimetric Method (SM:3500 -Cr B)	< 0.050	≤ 6.0
Lead @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.010	≤ 4.0
Manganese @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.20	≤ 33
Mercury #	mg/l	Cold-Vapor Atomic Absorption Spectrometric Method (SM:3112B)	< 0.0010	≤ 0.7


Physical Appearance : 1. Sample : lightly SS
2. Container : Normal [PE 0.5 L [3 Bottle], G 1.0 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,
SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2018
3. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
4. * = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (จ-003-ก-8334)*
5. ** = These data are non laboratory data. / Sampling At UTM 47 P 730370 E 1404509 N

Examined By 
(Miss Apiradee Chuen-arom)
(จ-003-ก-4377)
06 / 06 / 2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 
(Mr. Kawee Suthasub)
(จ-003-ก-2205)
06 / 06 / 2022

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Request No. W6505268

Report No. 6506-0117

TEST REPORT

Customer : GC Glycol Company Limited**
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150**
Sampling Source : EOEG Plant**
Sample Name : บ่อสังเคราะห์ 2 (TOCGC MW05)**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 12/05/2022 – 06/06/2022
Sample No. : W 65051039
Sampling Date : 11/05/2022**
Sampling Time : 11:40 AM**
Received Date : 12/05/2022
Reported Date : 06/06/2022

Parameter	Unit	Method	Result	Standard ¹⁾
Nickel @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤ 5.0
Selenium *	mg/l	Digestion, Hydride Generation/AAS Method (SM:3030F, 3114B&C)	< 0.0050	≤ 12
Vanadium *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.02	≤ 17

Physical Appearance : 1. Sample : lightly SS
2. Container : Normal [PE 0.5 L [3 Bottle], G 1.0 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,
SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2018
3. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
4. * = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (๓-003-๓-8334)*
5. ** = These data are non laboratory data. / Sampling At UTM 47 P 730370 E 1404509 N

Examined By.....
(Miss Apiradee Chuen-arom)
(๓-003-๓-4377)
06 / 06 / 2022



Approved By
(Mr. Kawee Suthasub)
(๓-003-๓-2205)
06 / 06 / 2022

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY
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WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. W6505268

Report No. 6506-0117

TEST REPORT

Customer : GC Glycol Company Limited**

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150**

Sampling Source : EOEG Plant**

Sample Name : บ่อสังเกตการณ์ 2 (TOCGC MW05)**

Sampling By : ETC**

Sampling Method : Grab**

Tested Date : 12/05/2022 – 06/06/2022

Sample No. : W 65051039

Sampling Date : 11/05/2022**

Sampling Time : 11:40 AM**

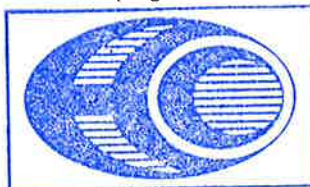
Received Date : 12/05/2022

Reported Date : 06/06/2022

Parameter	Unit	Method	Result	Standard ^{1/}
Boron *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.11	-
Cobalt *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.02	-
Copper @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	-
Iron *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	32.0	-
Titanium *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.02	-

Physical Appearance : 1. Sample : lightly SS
2. Container : Normal [PE 0.5 L [3 Bottle], G 1.0 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. Parameter Outside The Scope of The Registration of Department of Industrial Works
3. @ = ISO/IEC 17025:2017 Accredited by TISI., SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2018
4. Mr. Kawee Suthasub is Technical Management.
5. * = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (ว-003-จ-8334)*
6. ** = These data are non laboratory data. / Sampling At UTM 47 P 730370 E 1404509 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....
(Mr. Kawee Suthasub)

06 / 06 / 2022

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY
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WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. W6505268

Report No. 6506-0117

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051039

Sample Name : บ่อสังเคราะห์ 2 (TOCGC MW05) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 11:40 AM

Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 06/06/2022 Reported Date : 06/06/2022

Parameter	Unit	Method	Results	Standard ¹⁾
Volatile Organic Compounds				
- Benzene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.2
- Carbon tetrachloride	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.4
- 1,2-Dichloroethane	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.5
- 1,1-Dichloroethylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.1
- cis-1,2-Dichloroethylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 2.0
- trans-1,2-Dichloroethylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 5.0
- Ethylbenzene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 2.0
- Styrene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 24
- Tetrachloroethylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.9
- Toluene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 5.0
- 1,2,4 - Trichlorobenzene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 24
- 1,1,1-Trichloroethane	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.2


Physical Appearance : 1. Sample : lightly SS

2. Container : Normal [PE 0.5 L [3 Bottle], G 1.0 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)

2. Sampling By Miss Pornpinan Viriyakusolkul (ว-003-จ-8334)

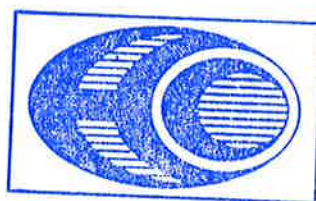
3. Sampling At UTM 47 P 730370 E 1404509 N

Examined By 


(Miss Apiradee Chuen-arom)

(ว-003-ค-4377)

06/06/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 

(Mr. Kawee Suthasub)

(ว-003-ค-2205)

06/06/2022

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Request No. W6505268

Report No. 6506-0117

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051039

Sample Name : บ่อสังเกตการณ์ 2 (TOCGC MW05) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 11:40 AM

Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 06/06/2022 Reported Date : 06/06/2022

Parameter	Unit	Method	Results	Standard ¹⁾
Volatile Organic Compounds				
- 1,1,2-Trichloroethane	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.8
- Trichloroethylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 4.4
- p,m-Xylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 24
- o-Xylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 24
- Xylene Total	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 24
- Vinyl Chloride	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.03
- Dichloromethane	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 6.0

Physical Apperance : 1. Sample : lightly SS
2. Container : Normal [PE 0.5 L [3 Bottle], G 1.0 L]

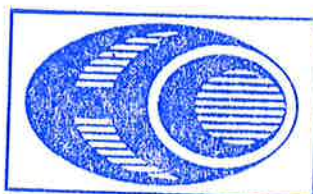
Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. Sampling By Miss Pornpinan Viriyakusolkul (ว-003-จ-8334)
3. Sampling At UTM 47 P 730370 E 1404509 N

Examined By

(Miss Apiradee Chuen-arom)

(ว-003-ค-4377)

06/06/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

(ว-003-ค-2205)

06/06/2022

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Request No. W6505268

Report No. 6506-0117

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051039

Sample Name : บ่อสังเกตการณ์ 2 (TOCGC MW05) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 11:40 AM

Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 06/06/2022 Reported Date : 06/06/2022

Parameter	Unit	Method	Result	Standard ¹⁾
Total Petroleum Hydrocarbons ***				
- TPH (C ₈ -C ₁₆)	mg/l	3510 C / 8015 D	ND	≤ 1.7
- n-Nonane				
- n-Decane				
- n-Dodecane				
- n-Tetradecane				
- n-Hexadecane				

Physical Apperance : 1. Sample : lightly SS

2. Container : Normal [PE 0.5 L [3 Bottle], G 1.0 L]

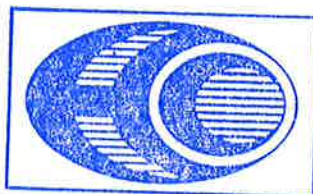
Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)

2. Sampling By Eastern Thai Consulting 1992 Co., Ltd., (Miss Pornpinan Viriyakusolkul (จ-003-จ-8334))

3. *** Tested by SECOT Co.,Ltd. (จ-239)

4. MDL = Method Detection Limit [MDL of TPH (C₈-C₁₆) = < 0.025 mg/l]

5. ND = non-detectable / Sampling At UTM 47 P 730370 E 1404509 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By 

(Miss Apiradee Chuen-arom)

06 / 06 / 2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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Request No. W6505268

Report No. 6506-0118

TEST REPORT

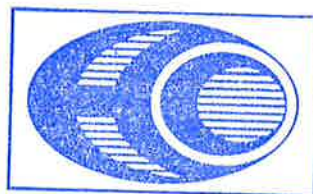
Customer : GC Glycol Company Limited**
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150**
Sampling Source : EOEG Plant**
Sample Name : บ่อสังเคราะห์ 3 (TOCGC MW06)**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 12/05/2022 – 06/06/2022
Sample No. : W 65051040
Sampling Date : 11/05/2022**
Sampling Time : 10:00 AM**
Received Date : 12/05/2022
Reported Date : 06/06/2022

Parameter	Unit	Method	Result	Standard ^{1/}
Arsenic *	mg/l	Continuous Hydride Generation/AAS Method (SM:3114B)	< 0.0020	≤ 0.1
Beryllium *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.01	≤ 0.01
Cadmium @		Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.003	≤ 2.0
Chromium @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤ 6.0
Hexavalent Chromium *	mg/l as Cr ⁶⁺	Filtration, Colorimetric Method (SM:3500 -Cr B)	< 0.050	≤ 6.0
Lead @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.010	≤ 4.0
Manganese @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.35	≤ 33
Mercury #	mg/l	Cold-Vapor Atomic Absorption Spectrometric Method (SM:3112B)	< 0.0010	≤ 0.7

Physical Appearance : 1. Sample : lightly SS
2. Container : Normal [PE 0.5 L [3 Bottle], PE 2.0 L, G 2.5 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,
SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2018
3. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
4. * = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (จ-003-จ-8334)*
5. ** = These data are non laboratory data. / Sampling At UTM 47 P 730789 E 1404730 N

Examined By.....
(Miss Apiradee Chuen-arom)
(จ-003-จ-4377)
06 / 06 / 2022



Approved By.....
(Mr. Kawee Suthasub)
(จ-003-จ-2205)
06 / 06 / 2022

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Request No. W6505268

Report No. 6506-0118


TEST REPORT

Customer : GC Glycol Company Limited**
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150**
Sampling Source : EOEG Plant** Sample No. : W 65051040
Sample Name : บ่อสังเคราะห์ 3 (TOCGC MW06)** Sampling Date : 11/05/2022**
Sampling By : ETC** Sampling Time : 10:00 AM**
Sampling Method : Grab** Received Date : 12/05/2022
Tested Date : 12/05/2022 – 06/06/2022 Reported Date : 06/06/2022


Parameter	Unit	Method	Result	Standard ^{1/}
Nickel @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤ 5.0
Selenium *	mg/l	Digestion, Hydride Generation/AAS Method (SM:3030F, 3114B&C)	< 0.0050	≤ 12
Vanadium *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.02	≤ 17

Physical Appearance : 1. Sample : lightly SS
2. Container : Normal [PE 0.5 L [3 Bottle], G 1.0 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,
SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2018
3. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
4. * = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (ว-003-จ-8334)*
5. ** = These data are non laboratory data. / Sampling At UTM 47 P 730789 E 1404730 N

Examined By 
(Miss Apiradee Chuen-arom)
(ว-003-ค-4377)
06 / 06 / 2022



Approved By 
(Mr. Kawee Suthasub)
(ว-003-ค-2205)
06 / 06 / 2022

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Request No. W6505268

Report No. 6506-0118

TEST REPORT

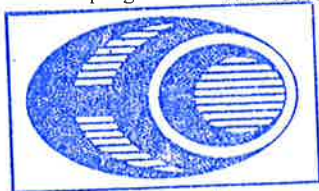
Customer : GC Glycol Company Limited**
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150**
Sampling Source : EOEG Plant**
Sample Name : ป๋อสังเกตรณ 3 (TOCGC MW06)**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 12/05/2022 – 06/06/2022

Sample No. : W 65051040
Sampling Date : 11/05/2022**
Sampling Time : 10:00 AM**
Received Date : 12/05/2022
Reported Date : 06/06/2022

Parameter	Unit	Method	Result	Standard ¹⁾
Boron *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.02	-
Cobalt *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.02	-
Copper @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	-
Iron *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	11.6	-
Titanium *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.02	-

Physical Appearance : 1. Sample : lightly SS
2. Container : Normal [PE 0.5 L [3 Bottle], G 1.0 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. Parameter Outside The Scope of The Registration of Department of Industrial Works
3. @ = ISO/IEC 17025:2017 Accredited by TISI., SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2018
4. Mr. Kawee Suthasub is Technical Management.
5. * = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (จ-003-จ-8334)*
6. ** = These data are non laboratory data. / Sampling At UTM 47 P 730789 E 1404730 N



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Examined By.....
(Mr. Kawee Suthasub)

06 / 06 / 2022

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Request No. W6505268

Report No. 6506-0118

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051040

Sample Name : บ่อสังเกตการณ์ 3 (TOCGC MW06) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 10:00 AM

Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 06/06/2022 Reported Date : 06/06/2022

Parameter	Unit	Method	Results	Standard ¹⁾
Volatile Organic Compounds				
- Benzene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.2
- Carbon tetrachloride	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.4
- 1,2-Dichloroethane	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.5
- 1,1-Dichloroethylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.1
- cis-1,2-Dichloroethylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 2.0
- trans-1,2-Dichloroethylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 5.0
- Ethylbenzene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 2.0
- Styrene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 24
- Tetrachloroethylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.9
- Toluene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 5.0
- 1,2,4 - Trichlorobenzene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 24
- 1,1,1-Trichloroethane	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.2


Physical Appearance : 1. Sample : lightly SS

2. Container : Normal [PE 0.5 L [3 Bottle], G 1.0 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)

2. Sampling By Miss Pornpinan Viriyakusolkul (ว-003-จ-8334)

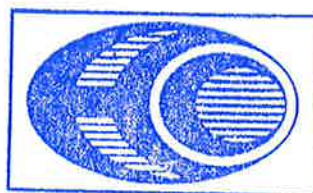
3. Sampling At UTM 47 P 730789 E 1404730 N

Examined By 


(Miss Apiradee Chuen-arom)

(ว-003-ค-4377)

06/06/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 

(Mr. Kawee Suthasub)

(ว-003-ค-2205)

06/06/2022

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Request No. W6505268

Report No. 6506-0118

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051040

Sample Name : บ่อสังเกตการณ์ 3 (TOCGC MW06) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 10:00 AM

Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 06/06/2022 Reported Date : 06/06/2022

Parameter	Unit	Method	Results	Standard ¹
Volatile Organic Compounds				
- 1,1,2-Trichloroethane	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.8
- Trichloroethylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 4.4
- p,m-Xylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 24
- o-Xylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 24
- Xylene Total	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 24
- Vinyl Chloride	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.03
- Dichloromethane	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 6.0

Physical Apperance : 1. Sample : lightly SS

2. Container : Normal [PE 0.5 L [3 Bottle], G 1.0 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)

2. Sampling By Miss Pornpinan Viriyakusolkul (ว-003-จ-8334)

3. Sampling At UTM 47 P 730789 E 1404730 N

Examined By



(Miss Apiradee Chuen-arom)

(ว-003-ค-4377)

06/06/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(Mr. Kawee Suthasub)

(ว-003-ค-2205)

06/06/2022

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Request No. W6505268

Report No. 6506-0118

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051040

Sample Name : บ่อสังเคราะห์น้ำ 3 (TOCGC MW06) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 10:00 AM

Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 06/06/2022 Reported Date : 06/06/2022

Parameter	Unit	Method	Result	Standard ¹⁾
Total Petroleum Hydrocarbons ***				
- TPH (C _{>8} -C ₁₆)	mg/l	3510 C /8015 D	ND	≤ 1.7
- n-Nonane				
- n-Decane				
- n-Dodecane				
- n-Tetradecane				
- n-Hexadecane				

Physical Apperance : 1. Sample : lightly SS

2. Container : Normal [PE 0.5 L [3 Bottle], G 1.0 L]

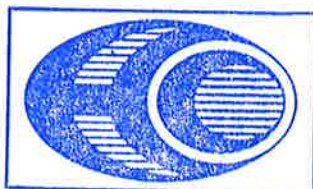
Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)

2. Sampling By Eastern Thai Consulting 1992 Co., Ltd., (Miss Pornpinan Viriyakusolkul (๖-003-๖-8334))

3. *** Tested by SECOT Co.,Ltd. (๖-239)

4. MDL = Method Detection Limit [MDL of TPH (C_{>8}-C₁₆) = < 0.025 mg/l]

5. ND = non-detectable / Sampling At UTM 47 P 730789 E 1404730 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By



(Miss Apiradee Chuen-arom)

06 / 06 / 2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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Request No. W6505268

Report No. 6506-0119

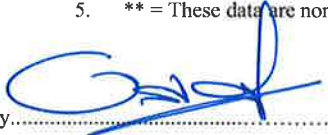
TEST REPORT

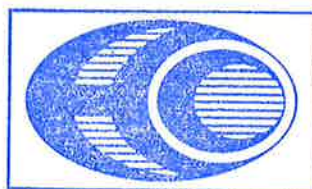
Customer : GC Glycol Company Limited**
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150**
Sampling Source : EOEG Plant**
Sample Name : บ่อสังเคราะห์ 4 (TOCGC MW07)**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 12/05/2022 – 06/06/2022
Sample No. : W 65051041
Sampling Date : 11/05/2022**
Sampling Time : 10:20 AM**
Received Date : 12/05/2022
Reported Date : 06/06/2022

Parameter	Unit	Method	Result	Standard ¹⁾
Arsenic *	mg/l	Continuous Hydride Generation/AAS Method (SM:3114B)	< 0.0020	≤ 0.1
Beryllium *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.01	≤ 0.01
Cadmium @		Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.003	≤ 2.0
Chromium @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤ 6.0
Hexavalent Chromium *	mg/l as Cr ⁶⁺	Filtration, Colorimetric Method (SM:3500 -Cr B)	< 0.050	≤ 6.0
Lead @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.010	≤ 4.0
Manganese @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.07	≤ 33
Mercury #	mg/l	Cold-Vapor Atomic Absorption Spectrometric Method (SM:3112B)	< 0.0010	≤ 0.7


Physical Appearance : 1. Sample : lightly SS
2. Container : Normal [PE 0.5 L [3 Bottle], PE 2.0 L, G 2.5 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,
SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2018
3. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
4. * = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (จ-003-ท-8334)*
5. ** = These data are non laboratory data. / Sampling At UTM 47 P 730841 E 1404704 N

Examined By. 
(Miss Apiradee Chuen-arom)
(จ-003-ท-4377)
06 / 06 / 2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 
(Mr. Kawee Suthasub)
(จ-003-ท-2205)
06 / 06 / 2022

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY
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WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. W6505268

Report No. 6506-0119


TEST REPORT

Customer	: GC Glycol Company Limited**	Sample No.	: W 65051041
Address	: 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150**	Sampling Date	: 11/05/2022**
Sampling Source	: EOEG Plant**	Sampling Time	: 10:20 AM**
Sample Name	: บ่อสังเคราะห์ 4 (TOCGC MW07)**	Received Date	: 12/05/2022
Sampling By	: ETC**	Reported Date	: 06/06/2022
Sampling Method	: Grab**		
Tested Date	: 12/05/2022 – 06/06/2022		


Parameter	Unit	Method	Result	Standard ¹⁾
Nickel @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤ 5.0
Selenium *	mg/l	Digestion, Hydride Generation/AAS Method (SM:3030F, 3114B&C)	< 0.0050	≤ 12
Vanadium *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.02	≤ 17

Physical Appearance : 1. Sample : lightly SS
2. Container : Normal [PE 0.5 L [3 Bottle], G 1.0 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,
SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2018
3. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
4. * = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (จ-003-จ-8334)*
5. ** = These data are non laboratory data. / Sampling At UTM 47 P 730841 E 1404704 N

Examined By 
(Miss Apiradee Chuen-arom)
(จ-003-ก-4377)
06 / 06 / 2022



Approved By 
(Mr. Kawee Suthasub)
(จ-003-ก-2205)
06 / 06 / 2022

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Request No. W6505268

Report No. 6506-0119

TEST REPORT

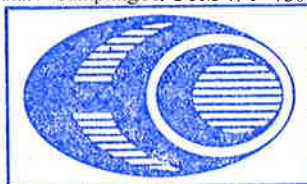
Customer : GC Glycol Company Limited**
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150**
Sampling Source : EOEG Plant**
Sample Name : บ่อสังเกตการณ์ 4 (TOCGC MW07)**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 12/05/2022 – 06/06/2022

Sample No. : W 65051041
Sampling Date : 11/05/2022**
Sampling Time : 10:20 AM**
Received Date : 12/05/2022
Reported Date : 06/06/2022

Parameter	Unit	Method	Result	Standard ^{/1}
Boron *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.02	-
Cobalt *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.02	-
Copper @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	-
Iron @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.06	-
Titanium *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.02	-

Physical Appearance : 1. Sample : lightly SS
2. Container : Normal [PE 0.5 L [3 Bottle], G 1.0 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. Parameter Outside The Scope of The Registration of Department of Industrial Works
3. @ = ISO/IEC 17025:2017 Accredited by TISI., SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2018
4. Mr. Kawee Suthasub is Technical Management.
5. * = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (จ-003-จ-8334)*
6. ** = These data are non laboratory data. / Sampling At UTM 47 P 730841 E 1404704 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Mr. Kawee Suthasub)

06 / 06 / 2022

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Request No. W6505268

Report No. 6506-0119

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051041

Sample Name : บ่อสังเคราะห์ 4 (TOCGC MW07) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 10:20 AM


Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 06/06/2022 Reported Date : 06/06/2022

Parameter	Unit	Method	Results	Standard ¹⁾
Volatile Organic Compounds				
- Benzene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.2
- Carbon tetrachloride	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.4
- 1,2-Dichloroethane	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.5
- 1,1-Dichloroethylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.1
- cis-1,2-Dichloroethylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 2.0
- trans-1,2-Dichloroethylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 5.0
- Ethylbenzene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 2.0
- Styrene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 24
- Tetrachloroethylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.9
- Toluene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 5.0
- 1,2,4 - Trichlorobenzene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 24
- 1,1,1-Trichloroethane	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.2


Physical Appearance : 1. Sample : lightly SS
2. Container : Normal [PE 0.5 L [3 Bottle], G 1.0 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. Sampling By Miss Pornpinan Viriyakusolkul (ว-003-จ-8334)
3. Sampling At UTM 47 P 730841 E 1404704 N

Examined By 
(Miss Apiradee Chuen-arom)
(ว-003-ค-4377)
06/06/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 
(Mr. Kawee Suthasub)
(ว-003-ค-2205)
06/06/2022

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Request No. W6505268

Report No. 6506-0119

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051041

Sample Name : บ่อสังเกตการณ์ 4 (TOCGC MW07) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 10:20 AM


Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 06/06/2022 Reported Date : 06/06/2022

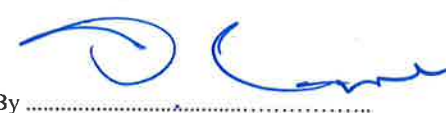
Parameter	Unit	Method	Results	Standard ¹⁾
Volatile Organic Compounds				
- 1,1,2-Trichloroethane	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.8
- Trichloroethylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 4.4
- p,m-Xylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 24
- o-Xylene	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 24
- Xylene Total	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 24
- Vinyl Chloride	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 0.03
- Dichloromethane	mg/l	Purge-and-Trap/GC-MS	Not Detected	≤ 6.0

Physical Apperance : 1. Sample : lightly SS
2. Container : Normal [PE 0.5 L [3 Bottle], G 1.0 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. Sampling By Miss Pornpinan Viriyakusolkul (ว-003-จ-8334)
3. Sampling At UTM 47 P 730841 E 1404704 N

Examined By 
(Miss Apiradee Chuen-arom)
(ว-003-ค-4377)
06/06/2022



Approved By 
(Mr. Kawee Suthasub)
(ว-003-ค-2205)
06/06/2022

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Request No. W6505268

Report No. 6506-0119

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051041

Sample Name : บ่อสังเคราะห์ 4 (TOCGC MW07) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 10:20 AM

Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 06/06/2022 Reported Date : 06/06/2022

Parameter	Unit	Method	Result	Standard ¹
Total Petroleum Hydrocarbons ***				
- TPH (C ₈ -C ₁₆)	mg/l	3510 C / 8015 D	ND	≤ 1.7
- n-Nonane				
- n-Decane				
- n-Dodecane				
- n-Tetradecane				
- n-Hexadecane				

Physical Apperance : 1. Sample : lightly SS

2. Container : Normal [PE 0.5 L [3 Bottle], G 1.0 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)

2. Sampling By Eastern Thai Consulting 1992 Co., Ltd., (Miss Pornpinan Viriyakusolkul (๖-003-๖-8334))

3. *** Tested by SECOT Co.,Ltd. (๖-239)

4. MDL = Method Detection Limit [MDL of TPH (C₈-C₁₆) = < 0.025 mg/l]

5. ND = non-detectable / Sampling At UTM 47 P 730841 E 1404704 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By 

(Miss Apiradee Chuen-arom)

06 / 06 / 2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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Request No. W6505270

Report No. 6506-0112

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051045

Sample Name : บ่อสังเคราะห์ 1 (TOCGC MW01) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 9:25 AM

Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 01/06/2022 Reported Date : 07/06/2022

Parameter	Unit	Method	Result	Standard ^{1/}
Arsenic (As)	mg/kg	Digestion, Inductively Coupled Plasma	< 5.00	≤ 27
Beryllium (Be)	mg/kg	Digestion, Inductively Coupled Plasma	< 1.00	≤ 13
Cadmium (Cd)	mg/kg	Digestion, Inductively Coupled Plasma	< 0.15	≤ 810
Chromium (Cr)	mg/kg	Digestion, Inductively Coupled Plasma	5.08	≤ 640
Hexavalent Chromium	mg/kg	Alkaline Digestion, Colorimetric Method	< 2.00	≤ 640
Lead (Pb)	mg/kg	Digestion, Inductively Coupled Plasma	4.75	≤ 750
Manganese (Mn)	mg/kg	Digestion, Inductively Coupled Plasma	70.8	≤ 32,000
Mercury (Hg)	mg/kg	Digestion, Cold-Vapor Atomic Absorption Spectrometric	< 0.20	≤ 610
Nickel (Ni)	mg/kg	Digestion, Inductively Coupled Plasma	< 1.00	≤ 41,000
Selenium (Se)	mg/kg	Digestion, Inductively Coupled Plasma	< 5.00	≤ 10,000
Vanadium (V)	mg/kg	Digestion, Inductively Coupled Plasma	6.94	≤ 1,000
Zinc (Zn)	mg/kg	Digestion, Inductively Coupled Plasma	22.9	≤ 1,000

Physical Appearance : 1. Sample : brown, soil
2. Container : Normal [G 0.5 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. Sampling By Miss Pornpinan Viriyakusolkul (จ-003-จ-8334)
3. Sampling At UTM 47 P 731078 E 1405208 N

Examined By



(Miss Apiradee Chuen-arom)

(จ-003-ค-4377)

07 / 06 / 2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(Mr. Kawee Suthasub)

(จ-003-ค-2205)

07 / 06 / 2022

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Request No. W6505270

Report No. 6506-0112

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,
Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051045

Sample Name : บ่อสังเกตการณ์ I (TOCGC MW01) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 9:25 AM

Sampling Method : Grab Received Date : 12/05/2022


Tested Date : 12/05/2022 – 01/06/2022 Reported Date : 07/06/2022

Parameter	Unit	Method	Result	Standard ¹¹
Boron (B)	mg/kg	Digestion, Inductively Coupled Plasma	4.03	-
Cobalt (Co)	mg/kg	Digestion, Inductively Coupled Plasma	< 1.00	-
Copper (Cu)	mg/kg	Digestion, Inductively Coupled Plasma	1.32	-
Iron (Fe)	mg/kg	Digestion, Inductively Coupled Plasma	2,569	-
Titanium (Ti)	mg/kg	Digestion, Inductively Coupled Plasma	12.1	-

Physical Apperance : 1. Sample : brown, soil
2. Container : Normal [G 0.5 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. Parameter Outside The Scope of The Registration of Department of Industrial Works
3. Sampling By Miss Pornpinan Viriyakusolkul (ว-003-จ-8334)
4. Sampling At UTM 47 P 731078 E 1405208 N



Examined By 
(Miss Apiradee Chuen-arom)

07/06/2022

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Request No. W6505270

Report No. 6506-0112

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051045

Sample Name : บ่อสังเกตการณ์ 1 (TOCGC MW01) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 9:25 AM

Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 01/06/2022 Reported Date : 07/06/2022

Parameter	Unit	Method	Results	Standard ¹⁾
Volatile Organic Compounds				
- Benzene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 15
- Carbon tetrachloride	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 5.3
- 1,2-Dichloroethane	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 7.6
- 1,1-Dichloroethylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 1.2
- cis-1,2-Dichloroethylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 150
- trans-1,2-Dichloroethylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 210
- Ethylbenzene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 230
- Styrene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 1,700
- Tetrachloroethylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 190
- Toluene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 520
- 1,2,4 - Trichlorobenzene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 1,000
- 1,1,1-Trichloroethane	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 1,400


Physical Apperance : 1. Sample : brown, soil

2. Container : Normal [G 0.5 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)

2. Sampling By Miss Pornpinan Viriyakusolkul (ว-003-จ-8334)

3. Sampling At UTM 47 P 731078 E 1405208 N


Examined By 

(Miss Apiradee Chuen-arom)

(ว-003-ท-4377)

07/06/2022



Approved By 

(Mr. Kawee Suthasub)

(ว-003-ท-2205)

07/06/2022

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Request No. W6505270

Report No. 6506-0112

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051045

Sample Name : บ่อสังเคราะห์ 1 (TOCGC MW01) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 9:25 AM

Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 01/06/2022 Reported Date : 07/06/2022

Parameter	Unit	Method	Results	Standard ¹⁾
Volatile Organic Compounds				
- 1,1,2-Trichloroethane	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 19
- Trichloroethylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 61
- Vinyl Chloride	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 8.3
- m,p-Xylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 210
- o-Xylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 210
- Xylene Total	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 210
- Dichloromethane	mg/kg	Purge-and-Trap/GC-MS	0.012	≤ 210

Physical Apperance : 1. Sample : brown, soil
2. Container : Normal [G 0.5 L]

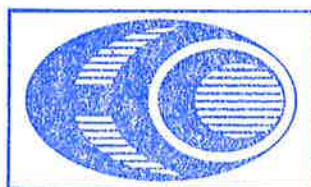
Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. Sampling By Miss Pornpinan Viriyakusolkul (ว-003-จ-8334)
3. Sampling At UTM 47 P 731078 E 1405208 N

Examined By

(Miss Apiradee Chuen-arom)

(ว-003-ค-4377)

07/06/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

(ว-003-ค-2205)

07/06/2022

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Request No. W6505270

Report No. 6506-0112

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051045

Sample Name : บ่อสังเกตรั่ว 1 (TOCGC MW01) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 9:25 AM

Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 01/06/2022 Reported Date : 07/06/2022

Parameter	Unit	Method	Result	Standard ¹
Total Petroleum Hydrocarbons ***				
- TPH (C ₈ -C ₁₆)	mg/kg	3540 C /8015 D	ND	≤ 25
- n-Nonane				
- n-Decane				
- n-Dodecane				
- n-Tetradecane				
- n-Hexadecane				

Physical Apperance : 1. Sample : brown, soil
2. Container : Normal [G 0.5 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. Sampling By Eastern Thai Consulting 1992 Co., Ltd., (Miss Pornpinan Viriyakusolkul (๖-003-๖-8334))
3. *** Tested by SECOT Co.,Ltd. (๖-239)
4. MDL = Method Detection Limit [MDL of TPH (C₈-C₁₆) = 0.25 mg/kg]
5. ND = non-detectable / Sampling At UTM 47 P 731078 E 1405208 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By



(Miss Apiradee Chuen-arom)

07 / 06 / 2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
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Request No. W6505270

Report No. 6506-0113

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051046

Sample Name : บ่อสังเกตการณ์ 2 (TOCGC MW05) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 11:40 AM

Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 01/06/2022 Reported Date : 07/06/2022

Parameter	Unit	Method	Result	Standard ¹⁾
Arsenic (As)	mg/kg	Digestion, Inductively Coupled Plasma	11.1	≤ 27
Beryllium (Be)	mg/kg	Digestion, Inductively Coupled Plasma	< 1.00	≤ 13
Cadmium (Cd)	mg/kg	Digestion, Inductively Coupled Plasma	0.38	≤ 810
Chromium (Cr)	mg/kg	Digestion, Inductively Coupled Plasma	18.0	≤ 640
Hexavalent Chromium	mg/kg	Alkaline Digestion, Colorimetric Method	< 2.00	≤ 640
Lead (Pb)	mg/kg	Digestion, Inductively Coupled Plasma	7.66	≤ 750
Manganese (Mn)	mg/kg	Digestion, Inductively Coupled Plasma	183	≤ 32,000
Mercury (Hg)	mg/kg	Digestion, Cold-Vapor Atomic Absorption Spectrometric	< 0.20	≤ 610
Nickel (Ni)	mg/kg	Digestion, Inductively Coupled Plasma	1.58	≤ 41,000
Selenium (Se)	mg/kg	Digestion, Inductively Coupled Plasma	< 5.00	≤ 10,000
Vanadium (V)	mg/kg	Digestion, Inductively Coupled Plasma	23.3	≤ 1,000
Zinc (Zn)	mg/kg	Digestion, Inductively Coupled Plasma	24.2	≤ 1,000

Physical Appearance : 1. Sample : brown, soil
2. Container : Normal [G 0.5 L]

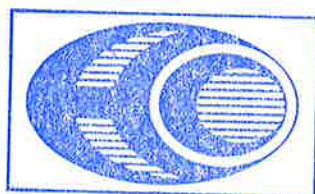
Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. Sampling By Miss Pompinan Viriyakusolkul (ว-003-ท-8334)
3. Sampling At UTM 47 P 730370 E 1404509 N

Examined By

(Miss Apiradee Chuen-arom)

(ว-003-ท-4377)

07 / 06 / 2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

(ว-003-ท-2205)

07 / 06 / 2022

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Request No. W6505270

Report No. 6506-0113

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,
Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051046

Sample Name : บ่อสังเคราะห์ 2 (TOCGC MW05) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 11:40 AM

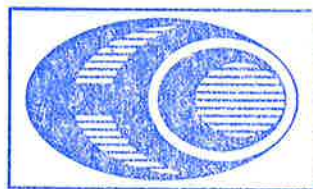
Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 01/06/2022 Reported Date : 07/06/2022

Parameter	Unit	Method	Result	Standard ¹⁾
Boron (B)	mg/kg	Digestion, Inductively Coupled Plasma	16.8	-
Cobalt (Co)	mg/kg	Digestion, Inductively Coupled Plasma	< 1.00	-
Copper (Cu)	mg/kg	Digestion, Inductively Coupled Plasma	1.02	-
Iron (Fe)	mg/kg	Digestion, Inductively Coupled Plasma	8,981	-
Titanium (Ti)	mg/kg	Digestion, Inductively Coupled Plasma	11.7	-

Physical Apperance : 1. Sample : brown, soil
2. Container : Normal [G 0.5 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. Parameter Outside The Scope of The Registration of Department of Industrial Works
3. Sampling By Miss Pompinan Viriyakusolkul (1-003-1-8334)
4. Sampling At UTM 47 P 730370 E 1404509 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Apiradee Chuen-arom)

07/ 06 / 2022

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Request No. W6505270

Report No. 6506-0113

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051046

Sample Name : บ่อสังเกตการณ์ 2 (TOCGC MW05) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 11:40 AM

Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 01/06/2022 Reported Date : 07/06/2022


Parameter	Unit	Method	Results	Standard ¹
Volatile Organic Compounds				
- Benzene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 15
- Carbon tetrachloride	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 5.3
- 1,2-Dichloroethane	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 7.6
- 1,1-Dichloroethylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 1.2
- cis-1,2-Dichloroethylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 150
- trans-1,2-Dichloroethylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 210
- Ethylbenzene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 230
- Styrene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 1,700
- Tetrachloroethylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 190
- Toluene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 520
- 1,2,4 - Trichlorobenzene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 1,000
- 1,1,1-Trichloroethane	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 1,400

Physical Apperance : 1. Sample : brown, soil
2. Container : Normal [G 0.5 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. Sampling By Miss Pornpinan Viriyakusolkul (ว-003-จ-8334)
3. Sampling At UTM 47 P 730370 E 1404509 N

Examined By 
(Miss Apiradee Chuen-arom)
(ว-003-ค-4377)
07/06/2022



Approved By 
(Mr. Kawee Suthasub)
(ว-003-ค-2205)
07/06/2022

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Request No. W6505270

Report No. 6506-0113

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051046

Sample Name : บ่อสังเกตการณ์ 2 (TOCGC MW05) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 11:40 AM

Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 01/06/2022 Reported Date : 07/06/2022

Parameter	Unit	Method	Results	Standard ¹⁾
Volatile Organic Compounds				
- 1,1,2-Trichloroethane	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 19
- Trichloroethylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 61
- Vinyl Chloride	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 8.3
- m,p-Xylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 210
- o-Xylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 210
- Xylene Total	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 210
- Dichloromethane	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 210

Physical Apperance : 1. Sample : brown, soil
2. Container : Normal [G 0.5 L]

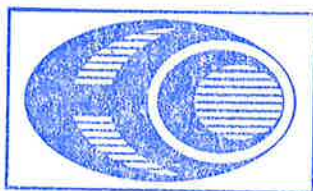
Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. Sampling By Miss Pornpinan Viriyakusolkul (ว-003-จ-8334)
3. Sampling At UTM 47 P 730370 E 1404509 N

Examined By 

(Miss Apiradee Chuen-arom)

(ว-003-ค-4377)

07/06/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 

(Mr. Kawee Suthasub)

(ว-003-ค-2205)

07/06/2022

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Request No. W6505270

Report No. 6506-0113

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051046

Sample Name : บ่อสังเคราะห์ 2 (TOCGC MW05) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 11:40 AM

Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 01/06/2022 Reported Date : 07/06/2022

Parameter	Unit	Method	Result	Standard ^{1/}
Total Petroleum Hydrocarbons ***				
- TPH (C ₈ -C ₁₆)	mg/kg	3540 C /8015 D	0.60	≤ 25
- n-Nonane				
- n-Decane				
- n-Dodecane				
- n-Tetradecane				
- n-Hexadecane				

Physical Appearance : 1. Sample : brown, soil

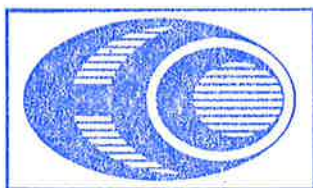
2. Container : Normal [G 0.5 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)


2. Sampling By Eastern Thai Consulting 1992 Co., Ltd., (Miss Pornpinan Viriyakusolkul (๖-003-๖-8334))

3. *** Tested by SECOT Co.,Ltd. (๖-239)

4. Sampling At UTM 47 P 730370 E 1404509 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By 

(Miss Apiradee Chuen-arom)

07 / 06 / 2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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Request No. W6505270

Report No. 6506-0114

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant

Sample Name : บ่อสังเกตการณ์ 3 (TOCGC MW06)

Sampling By : ETC

Sampling Method : Grab

Tested Date : 12/05/2022 – 01/06/2022

Sample No. : W 65051047

Sampling Date : 11/05/2022

Sampling Time : 10:00 AM

Received Date : 12/05/2022

Reported Date : 07/06/2022

Parameter	Unit	Method	Result	Standard ¹⁾
Arsenic (As)	mg/kg	Digestion, Inductively Coupled Plasma	< 5.00	≤ 27
Beryllium (Be)	mg/kg	Digestion, Inductively Coupled Plasma	< 1.00	≤ 13
Cadmium (Cd)	mg/kg	Digestion, Inductively Coupled Plasma	< 0.15	≤ 810
Chromium (Cr)	mg/kg	Digestion, Inductively Coupled Plasma	2.35	≤ 640
Hexavalent Chromium	mg/kg	Alkaline Digestion, Colorimetric Method	< 2.00	≤ 640
Lead (Pb)	mg/kg	Digestion, Inductively Coupled Plasma	5.32	≤ 750
Manganese (Mn)	mg/kg	Digestion, Inductively Coupled Plasma	172	≤ 32,000
Mercury (Hg)	mg/kg	Digestion, Cold-Vapor Atomic Absorption Spectrometric	< 0.20	≤ 610
Nickel (Ni)	mg/kg	Digestion, Inductively Coupled Plasma	< 1.00	≤ 41,000
Selenium (Se)	mg/kg	Digestion, Inductively Coupled Plasma	< 5.00	≤ 10,000
Vanadium (V)	mg/kg	Digestion, Inductively Coupled Plasma	3.15	≤ 1,000
Zinc (Zn)	mg/kg	Digestion, Inductively Coupled Plasma	16.8	≤ 1,000

Physical Appearance : 1. Sample : brown, soil
2. Container : Normal [G 0.5 L]

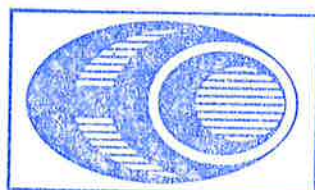
Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. Sampling By Miss Pompinan Viriyakusolkul (ว-003-จ-8334)
3. Sampling At UTM 47 P 730789 E 1404730 N

Examined By

(Miss Apiradee Chuen-arom)

(ว-003-ค-4377)

07 / 06 / 2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

(ว-003-ค-2205)

07 / 06 / 2022

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Request No. W6505270

Report No. 6506-0114

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,
Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051047

Sample Name : บ่อสังเคราะห์ 3 (TOCGC MW06) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 10:00 AM

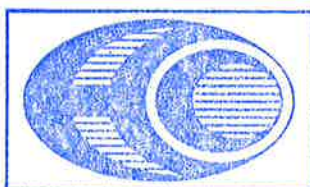
Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 01/06/2022 Reported Date : 07/06/2022

Parameter	Unit	Method	Result	Standard ¹¹
Boron (B)	mg/kg	Digestion, Inductively Coupled Plasma	4.77	-
Cobalt (Co)	mg/kg	Digestion, Inductively Coupled Plasma	< 1.00	-
Copper (Cu)	mg/kg	Digestion, Inductively Coupled Plasma	< 1.00	-
Iron (Fe)	mg/kg	Digestion, Inductively Coupled Plasma	1,981	-
Titanium (Ti)	mg/kg	Digestion, Inductively Coupled Plasma	23.4	-

Physical Apperance : 1. Sample : brown, soil
2. Container : Normal [G 0.5 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. Parameter Outside The Scope of The Registration of Department of Industrial Works
3. Sampling By Miss Pompinan Viriyakusolkul (ว-003-จ-8334)
4. Sampling At UTM 47 P 730789 E 1404730 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Apiradee Chuen-arom)

07/ 06 / 2022

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Request No. W6505270

Report No. 6506-0114

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051047

Sample Name : บ่อสังเกตการณ์ 3 (TOCGC MW06) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 10:00 AM

Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 01/06/2022 Reported Date : 07/06/2022

Parameter	Unit	Method	Results	Standard ¹
Volatile Organic Compounds				
- Benzene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 15
- Carbon tetrachloride	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 5.3
- 1,2-Dichloroethane	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 7.6
- 1,1-Dichloroethylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 1.2
- cis-1,2-Dichloroethylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 150
- trans-1,2-Dichloroethylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 210
- Ethylbenzene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 230
- Styrene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 1,700
- Tetrachloroethylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 190
- Toluene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 520
- 1,2,4 - Trichlorobenzene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 1,000
- 1,1,1-Trichloroethane	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 1,400


Physical Apperance : 1. Sample : brown, soil

2. Container : Normal [G 0.5 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)

2. Sampling By Miss Pornpinan Viriyakusolkul (ว-003-จ-8334)

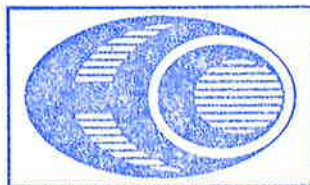
3. Sampling At UTM 47 P 730789 E 1404730 N

Examined By 


(Miss Apiradee Chuen-arom)

(ว-003-ท-4377)

07/06/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 

(Mr. Kawee Suthasub)

(ว-003-ท-2205)

07/06/2022

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Request No. W6505270

Report No. 6506-0114

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051047

Sample Name : บ่อสังเกตการณ์ 3 (TOCGC MW06) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 10:00 AM

Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 01/06/2022 Reported Date : 07/06/2022

Parameter	Unit	Method	Results	Standard ¹
Volatile Organic Compounds				
- 1,1,2-Trichloroethane	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 19
- Trichloroethylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 61
- Vinyl Chloride	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 8.3
- m,p-Xylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 210
- o-Xylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 210
- Xylene Total	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 210
- Dichloromethane	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 210

Physical Apperance :

1. Sample : brown, soil

2. Container : Normal [G 0.5 L]

Remark :

1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. Sampling By Miss Pornpinan Viriyakusolkul (ว-003-จ-8334)
3. Sampling At UTM 47 P 730789 E 1404730 N

Examined By

(Miss Apiradee Chuen-arom)

(ว-003-ค-4377)

07/06/2022



Approved By

(Mr. Kawee Suthasub)

(ว-003-ค-2205)

07/06/2022

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY

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Request No. W6505270

Report No. 6506-0114

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051047

Sample Name : บ่อสังเกตรั่ว 3 (TOCGC MW06) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 10:00 AM

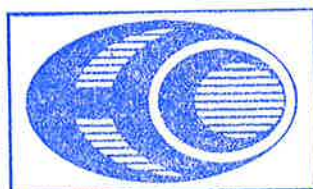
Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 01/06/2022 Reported Date : 07/06/2022

Parameter	Unit	Method	Result	Standard ¹
Total Petroleum Hydrocarbons ***				
- TPH (C ₈ -C ₁₆)	mg/kg	3540 C / 8015 D	ND	≤ 25
- n-Nonane				
- n-Decane				
- n-Dodecane				
- n-Tetradecane				
- n-Hexadecane				

Physical Appearance : 1. Sample : brown, soil
2. Container : Normal [G 0.5 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. Sampling By Eastern Thai Consulting 1992 Co., Ltd., (Miss Pornpinan Viriyakusolkul (๖-003-๖-8334))
3. *** Tested by SECOT Co.,Ltd. (๖-239)
4. MDL = Method Detection Limit [MDL of TPH (C₈-C₁₆) = 0.25 mg/kg]
5. ND = non-detectable / Sampling At UTM 47 P 730789 E 1404730 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By

(Miss Apiradee Chuen-arom)

07 / 06 / 2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL
WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. W6505270

Report No. 6506-0115

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051048

Sample Name : บ่อสังเกตการณ์ 4 (TOCGC MW07) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 10:20 AM

Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 01/06/2022 Reported Date : 07/06/2022

Parameter	Unit	Method	Result	Standard ¹
Arsenic (As)	mg/kg	Digestion, Inductively Coupled Plasma	< 5.00	≤ 27
Beryllium (Be)	mg/kg	Digestion, Inductively Coupled Plasma	< 1.00	≤ 13
Cadmium (Cd)	mg/kg	Digestion, Inductively Coupled Plasma	0.24	≤ 810
Chromium (Cr)	mg/kg	Digestion, Inductively Coupled Plasma	8.16	≤ 640
Hexavalent Chromium	mg/kg	Alkaline Digestion, Colorimetric Method	< 2.00	≤ 640
Lead (Pb)	mg/kg	Digestion, Inductively Coupled Plasma	4.23	≤ 750
Manganese (Mn)	mg/kg	Digestion, Inductively Coupled Plasma	58.3	≤ 32,000
Mercury (Hg)	mg/kg	Digestion, Cold-Vapor Atomic Absorption Spectrometric	< 0.20	≤ 610
Nickel (Ni)	mg/kg	Digestion, Inductively Coupled Plasma	1.66	≤ 41,000
Selenium (Se)	mg/kg	Digestion, Inductively Coupled Plasma	< 5.00	≤ 10,000
Vanadium (V)	mg/kg	Digestion, Inductively Coupled Plasma	14.7	≤ 1,000
Zinc (Zn)	mg/kg	Digestion, Inductively Coupled Plasma	67.3	≤ 1,000

Physical Appearance : 1. Sample : brown, soil
2. Container : Normal [G 0.5 L]

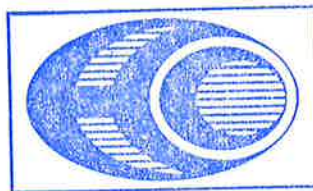
Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. Sampling By Miss Pornpinan Viriyakusolkul (จ-003-จ-8334)
3. Sampling At UTM 47 P 730841 E 1404704 N

Examined By.....

(Miss Apiradee Chuen-arom)

(จ-003-ค-4377)

07 / 06 / 2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

(จ-003-ค-2205)

07 / 06 / 2022

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY
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Request No. W6505270

Report No. 6506-0115

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,
Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051048

Sample Name : บ่อสังเกตการณ์ 4 (TOCGC MW07) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 10:20 AM

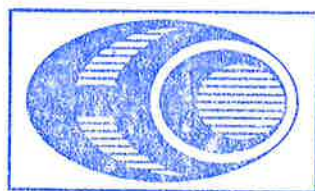
Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 01/06/2022 Reported Date : 07/06/2022

Parameter	Unit	Method	Result	Standard ¹
Boron (B)	mg/kg	Digestion, Inductively Coupled Plasma	9.60	-
Cobalt (Co)	mg/kg	Digestion, Inductively Coupled Plasma	< 1.00	-
Copper (Cu)	mg/kg	Digestion, Inductively Coupled Plasma	1.53	-
Iron (Fe)	mg/kg	Digestion, Inductively Coupled Plasma	5,234	-
Titanium (Ti)	mg/kg	Digestion, Inductively Coupled Plasma	17.1	-

Physical Apperance : 1. Sample : brown, soil
2. Container : Normal [G 0.5 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. Parameter Outside The Scope of The Registration of Department of Industrial Works
3. Sampling By Miss Pompinan Viriyakusolkul (๖-003-๖-8334)
4. Sampling At UTM 47 P 730841 E 1404704 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Apiradee Chuen-arom)

07/ 06 / 2022

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY
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Request No. W6505270

Report No. 6506-0115

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051048

Sample Name : บ่อสังเกตการณ์ 4 (TOCGC MW07) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 10:20 AM


Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 01/06/2022 Reported Date : 07/06/2022

Parameter	Unit	Method	Results	Standard ¹⁾
Volatile Organic Compounds				
- Benzene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 15
- Carbon tetrachloride	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 5.3
- 1,2-Dichloroethane	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 7.6
- 1,1-Dichloroethylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 1.2
- cis-1,2-Dichloroethylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 150
- trans-1,2-Dichloroethylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 210
- Ethylbenzene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 230
- Styrene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 1,700
- Tetrachloroethylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 190
- Toluene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 520
- 1,2,4 - Trichlorobenzene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 1,000
- 1,1,1-Trichloroethane	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 1,400

Physical Appearance : 1. Sample : brown, soil
2. Container : Normal [G 0.5 L]


Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. Sampling By Miss Pornpinan Viriyakusolkul (ว-003-จ-8334)
3. Sampling At UTM 47 P 730841 E 1404704 N

Examined By 
(Miss Apiradee Chuen-arom)

(ว-003-ค-4377)
07/06/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 
(Mr. Kawee Suthasub)

(ว-003-ค-2205)
07/06/2022

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY
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Request No. W6505270

Report No. 6506-0115

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051048

Sample Name : บ่อสังเคราะห์ 4 (TOCGC MW07) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 10:20 AM

Sampling Method : Grab Received Date : 12/05/2022

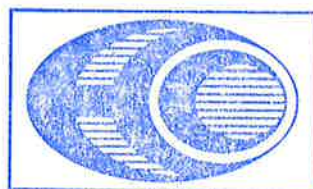
Tested Date : 12/05/2022 – 01/06/2022 Reported Date : 07/06/2022

Parameter	Unit	Method	Results	Standard ¹
Volatile Organic Compounds				
- 1,1,2-Trichloroethane	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 19
- Trichloroethylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 61
- Vinyl Chloride	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 8.3
- m,p-Xylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 210
- o-Xylene	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 210
- Xylene Total	mg/kg	Purge-and-Trap/GC-MS	Not Detected	≤ 210
- Dichloromethane	mg/kg	Purge-and-Trap/GC-MS	0.011	≤ 210


Physical Apperance : 1. Sample : brown, soil
2. Container : Normal [G 0.5 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. Sampling By Miss Pornpinan Viriyakusolkul (ว-003-จ-8334)
3. Sampling At UTM 47 P 730841 E 1404704 N

Examined By 
(Miss Apiradee Chuen-arom)
(ว-003-ค-4377)
07/06/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 
(Mr. Kawee Suthasub)
(ว-003-ค-2205)
07/06/2022

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Request No. W6505270

Report No. 6506-0115

TEST REPORT

Customer : GC Glycol Company Limited

Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 65051048

Sample Name : บ่อสังเกตการณ์ 4 (TOCGC MW07) Sampling Date : 11/05/2022

Sampling By : ETC Sampling Time : 10:20 AM

Sampling Method : Grab Received Date : 12/05/2022

Tested Date : 12/05/2022 – 01/06/2022 Reported Date : 07/06/2022

Parameter	Unit	Method	Result	Standard ¹
Total Petroleum Hydrocarbons ***				
- TPH (C ₈ -C ₁₆)	mg/kg	3540 C /8015 D	0.74	≤ 25
- n-Nonane				
- n-Decane				
- n-Dodecane				
- n-Tetradecane				
- n-Hexadecane				

Physical Apperance : 1. Sample : brown, soil

2. Container : Normal [G 0.5 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)

2. Sampling By Eastern Thai Consulting 1992 Co., Ltd., (Miss Pornpinan Viriyakusolkul (๖-003-๖-8334))

3. *** Tested by SECOT Co.,Ltd. (๖-239)

4. Sampling At UTM 47 P 730841 E 1404704 N



Examined By



(Miss Apiradee Chuen-arom)

07 / 06 / 2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
SAMPLE SOURCE : EOEG Plant
SAMPLE POINT : บริเวณริมรั้วด้านทิศเหนือ
PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{max} , $L_{90\#}$ & $L_{dn\#}$
DETERMINATION METHOD : ISO 1996-1:2016
INSTRUMENT : Integrated Sound Level Meter S/N G300957 : Type 2

SAMPLE NO. : 07782
MEASURING DATE : 03-04/05/2022
RECEIVED DATE : 13/05/2022
REPORTED DATE : 18/05/2022

TIME \ DATE	03-04/05/2022 (L_{eq})	03-04/05/2022 (L_{max})	03-04/05/2022 ($L_{90\#}$)	UNIT
09:00 – 10:00 ¹³	61.8	80.7	54.2	dB(A)
10:00 – 11:00	61.9	82.6	54.7	dB(A)
11:00 – 12:00	62.8	78.2	54.4	dB(A)
12:00 – 13:00	61.3	80.2	53.7	dB(A)
13:00 – 14:00	62.4	86.9	53.7	dB(A)
14:00 – 15:00	61.3	83.4	53.5	dB(A)
15:00 – 16:00	60.5	76.1	53.6	dB(A)
16:00 – 17:00	62.2	79.4	53.4	dB(A)
17:00 – 18:00	64.9	87.6	54.0	dB(A)
18:00 – 19:00	62.5	87.2	54.1	dB(A)
19:00 – 20:00	60.9	78.5	53.9	dB(A)
20:00 – 21:00	62.2	88.7	53.7	dB(A)
21:00 – 22:00	56.8	75.1	53.5	dB(A)
22:00 – 23:00	55.0	70.8	53.4	dB(A)
23:00 – 00:00	56.3	83.6	53.1	dB(A)
00:00 – 01:00	55.3	74.0	52.8	dB(A)
01:00 – 02:00	55.5	78.3	52.8	dB(A)
02:00 – 03:00	54.0	69.1	52.9	dB(A)
03:00 – 04:00	54.5	77.1	52.8	dB(A)
04:00 – 05:00	54.3	73.1	52.9	dB(A)
05:00 – 06:00	57.6	77.0	53.3	dB(A)
06:00 – 07:00	59.7	75.9	54.1	dB(A)
07:00 – 08:00	64.0	86.9	54.7	dB(A)
08:00 – 09:00	62.0	80.6	53.8	dB(A)
L_{eq} 24 hr.	60.7	-	-	dB(A)
$L_{dn\#}$	64.1	-	-	dB(A)
Maximum	-	88.7	-	dB(A)
Standard	70 ¹¹ , 70 ¹²	115 ¹¹ , 115 ¹²	-	dB(A)

REMARK : ¹³ Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

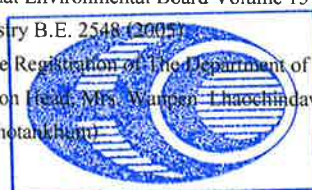
¹¹ Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

¹² Notification of Ministry of the Industry B.E. 2548 (2005)

* Parameter Outside The Scope of The Registration of The Department of Industrial Works

(Ms. Thanatporn Klinasopon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Photakhan)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....
(MRS. WANPEN LHAOCHINDAWAT)

18/05/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL
WITHOUT THE WRITTEN APPROVAL LABORATORY

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
SAMPLE SOURCE : EOEG Plant
SAMPLE POINT : บริเวณริมรั้วด้านทิศเหนือ
PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{max} , $L_{90\#}$ & $L_{dn\#}$
DETERMINATION METHOD : ISO 1996-1:2016
INSTRUMENT : Integrated Sound Level Meter S/N G300957 : Type 2
SAMPLE NO. : 07783
MEASURING DATE : 04-05/05/2022
RECEIVED DATE : 13/05/2022
REPORTED DATE : 18/05/2022

TIME \ DATE	04-05/05/2022 (L_{eq})	04-05/05/2022 (L_{max})	04-05/05/2022 ($L_{90\#}$)	UNIT
09:00 – 10:00 ³	60.1	77.2	53.1	dB(A)
10:00 – 11:00	59.2	75.3	52.7	dB(A)
11:00 – 12:00	61.4	79.5	52.9	dB(A)
12:00 – 13:00	58.2	79.9	52.5	dB(A)
13:00 – 14:00	58.6	77.5	52.8	dB(A)
14:00 – 15:00	59.0	78.7	53.3	dB(A)
15:00 – 16:00	59.5	75.9	54.1	dB(A)
16:00 – 17:00	60.7	76.5	54.2	dB(A)
17:00 – 18:00	63.9	82.1	54.1	dB(A)
18:00 – 19:00	61.7	87.2	53.7	dB(A)
19:00 – 20:00	58.6	77.7	52.9	dB(A)
20:00 – 21:00	61.8	89.8	52.8	dB(A)
21:00 – 22:00	55.9	71.6	53.0	dB(A)
22:00 – 23:00	55.6	76.7	52.5	dB(A)
23:00 – 00:00	55.9	73.2	52.6	dB(A)
00:00 – 01:00	54.6	72.4	52.3	dB(A)
01:00 – 02:00	53.3	66.2	52.4	dB(A)
02:00 – 03:00	53.7	69.2	52.4	dB(A)
03:00 – 04:00	54.7	76.9	52.8	dB(A)
04:00 – 05:00	54.2	69.7	52.8	dB(A)
05:00 – 06:00	57.6	77.2	52.9	dB(A)
06:00 – 07:00	60.8	77.3	54.3	dB(A)
07:00 – 08:00	64.4	84.9	55.3	dB(A)
08:00 – 09:00	62.3	76.2	54.2	dB(A)
L_{eq} 24 hr.	59.7	-	-	dB(A)
$L_{dn\#}$	63.7	-	-	dB(A)
Maximum	-	89.8	-	dB(A)
Standard	70 ¹ , 70 ²	115 ¹ , 115 ²	-	dB(A)

REMARK : [#] Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

¹ Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

² Notification of Ministry of the Industry B.E. 2548 (2005)

* Parameter Outside The Scope of The Registration of The Department of Industrial Works

(Ms. Thanatporn Klinsonon is Section Head, Mr. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Photunkham)

³ Start Time



Approved By 
(MRS. WANPEN LHAOCHINDAWAT)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

18/05/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
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TEST REPORT

CUSTOMER : GC Glycol Co., Ltd
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
SAMPLE SOURCE : EOEG Plant
SAMPLE POINT : บริเวณริมรั้วด้านทิศเหนือ
PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{max} , $L_{90\#}$ & $L_{dn\#}$
DETERMINATION METHOD : ISO 1996-1:2016
INSTRUMENT : Integrated Sound Level Meter S/N G300957 : Type 2

SAMPLE NO. : 07784
MEASURING DATE : 05-06/05/2022
RECEIVED DATE : 13/05/2022
REPORTED DATE : 18/05/2022

TIME \ DATE	05-06/05/2022 (L_{eq})	05-06/05/2022 (L_{max})	05-06/05/2022 ($L_{90\#}$)	UNIT
09:00 – 10:00 ¹⁾	60.2	77.4	53.9	dB(A)
10:00 – 11:00	61.5	78.6	53.8	dB(A)
11:00 – 12:00	62.3	84.7	53.5	dB(A)
12:00 – 13:00	60.7	80.1	53.6	dB(A)
13:00 – 14:00	61.2	78.2	54.9	dB(A)
14:00 – 15:00	60.4	74.8	54.9	dB(A)
15:00 – 16:00	60.9	83.0	54.4	dB(A)
16:00 – 17:00	61.8	76.7	54.6	dB(A)
17:00 – 18:00	64.1	85.1	56.2	dB(A)
18:00 – 19:00	63.1	83.6	54.3	dB(A)
19:00 – 20:00	60.4	77.7	53.0	dB(A)
20:00 – 21:00	61.6	87.4	52.7	dB(A)
21:00 – 22:00	56.1	74.4	52.7	dB(A)
22:00 – 23:00	55.1	72.2	52.6	dB(A)
23:00 – 00:00	55.5	71.7	53.3	dB(A)
00:00 – 01:00	55.3	73.8	52.5	dB(A)
01:00 – 02:00	53.1	65.2	52.4	dB(A)
02:00 – 03:00	54.0	74.3	52.4	dB(A)
03:00 – 04:00	54.0	73.8	52.7	dB(A)
04:00 – 05:00	55.6	78.3	53.0	dB(A)
05:00 – 06:00	57.7	79.8	53.0	dB(A)
06:00 – 07:00	60.4	75.4	53.8	dB(A)
07:00 – 08:00	64.6	84.2	55.5	dB(A)
08:00 – 09:00	62.5	83.4	53.9	dB(A)
L_{eq} 24 hr.	60.4	-	-	dB(A)
$L_{dn\#}$	64.0	-	-	dB(A)
Maximum	-	87.4	-	dB(A)
Standard	70 ¹⁾ , 70 ²⁾	115 ¹⁾ , 115 ²⁾	-	dB(A)

REMARK : ¹⁾ Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

¹⁾ Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

²⁾ Notification of Ministry of the Industry B.E. 2548 (2005)

* Parameter Outside The Scope of The Registration of The Department of Industrial Works

(Ms. Thanatporn Klinsoopon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Photakham)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

¹⁾ Start Time

Approved By.....
(MRS. WANPEN LHAOCHINDAWAT)

18/05/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL
WITHOUT THE WRITTEN APPROVAL LABORATORY

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
SAMPLE SOURCE : EOEG Plant
SAMPLE POINT : บริเวณริมรั้วด้านทิศเหนือ
PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{max} , $L_{90\#}$ & $L_{dn\#}$
DETERMINATION METHOD : ISO 1996-1:2016
INSTRUMENT : Integrated Sound Level Meter S/N G300957 : Type 2

SAMPLE NO. : 07785
MEASURING DATE : 06-07/05/2022
RECEIVED DATE : 13/05/2022
REPORTED DATE : 18/05/2022

TIME \ DATE	06-07/05/2022 (L_{eq})	06-07/05/2022 (L_{max})	06-07/05/2022 ($L_{90\#}$)	UNIT
09:00 – 10:00 ³	61.5	79.7	54.1	dB(A)
10:00 – 11:00	62.3	82.9	54.3	dB(A)
11:00 – 12:00	62.9	82.2	55.1	dB(A)
12:00 – 13:00	60.3	75.8	54.9	dB(A)
13:00 – 14:00	60.9	76.8	54.9	dB(A)
14:00 – 15:00	61.5	77.7	54.6	dB(A)
15:00 – 16:00	61.4	82.8	55.0	dB(A)
16:00 – 17:00	62.0	77.5	54.5	dB(A)
17:00 – 18:00	64.2	86.3	55.0	dB(A)
18:00 – 19:00	62.8	85.5	54.4	dB(A)
19:00 – 20:00	61.6	82.3	54.1	dB(A)
20:00 – 21:00	62.8	89.5	53.8	dB(A)
21:00 – 22:00	56.9	77.9	53.6	dB(A)
22:00 – 23:00	57.3	78.4	53.7	dB(A)
23:00 – 00:00	55.3	73.4	53.0	dB(A)
00:00 – 01:00	54.8	72.9	52.9	dB(A)
01:00 – 02:00	53.9	62.9	53.1	dB(A)
02:00 – 03:00	59.1	89.9	53.0	dB(A)
03:00 – 04:00	54.8	76.5	52.7	dB(A)
04:00 – 05:00	54.6	69.2	53.3	dB(A)
05:00 – 06:00	57.1	78.7	53.6	dB(A)
06:00 – 07:00	61.5	86.5	53.8	dB(A)
07:00 – 08:00	62.9	81.4	54.0	dB(A)
08:00 – 09:00	62.9	89.5	53.1	dB(A)
L_{eq} 24 hr.	60.8	-	-	dB(A)
$L_{dn\#}$	64.7	-	-	dB(A)
Maximum	-	89.9	-	dB(A)
Standard	70 ¹ , 70 ²	115 ¹ , 115 ²	-	dB(A)

REMARK : ³ Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

¹ Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

² Notification of Ministry of the Industry B.E. 2548 (2005)

* Parameter Outside The Scope of The Registration of The Department of Industrial Works

(Ms. Thanatporn Klinsonon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Photankhure)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By: 
(MRS. WANPEN LHAOCHINDAWAT)

18/05/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
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WITHOUT THE WRITTEN APPROVAL LABORATORY

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
SAMPLE SOURCE : EOEG Plant
SAMPLE POINT : บริเวณริมรั้วด้านทิศเหนือ
PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{max} , $L_{90\#}$ & $L_{dn\#}$
DETERMINATION METHOD : ISO 1996-1:2016
INSTRUMENT : Integrated Sound Level Meter S/N G300957 : Type 2

SAMPLE NO. : 07786
MEASURING DATE : 07-08/05/2022
RECEIVED DATE : 13/05/2022
REPORTED DATE : 18/05/2022

TIME \ DATE	07-08/05/2022 (L_{eq})	07-08/05/2022 (L_{max})	07-08/05/2022 ($L_{90\#}$)	UNIT
09:00 – 10:00 ³	59.5	77.0	52.8	dB(A)
10:00 – 11:00	60.5	86.8	53.4	dB(A)
11:00 – 12:00	61.9	82.1	54.4	dB(A)
12:00 – 13:00	58.8	78.5	53.8	dB(A)
13:00 – 14:00	60.0	85.8	53.9	dB(A)
14:00 – 15:00	59.2	78.3	53.3	dB(A)
15:00 – 16:00	59.1	78.8	53.6	dB(A)
16:00 – 17:00	60.6	76.9	53.4	dB(A)
17:00 – 18:00	61.5	83.8	52.9	dB(A)
18:00 – 19:00	60.7	82.5	52.7	dB(A)
19:00 – 20:00	60.5	83.2	52.3	dB(A)
20:00 – 21:00	59.3	81.4	52.4	dB(A)
21:00 – 22:00	55.4	76.2	52.6	dB(A)
22:00 – 23:00	59.0	75.0	52.7	dB(A)
23:00 – 00:00	59.7	76.6	54.5	dB(A)
00:00 – 01:00	56.9	74.7	54.8	dB(A)
01:00 – 02:00	56.6	68.1	55.6	dB(A)
02:00 – 03:00	57.3	69.9	56.2	dB(A)
03:00 – 04:00	56.0	64.8	55.2	dB(A)
04:00 – 05:00	56.2	72.6	54.7	dB(A)
05:00 – 06:00	56.0	72.3	54.2	dB(A)
06:00 – 07:00	61.0	87.4	54.5	dB(A)
07:00 – 08:00	62.6	83.6	54.3	dB(A)
08:00 – 09:00	61.8	87.9	53.2	dB(A)
L_{eq} 24 hr.	59.6	-	-	dB(A)
$L_{dn\#}$	64.8	-	-	dB(A)
Maximum	-	87.9	-	dB(A)
Standard	70 ¹ , 70 ²	115 ¹ , 115 ²	-	dB(A)

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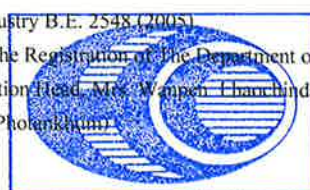
¹ Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

² Notification of Ministry of the Industry B.E. 2548 (2005)

* Parameter Outside The Scope of The Registration of The Department of Industrial Works

(Ms. Thanatporn Klinsoon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Photankham)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(MRS. WANPEN LHAOCHINDAWAT)

18/05/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
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WITHOUT THE WRITTEN APPROVAL LABORATORY

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
SAMPLE SOURCE : EOEG Plant
SAMPLE POINT : บริเวณริมรั้วด้านทิศเหนือ
PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{max} , $L_{90\#}$ & $L_{dn\#}$
DETERMINATION METHOD : ISO 1996-1:2016
INSTRUMENT : Integrated Sound Level Meter S/N G300957 : Type 2

SAMPLE NO. : 07787
MEASURING DATE : 08-09/05/2022
RECEIVED DATE : 13/05/2022
REPORTED DATE : 18/05/2022

TIME \ DATE	08-09/05/2022 (L_{eq})	08-09/05/2022 (L_{max})	08-09/05/2022 ($L_{90\#}$)	UNIT
09:00 – 10:00 ³	58.8	80.6	53.2	dB(A)
10:00 – 11:00	58.1	72.8	53.3	dB(A)
11:00 – 12:00	60.4	83.1	53.7	dB(A)
12:00 – 13:00	57.5	77.4	54.3	dB(A)
13:00 – 14:00	58.9	76.7	55.0	dB(A)
14:00 – 15:00	58.8	79.7	54.9	dB(A)
15:00 – 16:00	59.4	73.2	54.7	dB(A)
16:00 – 17:00	59.8	79.8	54.8	dB(A)
17:00 – 18:00	59.9	81.2	54.4	dB(A)
18:00 – 19:00	59.9	80.6	54.4	dB(A)
19:00 – 20:00	58.1	76.2	54.6	dB(A)
20:00 – 21:00	59.4	80.4	54.2	dB(A)
21:00 – 22:00	57.2	77.1	54.5	dB(A)
22:00 – 23:00	57.1	78.7	54.6	dB(A)
23:00 – 00:00	56.8	75.1	54.3	dB(A)
00:00 – 01:00	55.5	72.3	54.5	dB(A)
01:00 – 02:00	54.8	63.9	54.0	dB(A)
02:00 – 03:00	55.8	79.3	54.2	dB(A)
03:00 – 04:00	55.7	76.2	54.0	dB(A)
04:00 – 05:00	55.6	69.9	54.1	dB(A)
05:00 – 06:00	57.0	76.1	53.9	dB(A)
06:00 – 07:00	61.4	80.7	54.7	dB(A)
07:00 – 08:00	64.1	80.6	55.7	dB(A)
08:00 – 09:00	62.9	80.9	54.7	dB(A)
L_{eq} 24 hr.	59.1	-	-	dB(A)
$L_{dn\#}$	64.1	-	-	dB(A)
Maximum	-	83.1	-	dB(A)
Standard	70 ¹ , 70 ²	115 ¹ , 115 ²	-	dB(A)

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² Notification of Ministry of the Industry B.E. 2548 (2005)

* Parameter Outside The Scope of The Registration of The Department of Industrial Works

(Ms. Thanatporn Klinsoon is Section Head Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Photankham)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(MRS. WANPEN LHAOCHINDAWAT)

18/05/2022

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TEST REPORT

CUSTOMER : GC Glycol Co., Ltd
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
SAMPLE SOURCE : EOEG Plant
SAMPLE POINT : บริเวณริมรั้วด้านทิศเหนือ
PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{max} , $L_{90\#}$ & $L_{dn\#}$
DETERMINATION METHOD : ISO 1996-1:2016
INSTRUMENT : Integrated Sound Level Meter S/N G300957 : Type 2

SAMPLE NO. : 07788
MEASURING DATE : 09-10/05/2022
RECEIVED DATE : 13/05/2022
REPORTED DATE : 18/05/2022

TIME \ DATE	09-10/05/2022 (L_{eq})	09-10/05/2022 (L_{max})	09-10/05/2022 ($L_{90\#}$)	UNIT
09:00 – 10:00 ^{1/3}	60.9	79.0	54.3	dB(A)
10:00 – 11:00	61.2	78.7	54.9	dB(A)
11:00 – 12:00	63.0	85.8	55.2	dB(A)
12:00 – 13:00	60.3	81.7	54.8	dB(A)
13:00 – 14:00	61.5	76.9	55.7	dB(A)
14:00 – 15:00	61.2	77.2	55.5	dB(A)
15:00 – 16:00	60.3	74.6	55.4	dB(A)
16:00 – 17:00	61.9	78.6	55.4	dB(A)
17:00 – 18:00	64.8	82.6	56.0	dB(A)
18:00 – 19:00	63.5	88.8	55.8	dB(A)
19:00 – 20:00	62.1	83.2	55.7	dB(A)
20:00 – 21:00	60.5	79.3	55.2	dB(A)
21:00 – 22:00	56.3	71.8	54.8	dB(A)
22:00 – 23:00	58.1	77.1	54.8	dB(A)
23:00 – 00:00	56.8	73.9	54.9	dB(A)
00:00 – 01:00	57.0	75.8	54.9	dB(A)
01:00 – 02:00	55.8	64.4	54.9	dB(A)
02:00 – 03:00	55.9	74.4	54.7	dB(A)
03:00 – 04:00	59.6	74.9	53.3	dB(A)
04:00 – 05:00	61.3	80.5	57.2	dB(A)
05:00 – 06:00	58.8	78.3	56.2	dB(A)
06:00 – 07:00	62.0	77.4	56.0	dB(A)
07:00 – 08:00	64.9	80.9	56.1	dB(A)
08:00 – 09:00	63.7	88.6	54.9	dB(A)
L_{eq} 24 hr.	61.2	-	-	dB(A)
$L_{dn\#}$	66.0	-	-	dB(A)
Maximum	-	88.8	-	dB(A)
Standard	70 ^{1/} , 70 ^{2/}	115 ^{1/} , 115 ^{2/}	-	dB(A)

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^{1/} Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

^{2/} Notification of Ministry of the Industry B.E. 2548 (2005)

* Parameter Outside The Scope of The Registration of The Department of Industrial Works

(Ms. Thanatporn Klinsoon is Section Head, Mrs. Wanpen Chaochindawat is Technical Management)

(Measurement By Mr. Tummarut Photankharn)

^{3/} Start Time



Approved By

(MRS. WANPEN LHAOCHINDAWAT)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

18/05/2022

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TEST REPORT

CUSTOMER : GC Glycol Co., Ltd
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
SAMPLE SOURCE : EOEG Plant
SAMPLE POINT : บริเวณริมรั้วด้านทิศใต้
PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{max} , $L_{90\%}$ & $L_{dn\#}$
DETERMINATION METHOD : ISO 1996-1:2016
INSTRUMENT : Integrated Sound Level Meter S/N G301660 : Type 2

SAMPLE NO. : 07789
MEASURING DATE : 03-04/05/2022
RECEIVED DATE : 13/05/2022
REPORTED DATE : 18/05/2022

TIME \ DATE	03-04/05/2022 (L_{eq})	03-04/05/2022 (L_{max})	03-04/05/2022 ($L_{90\%}$)	UNIT
09:20 – 10:20 ³	63.2	85.4	59.1	dB(A)
10:20 – 11:20	62.2	80.2	58.6	dB(A)
11:20 – 12:20	62.6	84.8	58.5	dB(A)
12:20 – 13:20	61.5	79.5	57.9	dB(A)
13:20 – 14:20	64.3	81.8	58.7	dB(A)
14:20 – 15:20	64.6	83.6	58.9	dB(A)
15:20 – 16:20	64.4	87.8	58.6	dB(A)
16:20 – 17:20	62.4	80.7	58.0	dB(A)
17:20 – 18:20	63.1	78.4	58.4	dB(A)
18:20 – 19:20	64.1	80.5	58.7	dB(A)
19:20 – 20:20	62.2	80.1	58.0	dB(A)
20:20 – 21:20	61.7	88.9	57.6	dB(A)
21:20 – 22:20	59.8	72.2	57.7	dB(A)
22:20 – 23:20	59.0	74.3	57.3	dB(A)
23:20 – 00:20	60.1	76.9	57.4	dB(A)
00:20 – 01:20	59.5	73.1	57.3	dB(A)
01:20 – 02:20	59.8	78.6	57.6	dB(A)
02:20 – 03:20	59.3	73.5	57.5	dB(A)
03:20 – 04:20	60.1	73.3	58.0	dB(A)
04:20 – 05:20	61.9	79.8	58.3	dB(A)
05:20 – 06:20	60.5	76.0	58.3	dB(A)
06:20 – 07:20	61.4	80.8	58.5	dB(A)
07:20 – 08:20	61.9	74.7	58.2	dB(A)
08:20 – 09:20	64.4	90.5	58.6	dB(A)
L_{eq} 24 hr.	62.2	-	-	dB(A)
$L_{dn\#}$	67.2	-	-	dB(A)
Maximum	-	90.5	-	dB(A)
Standard	70 ¹ , 70 ²	115 ¹ , 115 ²	-	dB(A)

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¹ Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

² Notification of Ministry of the Industry B.E. 2548 (2005)

³ Start Time

* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Ms. Thanatporn Klinsoopon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)
(Measurement By Mr. Tummarut Photakhanong)



Approved By: 
(MRS. WANPEN LHAOCHINDAWAT)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

18/05/2022

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TEST REPORT

CUSTOMER : GC Glycol Co., Ltd
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
SAMPLE SOURCE : EOEG Plant
SAMPLE POINT : บริเวณริมรั้วด้านทิศใต้
PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{max} , $L_{90\#}$ & $L_{dn\#}$
DETERMINATION METHOD : ISO 1996-1:2016
INSTRUMENT : Integrated Sound Level Meter S/N G301660 : Type 2

SAMPLE NO. : 07790
MEASURING DATE : 04-05/05/2022
RECEIVED DATE : 13/05/2022
REPORTED DATE : 18/05/2022

TIME \ DATE	04-05/05/2022 (L_{eq})	04-05/05/2022 (L_{max})	04-05/05/2022 ($L_{90\#}$)	UNIT
09:20 – 10:20 ^{1/3}	64.1	81.7	58.1	dB(A)
10:20 – 11:20	63.9	84.7	57.6	dB(A)
11:20 – 12:20	65.8	85.1	58.0	dB(A)
12:20 – 13:20	62.2	80.6	57.5	dB(A)
13:20 – 14:20	63.8	78.6	57.8	dB(A)
14:20 – 15:20	65.1	82.3	59.2	dB(A)
15:20 – 16:20	64.5	84.9	59.9	dB(A)
16:20 – 17:20	63.3	81.9	59.0	dB(A)
17:20 – 18:20	63.4	83.4	59.0	dB(A)
18:20 – 19:20	61.5	77.7	58.5	dB(A)
19:20 – 20:20	60.2	78.2	57.1	dB(A)
20:20 – 21:20	60.2	76.0	57.3	dB(A)
21:20 – 22:20	61.4	81.9	58.6	dB(A)
22:20 – 23:20	59.2	71.6	57.6	dB(A)
23:20 – 00:20	58.9	73.5	57.5	dB(A)
00:20 – 01:20	59.6	71.7	57.2	dB(A)
01:20 – 02:20	59.3	78.8	57.3	dB(A)
02:20 – 03:20	60.7	81.8	57.4	dB(A)
03:20 – 04:20	59.6	81.5	57.5	dB(A)
04:20 – 05:20	60.2	78.3	57.5	dB(A)
05:20 – 06:20	59.3	71.7	57.5	dB(A)
06:20 – 07:20	61.7	82.0	57.6	dB(A)
07:20 – 08:20	61.8	80.6	57.5	dB(A)
08:20 – 09:20	63.3	83.7	58.4	dB(A)
L_{eq} 24 hr.	62.3	-	-	dB(A)
$L_{dn\#}$	67.0	-	-	dB(A)
Maximum	-	85.1	-	dB(A)
Standard	70 ^{1/} , 70 ^{2/}	115 ^{1/} , 115 ^{2/}	-	dB(A)

REMARK : ^{1/} Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

¹¹ Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

¹² Notification of Ministry of the Industry B.E. 2548 (2005)

* Parameter Outside The Scope of The Registration of The Department of Industrial Works

(Ms. Thanatporn Klinson is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Photankhurn)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(MRS. WANPEN LHAOCHINDAWAT)

^{1/3} Start Time

18/05/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
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WITHOUT THE WRITTEN APPROVAL LABORATORY

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
SAMPLE SOURCE : EOEG Plant
SAMPLE POINT : บริเวณริมรั้วด้านทิศใต้
PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{max} , $L_{90\#}$ & $L_{dn\#}$
DETERMINATION METHOD : ISO 1996-1:2016
INSTRUMENT : Integrated Sound Level Meter S/N G301660 : Type 2

SAMPLE NO. : 07791
MEASURING DATE : 05-06/05/2022
RECEIVED DATE : 13/05/2022
REPORTED DATE : 18/05/2022

TIME \ DATE	05-06/05/2022 (L_{eq})	05-06/05/2022 (L_{max})	05-06/05/2022 ($L_{90\#}$)	UNIT
09:20 – 10:20 ³	65.6	85.4	60.2	dB(A)
10:20 – 11:20	64.5	84.3	59.7	dB(A)
11:20 – 12:20	64.0	84.6	59.7	dB(A)
12:20 – 13:20	62.0	72.7	59.8	dB(A)
13:20 – 14:20	64.1	79.0	60.6	dB(A)
14:20 – 15:20	64.4	84.7	60.4	dB(A)
15:20 – 16:20	64.4	79.3	61.4	dB(A)
16:20 – 17:20	64.0	81.2	61.0	dB(A)
17:20 – 18:20	62.8	75.9	60.2	dB(A)
18:20 – 19:20	62.7	84.0	60.3	dB(A)
19:20 – 20:20	63.4	82.3	60.6	dB(A)
20:20 – 21:20	63.7	79.8	60.4	dB(A)
21:20 – 22:20	62.2	80.6	60.7	dB(A)
22:20 – 23:20	61.9	78.5	60.6	dB(A)
23:20 – 00:20	61.8	67.2	61.0	dB(A)
00:20 – 01:20	61.9	82.1	59.2	dB(A)
01:20 – 02:20	62.0	82.6	59.3	dB(A)
02:20 – 03:20	61.3	77.4	59.1	dB(A)
03:20 – 04:20	61.3	81.3	59.1	dB(A)
04:20 – 05:20	59.4	72.5	58.1	dB(A)
05:20 – 06:20	61.6	81.2	58.7	dB(A)
06:20 – 07:20	61.5	78.9	58.6	dB(A)
07:20 – 08:20	62.5	82.6	58.1	dB(A)
08:20 – 09:20	64.8	90.5	58.5	dB(A)
L_{eq} 24 hr.	63.1	-	-	dB(A)
$L_{dn\#}$	68.3	-	-	dB(A)
Maximum	-	90.5	-	dB(A)
Standard	70 ¹ , 70 ²	115 ¹ , 115 ²	-	dB(A)

REMARK : [#] Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

¹ Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

² Notification of Ministry of the Industry B.E. 2548 (2005)

* Parameter Outside The Scope of The Registration of The Department of Industrial Works

(Ms. Thanatporn Klinsoon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Photanachum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

³ Start Time

Approved By

(MRS. WANPEN LHAOCHINDAWAT)

18/05/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL
WITHOUT THE WRITTEN APPROVAL LABORATORY

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
SAMPLE SOURCE : EOEG Plant
SAMPLE POINT : บริเวณริมรั้วด้านทิศใต้
PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{max} , L_{90H} & $L_{dn\#}$
DETERMINATION METHOD : ISO 1996-1:2016
INSTRUMENT : Integrated Sound Level Meter S/N G301660 : Type 2

SAMPLE NO. : 07792
MEASURING DATE : 06-07/05/2022
RECEIVED DATE : 13/05/2022
REPORTED DATE : 18/05/2022

TIME \ DATE	06-07/05/2022 (L_{eq})	06-07/05/2022 (L_{max})	06-07/05/2022 (L_{90H})	UNIT
09:20 – 10:20 ¹³	65.0	82.0	59.3	dB(A)
10:20 – 11:20	65.9	83.1	59.9	dB(A)
11:20 – 12:20	64.5	83.3	60.0	dB(A)
12:20 – 13:20	62.9	82.5	59.7	dB(A)
13:20 – 14:20	65.7	83.7	60.2	dB(A)
14:20 – 15:20	65.6	85.1	60.5	dB(A)
15:20 – 16:20	65.5	81.7	60.8	dB(A)
16:20 – 17:20	66.1	85.9	60.8	dB(A)
17:20 – 18:20	63.2	77.9	60.1	dB(A)
18:20 – 19:20	64.1	88.1	59.2	dB(A)
19:20 – 20:20	61.2	79.9	58.5	dB(A)
20:20 – 21:20	61.7	78.6	58.9	dB(A)
21:20 – 22:20	59.6	71.2	58.0	dB(A)
22:20 – 23:20	60.9	81.3	58.0	dB(A)
23:20 – 00:20	58.9	70.6	57.8	dB(A)
00:20 – 01:20	58.7	70.8	57.6	dB(A)
01:20 – 02:20	59.2	78.3	57.5	dB(A)
02:20 – 03:20	58.7	69.0	57.7	dB(A)
03:20 – 04:20	59.3	74.9	57.7	dB(A)
04:20 – 05:20	60.6	81.9	58.2	dB(A)
05:20 – 06:20	61.2	80.4	57.9	dB(A)
06:20 – 07:20	60.3	78.7	57.9	dB(A)
07:20 – 08:20	62.3	83.0	57.9	dB(A)
08:20 – 09:20	63.3	79.6	58.4	dB(A)
L_{eq} 24 hr.	63.0	-	-	dB(A)
$L_{dn\#}$	67.2	-	-	dB(A)
Maximum	-	88.1	-	dB(A)
Standard	70 ¹ , 70 ²	115 ¹ , 115 ²	-	dB(A)

REMARK : ¹³ Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

¹ Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

² Notification of Ministry of the Industry B.E. 2548 (2005)

* Parameter Outside The Scope of The Registration of The Department of Industrial Works

(Ms. Thanatporn Klinsonon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Photarkham)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(MRS. WANPEN LHAOCHINDAWAT)

18/05/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL
WITHOUT THE WRITTEN APPROVAL LABORATORY

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
SAMPLE SOURCE : EOEG Plant
SAMPLE POINT : บริเวณริมรั้วด้านทิศใต้
PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{max} , $L_{90\%}$ & $L_{dn\#}$
DETERMINATION METHOD : ISO 1996-1:2016
INSTRUMENT : Integrated Sound Level Meter S/N G301660 : Type 2

SAMPLE NO. : 07793
MEASURING DATE : 07-08/05/2022
RECEIVED DATE : 13/05/2022
REPORTED DATE : 18/05/2022

TIME \ DATE	07-08/05/2022 (L_{eq})	07-08/05/2022 (L_{max})	07-08/05/2022 ($L_{90\%}$)	UNIT
09:20 – 10:20 ¹	64.1	83.4	58.9	dB(A)
10:20 – 11:20	67.0	83.8	59.9	dB(A)
11:20 – 12:20	66.0	85.8	61.3	dB(A)
12:20 – 13:20	64.2	80.5	60.9	dB(A)
13:20 – 14:20	65.6	86.3	61.3	dB(A)
14:20 – 15:20	64.7	83.2	60.1	dB(A)
15:20 – 16:20	63.5	81.9	59.5	dB(A)
16:20 – 17:20	62.8	84.0	59.0	dB(A)
17:20 – 18:20	62.2	79.5	58.8	dB(A)
18:20 – 19:20	61.6	76.6	58.6	dB(A)
19:20 – 20:20	61.5	77.5	59.3	dB(A)
20:20 – 21:20	62.9	90.4	59.2	dB(A)
21:20 – 22:20	61.0	75.2	59.3	dB(A)
22:20 – 23:20	63.6	74.0	59.8	dB(A)
23:20 – 00:20	63.6	76.9	59.9	dB(A)
00:20 – 01:20	61.1	79.9	59.3	dB(A)
01:20 – 02:20	63.3	74.6	61.2	dB(A)
02:20 – 03:20	62.2	82.0	60.3	dB(A)
03:20 – 04:20	62.0	84.0	59.8	dB(A)
04:20 – 05:20	60.7	70.1	59.6	dB(A)
05:20 – 06:20	60.9	77.9	59.4	dB(A)
06:20 – 07:20	61.7	82.3	59.5	dB(A)
07:20 – 08:20	61.3	79.1	59.1	dB(A)
08:20 – 09:20	62.6	85.9	59.0	dB(A)
L_{eq} 24 hr.	63.3	-	-	dB(A)
$L_{dn\#}$	68.9	-	-	dB(A)
Maximum	-	90.4	-	dB(A)
Standard	70 ¹ , 70 ²	115 ¹ , 115 ²	-	dB(A)

REMARK : ¹ Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

¹ Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

² Notification of Ministry of the Industry B.E. 2548 (2005)

* Parameter Outside The Scope of The Registration of The Department of Industrial Works

(Ms. Thanatporn Klinsoon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Photancharu)



Approved By

(MRS. WANPEN LHAOCHINDAWAT)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

18/05/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL
WITHOUT THE WRITTEN APPROVAL LABORATORY

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
SAMPLE SOURCE : EOEG Plant
SAMPLE POINT : บริเวณริมรั้วด้านทิศใต้
PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{max} , $L_{90\#}$ & $L_{dn\#}$
DETERMINATION METHOD : ISO 1996-1:2016
INSTRUMENT : Integrated Sound Level Meter S/N G301660 : Type 2

SAMPLE NO. : 07794
MEASURING DATE : 08-09/05/2022
RECEIVED DATE : 13/05/2022
REPORTED DATE : 18/05/2022

TIME \ DATE	08-09/05/2022 (L_{eq})	08-09/05/2022 (L_{max})	08-09/05/2022 ($L_{90\#}$)	UNIT
09:20 – 10:20 ³	60.7	75.4	58.4	dB(A)
10:20 – 11:20	61.2	77.4	58.0	dB(A)
11:20 – 12:20	61.8	78.9	58.7	dB(A)
12:20 – 13:20	62.2	75.2	59.8	dB(A)
13:20 – 14:20	63.2	77.0	60.0	dB(A)
14:20 – 15:20	61.7	81.7	60.2	dB(A)
15:20 – 16:20	62.4	82.8	60.0	dB(A)
16:20 – 17:20	61.3	81.8	59.2	dB(A)
17:20 – 18:20	61.1	75.0	59.0	dB(A)
18:20 – 19:20	61.2	80.4	58.8	dB(A)
19:20 – 20:20	61.1	74.1	59.4	dB(A)
20:20 – 21:20	60.7	74.7	59.1	dB(A)
21:20 – 22:20	60.6	72.9	59.1	dB(A)
22:20 – 23:20	60.3	70.7	58.5	dB(A)
23:20 – 00:20	60.5	73.0	58.8	dB(A)
00:20 – 01:20	60.9	72.4	59.8	dB(A)
01:20 – 02:20	60.0	68.0	58.9	dB(A)
02:20 – 03:20	64.1	81.9	59.0	dB(A)
03:20 – 04:20	60.1	68.0	59.2	dB(A)
04:20 – 05:20	60.8	78.0	59.3	dB(A)
05:20 – 06:20	61.7	77.0	58.9	dB(A)
06:20 – 07:20	61.0	71.2	59.2	dB(A)
07:20 – 08:20	62.8	81.8	58.6	dB(A)
08:20 – 09:20	63.0	78.2	58.8	dB(A)
L_{eq} 24 hr.	61.6	-	-	dB(A)
$L_{dn\#}$	67.7	-	-	dB(A)
Maximum	-	82.8	-	dB(A)
Standard	70 ¹ , 70 ²	115 ¹ , 115 ²	-	dB(A)

REMARK : # Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

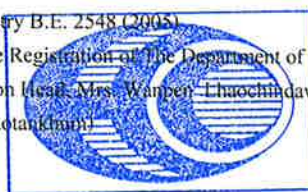
¹ Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

² Notification of Ministry of the Industry B.E. 2548 (2005)

* Parameter Outside The Scope of The Registration of The Department of Industrial Works

(Ms. Thanatporn Klinsoon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Photankham)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

18/05/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
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WITHOUT THE WRITTEN APPROVAL LABORATORY

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
SAMPLE SOURCE : EOEG Plant
SAMPLE POINT : บริเวณริมรั้วด้านทิศใต้
PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{max} , $L_{90\#}$ & $L_{dn\#}$
DETERMINATION METHOD : ISO 1996-1:2016
INSTRUMENT : Integrated Sound Level Meter S/N G301660 : Type 2

SAMPLE NO. : 07795
MEASURING DATE : 09-10/05/2022
RECEIVED DATE : 13/05/2022
REPORTED DATE : 18/05/2022

TIME \ DATE	09-10/05/2022 (L_{eq})	09-10/05/2022 (L_{max})	09-10/05/2022 ($L_{90\#}$)	UNIT
09:20 – 10:20 ³	64.0	84.7	58.4	dB(A)
10:20 – 11:20	64.0	80.8	59.5	dB(A)
11:20 – 12:20	65.3	88.1	59.7	dB(A)
12:20 – 13:20	61.7	79.6	58.9	dB(A)
13:20 – 14:20	64.3	80.9	59.6	dB(A)
14:20 – 15:20	65.0	85.6	59.5	dB(A)
15:20 – 16:20	64.9	87.1	60.5	dB(A)
16:20 – 17:20	64.0	81.9	60.8	dB(A)
17:20 – 18:20	64.2	78.9	60.9	dB(A)
18:20 – 19:20	64.8	88.2	61.6	dB(A)
19:20 – 20:20	63.9	80.0	61.6	dB(A)
20:20 – 21:20	61.7	73.3	59.7	dB(A)
21:20 – 22:20	60.5	70.8	59.5	dB(A)
22:20 – 23:20	61.9	82.0	60.2	dB(A)
23:20 – 00:20	62.3	71.1	60.4	dB(A)
00:20 – 01:20	63.8	67.3	62.5	dB(A)
01:20 – 02:20	63.8	72.7	62.2	dB(A)
02:20 – 03:20	63.4	72.4	62.3	dB(A)
03:20 – 04:20	66.0	85.6	60.4	dB(A)
04:20 – 05:20	66.1	82.8	62.4	dB(A)
05:20 – 06:20	64.0	79.5	62.1	dB(A)
06:20 – 07:20	64.6	79.4	62.4	dB(A)
07:20 – 08:20	64.2	79.6	61.1	dB(A)
08:20 – 09:20	65.5	83.7	61.2	dB(A)
L_{eq} 24 hr.	64.1	-	-	dB(A)
$L_{dn\#}$	70.6	-	-	dB(A)
Maximum	-	88.2	-	dB(A)
Standard	70 ¹ , 70 ²	115 ¹ , 115 ²	-	dB(A)

REMARK : ³ Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

¹ Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

² Notification of Ministry of the Industry B.E. 2548 (2005)

* Parameter Outside The Scope of The Registration of The Department of Industrial Works

(Ms. Thanatporn Klinsopon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Photankhum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(MRS. WANPEN LHAOCHINDAWAT)

18/05/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
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Request No. ATR6503069

Report No. 6503-1253

TEST REPORT

CUSTOMER : GC Glycol Company Limited

ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,
Amphur Muang Rayong, Rayong 21150

SAMPLE SOURCE : EOEG Plant

SAMPLE NAME : พนักงานที่เกี่ยวข้องกับ EO (คุณสมบัติ บุญเปล่ง) SAMPLE NO : A65031253

SAMPLING DATE : 28/03/2022 SAMPLING TIME : 09:30-21:30

RECEIVED DATE : 31/03/2022 TESTED DATE : 31/03/2022 – 12/04/2022

SAMPLING INSTRUMENT : Passive Sampling REPORTED DATE : 20/04/2022

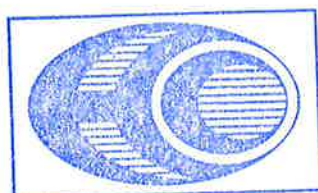
PARAMETER**	TEST METHOD	RESULT ²	STD ¹	UNIT
Ethylene Oxide	OSHA 1010	ND	1.8	mg/m ³
		ND	1.0	ppm

REMARK:

¹ Notification of The Department of Labour Protection and Welfare B.E.2560 (2017),
Concentration Limits of Hazardous Chemicals.

² ND = Non detectable : detection limit of Ethylene Oxide is 0.05 mg/m³ or 0.03 ppm.

** Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008
Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Suttha Songthaninai)
Analysed By SECOT Co.,Ltd.



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By



(Miss Thanatporn Klinsoopon)

20/04/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. ATR6503069

Report No. 6503-1254

TEST REPORT

CUSTOMER : GC Glycol Company Limited

ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,
Amphur Muang Rayong, Rayong 21150

SAMPLE SOURCE : EOEG Plant

SAMPLE NAME : พนักงานที่เกี่ยวข้องกับ EO (คุณมนตรี ชูวา) SAMPLE NO : A65031254

SAMPLING DATE : 28/03/2022 SAMPLING TIME : 09:32-21:32

RECEIVED DATE : 31/03/2022 TESTED DATE : 31/03/2022 – 12/04/2022

SAMPLING INSTRUMENT : Passive Sampling REPORTED DATE : 20/04/2022

PARAMETER**	TEST METHOD	RESULT ²	STD ¹	UNIT
Ethylene Oxide	OSHA 1010	ND	1.8	mg/m ³
		ND	1.0	ppm

REMARK:

¹ Notification of The Department of Labour Protection and Welfare B.E.2560 (2017),
Concentration Limits of Hazardous Chemicals.

² ND = Non detectable : detection limit of Ethylene Oxide is 0.05 mg/m³ or 0.03 ppm.

** Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008
Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Suttha Songthaninai)
Analysed By SECOT Co.,Ltd.



Examined By



(Miss Thanatporn Klinsopon)

20/04/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA65-R0387

Report No. R6503-1893

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd

ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

SAMPLE SOURCE : EOEG Plant

SAMPLE POINT : Compressor Area : C-115

PARAMETER* : L_{eq} 1 hr., L_{eq} 8 hr. & L_{max} SAMPLE NO. : 04394

DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 28/03/2022

INSTRUMENT : Integrated Sound Level Meter RECEIVED DATE : 28/03/2022

S/N G301013 : Type 2 REPORTED DATE : 05/04/2022


MEASURING TIME	RESULT		UNIT
	L_{eq} 1 hr.	L_{max}	
09:00-10:00	81.9	108.1	dB(A)
10:00-11:00	82.0	107.1	dB(A)
11:00-12:00	84.7	92.6	dB(A)
12:00-13:00	84.5	90.4	dB(A)
13:00-14:00	84.3	85.1	dB(A)
14:00-15:00	84.4	92.2	dB(A)
15:00-16:00	84.5	88.5	dB(A)
16:00-17:00	84.4	95.1	dB(A)
L_{eq} 8 hr.	84.0	—	dB(A)
Standard	90 ^{/1}	140 ^{/1} , 115 ^{/2}	dB(A)

REMARK : ^{/1} Notification of The Ministry of Industry B.E. 2546 (2003)^{/2} Regulation of The Ministry of Labour B.E. 2559 (2016)

* Measurement By Mrs. Wanpen Lhaochindawat



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 

(MRS. WANPEN LHAOCHINDAWAT)

05/04/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA65-R0387

Report No. R6503-1894

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd

ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

SAMPLE SOURCE : EOEG Plant

SAMPLE POINT : Compressor Area : C-320

PARAMETER* : L_{eq} 1 hr., L_{eq} 8 hr. & L_{max} SAMPLE NO. : 04395

DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 28/03/2022

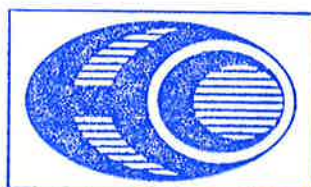
INSTRUMENT : Integrated Sound Level Meter RECEIVED DATE : 28/03/2022

S/N G301638 : Type 2 REPORTED DATE : 05/04/2022

MEASURING TIME	RESULT		UNIT
	L_{eq} 1 hr.	L_{max}	
09:00-10:00	80.0	103.3	dB(A)
10:00-11:00	80.3	104.0	dB(A)
11:00-12:00	82.0	88.5	dB(A)
12:00-13:00	81.7	86.8	dB(A)
13:00-14:00	81.6	82.1	dB(A)
14:00-15:00	81.7	88.9	dB(A)
15:00-16:00	81.7	85.1	dB(A)
16:00-17:00	81.7	92.4	dB(A)
L_{eq} 8 hr.	81.4	-	dB(A)
Standard	90 ^{/1}	140 ^{/1} , 115 ^{/2}	dB(A)

REMARK : ^{/1} Notification of The Ministry of Industry B.E. 2546 (2003)^{/2} Regulation of The Ministry of Labour B.E. 2559 (2016)

* Measurement By Mrs. Wanpen Lhaochindawat



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(MRS. WANPEN LHAOCHINDAWAT)

05/04/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA65-R0387

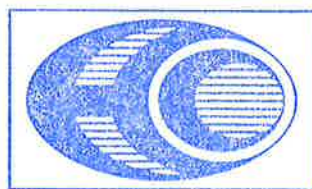
Report No. R6503-1889

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
SAMPLE SOURCE : EOEG Plant
SAMPLE POINT : Operation 1 (คุณสมบัติ นูญเปล่ง ID 26005428)
MEASURING DATE : 28/03/2022 SAMPLE NO. : 04390
RECEIVED DATE : 28/03/2022 SAMPLING TIME : 07:00-19:00
SAMPLING INSTRUMENT : Noise dosimeter : S/N NXQ070006 REPORTED DATE : 05/04/2022

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) [#]	77.3	83 ^{/1}	dB(A)
12 Hour dose	25.70	100 ^{/2}	%
Time weighted average level (8-hr TWA) [#]	79.1	85 ^{/1}	dB(A)

REMARK : ^{/1} Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)
^{/2} Standard of National Institute for Occupational Safety and Health, Occupational Noise Exposure Revised Criteria 1998
[#] Based on Criteria 85 dB(A) ; 3 dB Exchange Rate
* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009
(Measurement By Mrs.Wanpen Lhaochindawat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

05/04/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
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WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA65-R05119

Report No. R6505-3142

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd

ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

SAMPLE SOURCE : EOEG Plant

SAMPLE POINT : Operation 2 (คุณสมบัติ ทาอ่อน ID 26006122)

MEASURING DATE : 24/05/2022 SAMPLE NO. : 10046

RECEIVED DATE : 24/05/2022 SAMPLING TIME : 07:00-19:00

SAMPLING INSTRUMENT : Noise dosimeter : S/N NXL060045 REPORTED DATE : 01/06/2022

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) [#]	81.7	83 ^{/1}	dB(A)
12 Hour dose	70.40	100 ^{/2}	%
Time weighted average level (8-hr TWA) [#]	83.5	85 ^{/1}	dB(A)

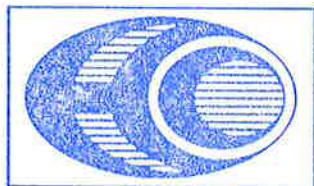
REMARK :

^{/1} Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)

^{/2} Standard of National Institute for Occupational Safety and Health, Occupational Noise Exposure Revised Criteria 1998

[#] Based on Criteria 85 dB(A) ; 3 dB Exchange Rate

* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009
(Measurement By Mr. Wattana Khotla)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

01/06/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA65-R05119

Report No. R6505-3143

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd

ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

SAMPLE SOURCE : EOEG Plant

SAMPLE POINT : Operation 3 (คุณพชรพล เพชรสุวรรณ ID 26008123)

MEASURING DATE : 24/05/2022 SAMPLE NO. : 10047

RECEIVED DATE : 24/05/2022 SAMPLING TIME : 07:00-19:00

SAMPLING INSTRUMENT : Noise dosimeter : S/N NXQ070008 REPORTED DATE : 01/06/2022

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) [#]	79.3	83 ^{/1}	dB(A)
12 Hour dose	40.00	100 ^{/2}	%
Time weighted average level (8-hr TWA) [#]	81.0	85 ^{/1}	dB(A)

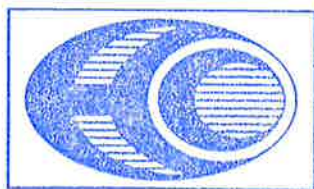
REMARK :

^{/1} Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)

^{/2} Standard of National Institute for Occupational Safety and Health, Occupational Noise Exposure Revised Criteria 1998

[#] Based on Criteria 85 dB(A) ; 3 dB Exchange Rate

* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009
(Measurement By Mr. Wattana Khotla)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(MRS. WANPEN LHAOCHINDAWAT)

01/06/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA65-R0387

Report No. R6503-1892

TEST REPORT

CUSTOMER : GC Glycol Co., Ltd
 ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
 Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
 SAMPLE SOURCE : EOEG Plant
 SAMPLE POINT : Operation 4 (คุณสมบัติที่ คำทองหลวง ID 26003059)
 MEASURING DATE : 28/03/2022 SAMPLE NO. : 04393
 RECEIVED DATE : 28/03/2022 SAMPLING TIME : 07:00-19:00
 SAMPLING INSTRUMENT : Noise dosimeter : S/N NXL060045 REPORTED DATE : 05/04/2022

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) [#]	80.7	83 ^{/1}	dB(A)
12 Hour dose	55.69	100 ^{/2}	%
Time weighted average level (8-hr TWA) [#]	82.5	85 ^{/1}	dB(A)

REMARK : ^{/1} Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)
^{/2} Standard of National Institute for Occupational Safety and Health, Occupational Noise Exposure Revised Criteria 1998
[#] Based on Criteria 85 dB(A) ; 3 dB Exchange Rate
 * Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009
 (Measurement By Mrs.Wanpen Lhaochindawat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

05/04/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
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 WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. ATR6503069

Report No. 6503-1240

TEST REPORT

CUSTOMER : GC Glycol Co.,Ltd.

ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

SAMPLE SOURCE : EOEG Plant

SAMPLE NAME : EO Scrubbing (T-311)

SAMPLING DATE : 28/03/2022 SAMPLE NO. : A65031240

RECEIVED DATE : 31/03/2022 SAMPLING TIME : 09:48-21:48

SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 31/03/2022-20/04/2022

Serial No. 218383 REPORTED DATE : 20/04/2022

PARAMETER**	TEST METHOD	RESULT	STD ^{/1}	UNIT
Carbon Dioxide	Non-Dispersive Infrared Method	1,267.2	9,000	mg/m ³
		704.0	5,000	ppm

REMARK:

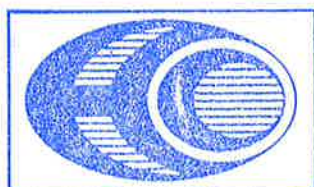
^{/1} Occupational Safety and Health Administration (OSHA) ; Standard Number 1910.1000 Table Z-1 Limits for Air Contaminants.

** Parameter not have License Registration of Department of Labour Protection and Welfare.

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Suttha Songthaninai)

Analysed By SECOT Co.,Ltd.

GPS = Sampling at UTM 47 P 731050E 1404810N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Thanatporn Klinsoon)

20/04/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. ATR6505078

Report No. 6505-1282

TEST REPORT

CUSTOMER : GC Glycol Co.,Ltd.

ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

SAMPLE SOURCE : EOEG Plant

SAMPLE NAME : EO Scrubbing (T-311)

SAMPLING DATE : 24/05/2022 SAMPLE NO. : A65051282

RECEIVED DATE : 30/05/2022 SAMPLING TIME : 09:00-21:00

SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 30/05/2022-13/06/2022
Serial No. 20180903076 REPORTED DATE : 28/06/2022

PARAMETER**	TEST METHOD	RESULT	STD ^{/1}	UNIT
Carbon Dioxide	Non-Dispersive Infrared Method	1,362.6	9,000	mg/m ³
		757.0	5,000	ppm

REMARK:

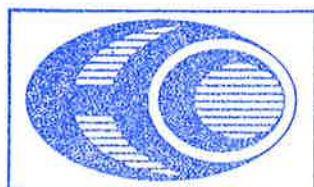
^{/1} Occupational Safety and Health Administration (OSHA) ; Standard Number 1910.1000 Table Z-1 Limits for Air Contaminants.

** Parameter not have License Registration of Department of Labour Protection and Welfare.

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Wattana Khotla)

Analysed By SECOT Co.,Ltd.

GPS = Sampling at UTM 47 P 731050E 1404810N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Thanatporn Klinsoon)

28/06/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
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WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. ATR6503069

Report No. 6503-1241

TEST REPORT

CUSTOMER : GC Glycol Co.,Ltd.

ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

SAMPLE SOURCE : EOEG Plant

SAMPLE NAME : CO2 Removal Unit (T-220)

SAMPLING DATE : 28/03/2022 SAMPLE NO. : A65031241

RECEIVED DATE : 31/03/2022 SAMPLING TIME : 09:55-21:55

SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 31/03/2022-20/04/2022

Serial No. 218402 REPORTED DATE : 20/04/2022

PARAMETER**	TEST METHOD	RESULT	STD ^{/1}	UNIT
Carbon Dioxide	Non-Dispersive Infrared Method	1,319.4	9,000	mg/m ³
		733.0	5,000	ppm

REMARK:^{/1} Occupational Safety and Health Administration (OSHA) ; Standard Number 1910.1000 Table Z-1 Limits for Air Contaminants.

** Parameter not have License Registration of Department of Labour Protection and Welfare.

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Suttha Songthaninai)

Analysed By SECOT Co.,Ltd.

GPS = Sampling at UTM 47 P 731017E 1404785N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Thanatporn Klinsopon)

20/04/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
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Request No. ATR6505078

Report No. 6505-1283

TEST REPORT

CUSTOMER : GC Glycol Co.,Ltd.

ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

SAMPLE SOURCE : EOEG Plant

SAMPLE NAME : CO2 Removal Unit (T-220)

SAMPLING DATE : 24/05/2022 SAMPLE NO. : A65051283

RECEIVED DATE : 30/05/2022 SAMPLING TIME : 09:06-21:06

SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 30/05/2022-13/06/2022

Serial No. 20181001042 REPORTED DATE : 28/06/2022

PARAMETER**	TEST METHOD	RESULT	STD ^{1/}	UNIT
Carbon Dioxide	Non-Dispersive Infrared Method	1,222.2	9,000	mg/m ³
		679.0	5,000	ppm

REMARK:

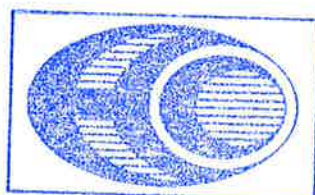
^{1/} Occupational Safety and Health Administration (OSHA) ; Standard Number 1910.1000 Table Z-1 Limits for Air Contaminants.

** Parameter not have License Registration of Department of Labour Protection and Welfare.

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Wattana Khotla)

Analysed By SECOT Co.,Ltd.

GPS = Sampling at UTM 47 P 731017E 1404785N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Thanatporn Klinsoon)

28/06/2022

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Request No. ATR6503069

Report No. 6503-1242

TEST REPORT

CUSTOMER : GC Glycol Co.,Ltd.

ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

SAMPLE SOURCE : EOEG Plant

SAMPLE NAME : Glycol Feed Stripper (T-510)

SAMPLING DATE : 28/03/2022 SAMPLE NO. : A65031242

RECEIVED DATE : 31/03/2022 SAMPLING TIME : 09:52-21:52

SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 31/03/2022-02/04/2022

Serial No. 218412 REPORTED DATE : 20/04/2022

PARAMETER*	TEST METHOD	RESULT	STD ^{1/}	UNIT
Formaldehyde	Sorbent Adsorption, Gas	< 0.43	0.92	mg/m ³
	Chromatography/NIOSH 2541	< 0.35	0.75	ppm

REMARK:

^{1/} Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

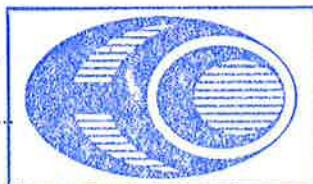
GPS = Sampling at UTM 47 P 731046E 1404821N

Examined By



(Miss Thanaporn Klinsopon)

20/04/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(Mr. Kawee Suthasub)

20/04/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL
WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. ATR6505078

Report No. 6505-1284

TEST REPORT

CUSTOMER : GC Glycol Co.,Ltd.
 ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
 SAMPLE SOURCE : EOEG Plant
 SAMPLE NAME : Glycol Feed Stripper (T-510)
 SAMPLING DATE : 24/05/2022 SAMPLE NO. : A65051284
 RECEIVED DATE : 30/05/2022 SAMPLING TIME : 08:59-20:59
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 30/05/2022-31/05/2022
 Serial No. 218391 REPORTED DATE : 28/06/2022

PARAMETER*	TEST METHOD	RESULT	STD ^{1/}	UNIT
Formaldehyde	Sorbent Adsorption, Gas	< 0.43	0.92	mg/m ³
	Chromatography/NIOSH 2541	< 0.35	0.75	ppm

REMARK:

^{1/} Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Wattana Khotla)

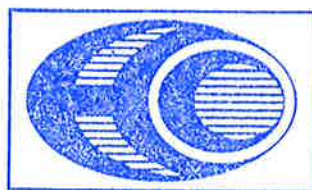
GPS = Sampling at UTM 47 P 731046E 1404821N

Examined By



(Miss Thanatporn Klinsoon)

28/06/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(Miss Nunnaphat Bakhuntod)

28/06/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL
 WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. ATR6503069

Report No. 6503-1243

TEST REPORT

CUSTOMER : GC Glycol Co.,Ltd.

ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

SAMPLE SOURCE : EOEG Plant

SAMPLE NAME : EO Purification Unit (T-410)

SAMPLING DATE : 28/03/2022 SAMPLE NO. : A65031243

RECEIVED DATE : 31/03/2022 SAMPLING TIME : 09:59-21:59

SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 31/03/2022-02/04/2022

Serial No. 218445 REPORTED DATE : 20/04/2022

PARAMETER*	TEST METHOD	RESULT	STD ^{/1}	UNIT
Formaldehyde	Sorbent Adsorption, Gas	< 0.43	0.92	mg/m ³
	Chromatography/NIOSH 2541	< 0.35	0.75	ppm

REMARK:

^{/1} Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

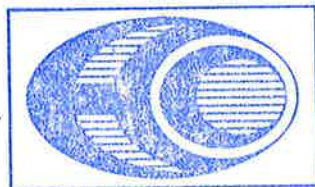
GPS = Sampling at UTM 47 P 731019E 1404725N

Examined By



(Miss Thanatporn Klinsopon)

20/04/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(Mr. Kawee Suthasub)

20/04/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL
WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. ATR6505078

Report No. 6505-1285

TEST REPORT

CUSTOMER : GC Glycol Co.,Ltd.

ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

SAMPLE SOURCE : EOEG Plant

SAMPLE NAME : EO Purification Unit (T-410)

SAMPLING DATE : 24/05/2022 SAMPLE NO. : A65051285

RECEIVED DATE : 30/05/2022 SAMPLING TIME : 09:08-21:08

SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 30/05/2022-31/05/2022
Serial No. 218388 REPORTED DATE : 28/06/2022

PARAMETER*	TEST METHOD	RESULT	STD ^{/1}	UNIT
Formaldehyde	Sorbent Adsorption, Gas	< 0.43	0.92	mg/m ³
	Chromatography/NIOSH 2541	< 0.35	0.75	ppm

REMARK:

^{/1} Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Wattana Khotla)

GPS = Sampling at UTM 47 P 731019E 1404725N

Examined By

(Miss Thanatporn Klinsonpon)

28/06/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Miss Nunnaphat Bakhuntod)

28/06/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL
WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. ATR6503069

Report No. 6503-1244

TEST REPORT

CUSTOMER : GC Glycol Company Limited

ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,
Amphur Muang Rayong, Rayong 21150

SAMPLE SOURCE : EOEG Plant

SAMPLE NAME : EO Purification Unit (T-410) SAMPLE NO : A65031244

SAMPLING DATE : 28/03/2022 SAMPLING TIME : 10:00-22:00

RECEIVED DATE : 31/03/2022 TESTED DATE : 31/03/2022 – 12/04/2022

SAMPLING INSTRUMENT : Passive Sampling REPORTED DATE : 20/04/2022

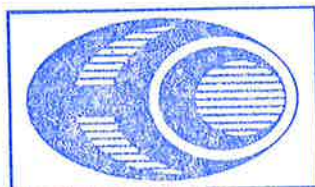
PARAMETER**	TEST METHOD	RESULT ^{1/2}	STD ^{1/}	UNIT
Ethylene Oxide	OSHA 1010	ND	1.8	mg/m ³
		ND	1.0	ppm

REMARK:

^{1/} Notification of The Department of Labour Protection and Welfare B.E.2560 (2017),
Concentration Limits of Hazardous Chemicals.

^{2/} ND = Non detectable : detection limit of Ethylene Oxide is 0.05 mg/m³ or 0.03 ppm.

** Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008
Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Suttha Songthaninai)
Analysed By SECOT Co.,Ltd. / GPS = Sampling at UTM 47 P 731019E 1404725N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By



(Miss Thanatporn Klinsoapon)

20/04/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. ATR6505078

Report No. 6505-1286

TEST REPORT

CUSTOMER : GC Glycol Company Limited

ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,
Amphur Muang Rayong, Rayong 21150

SAMPLE SOURCE : EOEG Plant

SAMPLE NAME : EO Purification Unit (T-410) SAMPLE NO : A65051286

SAMPLING DATE : 24/05/2022 SAMPLING TIME : 09:10-21:10

RECEIVED DATE : 30/05/2022 TESTED DATE : 30/05/2022 – 13/06/2022

SAMPLING INSTRUMENT : Passive Sampling REPORTED DATE : 28/06/2022

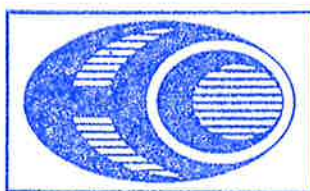
PARAMETER**	TEST METHOD	RESULT ^{/2}	STD ^{/1}	UNIT
Ethylene Oxide	OSHA 1010	ND	1.8	mg/m ³
		ND	1.0	ppm

REMARK:

^{/1} Notification of The Department of Labour Protection and Welfare B.E.2560 (2017),
Concentration Limits of Hazardous Chemicals.

^{/2} ND = Non detectable : detection limit of Ethylene Oxide is 0.05 mg/m³ or 0.03 ppm.

** Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008
Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Wattana Khotla)
Analysed By SECOT Co.,Ltd. / GPS = Sampling at UTM 47 P 731019E 1404725N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By



(Miss Thanatporn Klinsopon)

28/06/2022

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Request No. ATR6503069

Report No. 6503-1245

TEST REPORT

CUSTOMER : GC Glycol Company Limited

ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,
Amphur Muang Rayong, Rayong 21150

SAMPLE SOURCE : EOEG Plant

SAMPLE NAME : ริมรั้วโครงการด้านทิศตะวันตก

SAMPLE NO : A65031245

SAMPLING DATE : 28/03/2022

SAMPLING TIME : 10:15-22:15

RECEIVED DATE : 31/03/2022

TESTED DATE : 31/03/2022 – 12/04/2022

SAMPLING INSTRUMENT : Passive Sampling

REPORTED DATE : 20/04/2022

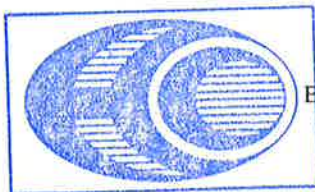
PARAMETER**	TEST METHOD	RESULT ²	STD ¹	UNIT
Ethylene Oxide	OSHA 1010	ND	1.8	mg/m ³
		ND	1.0	ppm

REMARK:

¹ Notification of The Department of Labour Protection and Welfare B.E.2560 (2017),
Concentration Limits of Hazardous Chemicals.

² ND = Non detectable : detection limit of Ethylene Oxide is 0.05 mg/m³ or 0.03 ppm.

** Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008
Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Suttha Songthaninai)
Analysed By SECOT Co.,Ltd. / GPS = Sampling at UTM 47 P 730858E 1404823N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By

(Miss Thanatporn Klinsoapon)

20/04/2022

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Request No. ATR6505078

Report No. 6505-1287

TEST REPORT

CUSTOMER : GC Glycol Company Limited

ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,
Amphur Muang Rayong, Rayong 21150

SAMPLE SOURCE : EOEG Plant

SAMPLE NAME : ริมรั้วโครงการด้านทิศตะวันตก SAMPLE NO : A65051287

SAMPLING DATE : 24/05/2022 SAMPLING TIME : 09:22-21:22

RECEIVED DATE : 30/05/2022 TESTED DATE : 30/05/2022 – 13/06/2022

SAMPLING INSTRUMENT : Passive Sampling REPORTED DATE : 28/06/2022

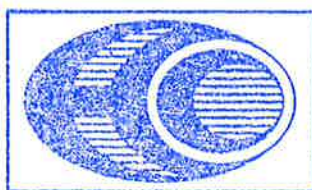
PARAMETER**	TEST METHOD	RESULT ^{1/2}	STD ^{1/}	UNIT
Ethylene Oxide	OSHA 1010	ND	1.8	mg/m ³
		ND	1.0	ppm

REMARK:

^{1/} Notification of The Department of Labour Protection and Welfare B.E.2560 (2017),
Concentration Limits of Hazardous Chemicals.

^{2/} ND = Non detectable : detection limit of Ethylene Oxide is 0.05 mg/m³ or 0.03 ppm.

** Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008
Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Wattana Khotla)
Analysed By SECOT Co.,Ltd. / GPS = Sampling at UTM 47 P 730858E 1404823N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By



(Miss Thanatporn Klinsopon)

28/06/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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Request No. ATR6503069

Report No. 6503-1246

TEST REPORT

CUSTOMER : GC Glycol Company Limited

ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,
Amphur Muang Rayong, Rayong 21150

SAMPLE SOURCE : EOEG Plant

SAMPLE NAME : EO Storage Tank (O3) (D-1410A) SAMPLE NO : A65031246

SAMPLING DATE : 28/03/2022 SAMPLING TIME : 10:03-22:03

RECEIVED DATE : 31/03/2022 TESTED DATE : 31/03/2022 – 12/04/2022

SAMPLING INSTRUMENT : Passive Sampling REPORTED DATE : 20/04/2022

PARAMETER**	TEST METHOD	RESULT ²	STD ¹	UNIT
Ethylene Oxide	OSHA 1010	ND	1.8	mg/m ³
		ND	1.0	ppm

REMARK:

¹ Notification of The Department of Labour Protection and Welfare B.E.2560 (2017),
Concentration Limits of Hazardous Chemicals.

² ND = Non detectable : detection limit of Ethylene Oxide is 0.05 mg/m³ or 0.03 ppm.

** Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008
Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Suttha Songthaninai)
Analysed By SECOT Co.,Ltd. / GPS = Sampling at UTM 47 P 731004E 1404676N



Examined By



(Miss Thanatporn Klinsopon)

20/04/2022

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Request No. ATR6505078

Report No. 6505-1288

TEST REPORT

CUSTOMER : GC Glycol Company Limited

ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,
Amphur Muang Rayong, Rayong 21150

SAMPLE SOURCE : EOEG Plant

SAMPLE NAME : EO Storage Tank (O3) (D-1410A) SAMPLE NO : A65051288

SAMPLING DATE : 24/05/2022 SAMPLING TIME : 09:15-21:15

RECEIVED DATE : 30/05/2022 TESTED DATE : 30/05/2022 – 13/06/2022

SAMPLING INSTRUMENT : Passive Sampling REPORTED DATE : 28/06/2022

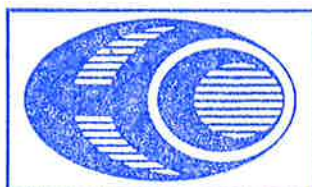
PARAMETER**	TEST METHOD	RESULT ²	STD ¹	UNIT
Ethylene Oxide	OSHA 1010	ND	1.8	mg/m ³
		ND	1.0	ppm

REMARK:

¹ Notification of The Department of Labour Protection and Welfare B.E.2560 (2017),
Concentration Limits of Hazardous Chemicals.

² ND = Non detectable : detection limit of Ethylene Oxide is 0.05 mg/m³ or 0.03 ppm.

** Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008
Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Wattana Khotla)
Analysed By SECOT Co.,Ltd. / GPS = Sampling at UTM 47 P 731004E 1404676N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By



(Miss Thanatporn Klinsopon)

28/06/2022

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