ภาคผนวก ก-3

ผลการติดตามตรวจสอบระดับเสียงโดยทั่วไป



United Analyst and Engineering Consultant Co., Ltd.
3 Soi Udomsuk 41, Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260
Tel.0 2763 2828 Fax 0 2763 2800 www.uaeconsultant.com E-mail: uae@uaeconsultant.com

ANALYSIS REPORT

CUSTOMER NAME : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
ADDRESS : 42/3 MOO 1, SUKHUMVIT ROAD KM. 124 THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 08 5314 3115 e-mail : kingkarn.kh@gpscgroup.com
MEASURING SOURCE : บ้านทุ่งเทครัว
MEASURING TYPE : AMBIENT (NOISE)
MEASURING DATE : JUNE 23-30, 2023
MEASURING TIME : *
MEASURING METHOD : INTEGRATED SOUND LEVEL METER
MEASURED BY : MR TOSSAPORN TANAPIRUN
RECEIVED DATE : JUNE 23-30, 2023
ANALYTICAL DATE : JUNE 23-30, 2023
REPORT NO. : 2023-U055826
WORK NO. : 2022-006185
ANALYSIS NO. : T23AM584-0001 - T23AM584-0007

TIME*	RESULT dB(A) บ้านทุ่งเทครัว JUNE 23-24, 2023 T23AM584-0001		
	$L_{Aeq\ 1\ hour}$	$L_{Amax\ 1\ hour}$	$L_{A90\ 1\ hour}$
07:00-08:00 HOUR	60.1	76.1	57.0
08:00-09:00 HOUR	61.5	79.4	58.1
09:00-10:00 HOUR	62.7	81.4	59.0
10:00-11:00 HOUR	63.2	79.7	60.0
11:00-12:00 HOUR	61.4	76.9	57.4
12:00-13:00 HOUR	62.5	80.7	58.7
13:00-14:00 HOUR	59.7	81.2	56.3
14:00-15:00 HOUR	59.8	77.4	56.4
15:00-16:00 HOUR	62.3	81.2	58.1
16:00-17:00 HOUR	63.2	79.1	59.0
17:00-18:00 HOUR	60.1	80.2	56.4
18:00-19:00 HOUR	63.2	83.4	60.1
19:00-20:00 HOUR	57.2	75.0	54.1
20:00-21:00 HOUR	58.0	73.2	53.9
21:00-22:00 HOUR	58.0	77.2	54.2
22:00-23:00 HOUR	53.8	75.3	50.0
23:00-00:00 HOUR	52.3	67.8	48.1
00:00-01:00 HOUR	53.1	71.3	48.9
01:00-02:00 HOUR	52.5	73.1	49.4
02:00-03:00 HOUR	54.4	71.9	50.9
03:00-04:00 HOUR	52.9	73.6	48.7
04:00-05:00 HOUR	53.7	69.4	50.0
05:00-06:00 HOUR	58.2	75.9	54.3
06:00-07:00 HOUR	62.2	80.8	58.4
$L_{Aeq\ 24\ hours}$	60.0		
L_{Adn}	63.9		

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TIME*	RESULT dB(A) บ้านทุ่งเทครัว JUNE 24-25, 2023 T23AM584-0002		
	$L_{Aeq\ 1\ hour}$	$L_{Amax\ 1\ hour}$	$L_{A90\ 1\ hour}$
07:00-08:00 HOUR	61.8	82.1	58.0
08:00-09:00 HOUR	62.9	83.4	59.8
09:00-10:00 HOUR	62.0	82.9	58.6
10:00-11:00 HOUR	63.1	80.9	59.9
11:00-12:00 HOUR	62.2	76.9	59.0
12:00-13:00 HOUR	60.5	77.0	56.5
13:00-14:00 HOUR	59.6	76.4	56.1
14:00-15:00 HOUR	60.6	81.7	56.6
15:00-16:00 HOUR	61.7	81.4	58.1
16:00-17:00 HOUR	61.1	78.7	57.5
17:00-18:00 HOUR	59.8	75.2	56.1
18:00-19:00 HOUR	61.7	81.4	58.3
19:00-20:00 HOUR	58.7	76.3	54.8
20:00-21:00 HOUR	58.2	78.3	55.1
21:00-22:00 HOUR	56.9	76.2	53.5
22:00-23:00 HOUR	54.2	74.5	51.0
23:00-00:00 HOUR	53.4	69.9	49.9
00:00-01:00 HOUR	55.1	76.0	51.9
01:00-02:00 HOUR	54.1	74.5	50.1
02:00-03:00 HOUR	53.8	70.8	49.9
03:00-04:00 HOUR	52.6	71.7	49.1
04:00-05:00 HOUR	52.0	73.5	48.9
05:00-06:00 HOUR	56.8	76.6	53.5
06:00-07:00 HOUR	62.3	80.4	59.2
$L_{Aeq\ 24\ hours}$	59.8		
L_{Adn}	63.8		

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TIME*	RESULT dB(A)		
	บ้านทุ่งเทศร้า		
	JUNE 25-26, 2023 T23AM584-0003		
	$L_{Aeq\ 1\ hour}$	$L_{Amax\ 1\ hour}$	$L_{A90\ 1\ hour}$
07:00-08:00 HOUR	63.4	84.6	59.4
08:00-09:00 HOUR	61.9	80.5	58.3
09:00-10:00 HOUR	62.5	81.1	58.7
10:00-11:00 HOUR	60.6	79.5	57.2
11:00-12:00 HOUR	62.7	79.5	58.7
12:00-13:00 HOUR	63.6	81.8	60.3
13:00-14:00 HOUR	60.9	80.8	56.9
14:00-15:00 HOUR	60.7	78.6	57.5
15:00-16:00 HOUR	60.8	80.1	56.6
16:00-17:00 HOUR	61.7	77.9	58.2
17:00-18:00 HOUR	63.9	79.4	59.8
18:00-19:00 HOUR	61.4	81.8	57.7
19:00-20:00 HOUR	56.2	76.1	52.5
20:00-21:00 HOUR	58.7	77.5	54.8
21:00-22:00 HOUR	57.5	76.7	54.3
22:00-23:00 HOUR	54.3	71.2	50.8
23:00-00:00 HOUR	53.8	70.5	50.6
00:00-01:00 HOUR	54.7	71.1	51.5
01:00-02:00 HOUR	54.0	70.0	50.1
02:00-03:00 HOUR	54.0	72.5	50.3
03:00-04:00 HOUR	53.3	71.4	49.9
04:00-05:00 HOUR	52.6	72.3	48.8
05:00-06:00 HOUR	56.1	76.6	52.4
06:00-07:00 HOUR	61.4	77.6	57.2
$L_{Aeq\ 24\ hours}$	60.2		
L_{Adn}	63.7		

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TIME*	RESULT dB(A)		
	บานทุงเทครัว		
	JUNE 26-27, 2023 T23AM584-0004		
	$L_{Aeq\ 1\ hour}$	$L_{Amax\ 1\ hour}$	$L_{A90\ 1\ hour}$
07:00-08:00 HOUR	60.6	77.0	56.4
08:00-09:00 HOUR	63.2	83.5	59.6
09:00-10:00 HOUR	62.4	80.6	58.3
10:00-11:00 HOUR	61.0	76.7	57.8
11:00-12:00 HOUR	61.5	78.1	57.3
12:00-13:00 HOUR	59.9	79.8	56.5
13:00-14:00 HOUR	61.5	83.2	58.4
14:00-15:00 HOUR	60.7	79.2	57.1
15:00-16:00 HOUR	60.8	78.4	57.5
16:00-17:00 HOUR	60.8	77.1	56.8
17:00-18:00 HOUR	62.9	78.2	59.4
18:00-19:00 HOUR	62.9	79.9	59.7
19:00-20:00 HOUR	56.3	72.1	52.1
20:00-21:00 HOUR	58.8	75.8	54.8
21:00-22:00 HOUR	58.1	76.5	55.0
22:00-23:00 HOUR	54.0	72.3	50.5
23:00-00:00 HOUR	53.2	73.4	49.3
00:00-01:00 HOUR	53.4	71.4	49.4
01:00-02:00 HOUR	51.9	68.1	48.7
02:00-03:00 HOUR	53.7	72.8	49.8
03:00-04:00 HOUR	53.8	72.6	50.7
04:00-05:00 HOUR	54.3	74.8	51.0
05:00-06:00 HOUR	56.2	73.8	52.0
06:00-07:00 HOUR	61.6	79.4	57.7
$L_{Aeq\ 24\ hours}$	59.8		
L_{Adn}	63.5		

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TIME*	RESULT dB(A) บ้านทุ่งเทครัว JUNE 27-28, 2023 T23AM584-0005		
	$L_{Aeq\ 1\ hour}$	$L_{Amax\ 1\ hour}$	$L_{A90\ 1\ hour}$
07:00-08:00 HOUR	60.2	79.4	57.0
08:00-09:00 HOUR	61.9	80.5	58.1
09:00-10:00 HOUR	61.2	79.9	57.7
10:00-11:00 HOUR	58.9	76.7	55.1
11:00-12:00 HOUR	61.2	78.4	57.0
12:00-13:00 HOUR	61.0	79.1	56.9
13:00-14:00 HOUR	63.0	83.1	59.3
14:00-15:00 HOUR	59.6	78.1	56.1
15:00-16:00 HOUR	62.1	78.2	57.9
16:00-17:00 HOUR	59.7	76.4	56.4
17:00-18:00 HOUR	61.6	77.8	58.2
18:00-19:00 HOUR	62.1	81.5	58.6
19:00-20:00 HOUR	57.0	76.7	53.1
20:00-21:00 HOUR	58.7	76.0	55.6
21:00-22:00 HOUR	57.7	75.3	54.6
22:00-23:00 HOUR	51.6	67.8	47.6
23:00-00:00 HOUR	54.2	75.0	50.1
00:00-01:00 HOUR	52.3	68.1	48.4
01:00-02:00 HOUR	52.3	71.5	48.4
02:00-03:00 HOUR	54.0	69.5	50.7
03:00-04:00 HOUR	53.7	72.2	50.0
04:00-05:00 HOUR	52.8	72.3	49.3
05:00-06:00 HOUR	56.7	72.2	53.4
06:00-07:00 HOUR	61.7	81.3	57.8
$L_{Aeq\ 24\ hours}$	59.4		
L_{Adn}	63.3		

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TIME*	RESULT dB(A)		
	บ้านทุ่งเทศร้าว		
	JUNE 28-29, 2023 T23AM584-0006		
	$L_{Aeq\ 1\ hour}$	$L_{Amax\ 1\ hour}$	$L_{A90\ 1\ hour}$
07:00-08:00 HOUR	60.0	77.5	56.6
08:00-09:00 HOUR	62.9	81.3	59.3
09:00-10:00 HOUR	62.0	81.3	58.3
10:00-11:00 HOUR	62.1	82.7	58.2
11:00-12:00 HOUR	60.5	81.9	57.2
12:00-13:00 HOUR	61.8	78.7	57.7
13:00-14:00 HOUR	61.9	79.3	58.1
14:00-15:00 HOUR	60.8	79.7	56.8
15:00-16:00 HOUR	62.3	80.7	58.7
16:00-17:00 HOUR	62.0	83.3	58.9
17:00-18:00 HOUR	60.4	76.0	57.2
18:00-19:00 HOUR	59.9	79.5	56.0
19:00-20:00 HOUR	56.9	72.8	53.6
20:00-21:00 HOUR	57.8	75.5	54.4
21:00-22:00 HOUR	58.5	74.8	55.2
22:00-23:00 HOUR	53.8	71.5	49.9
23:00-00:00 HOUR	52.3	73.3	48.8
00:00-01:00 HOUR	53.3	72.9	49.5
01:00-02:00 HOUR	53.5	69.2	49.8
02:00-03:00 HOUR	52.1	72.9	48.3
03:00-04:00 HOUR	53.5	69.7	49.4
04:00-05:00 HOUR	52.8	72.3	49.4
05:00-06:00 HOUR	58.1	78.1	54.6
06:00-07:00 HOUR	62.3	79.5	58.6
$L_{Aeq\ 24\ hours}$	59.7		
L_{Adn}	63.7		

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TIME*	RESULT dB(A)		
	บ้านทุ่งเหรัว		
	JUNE 29-30, 2023 T23AM584-0007		
	$L_{Aeq\ 1\ hour}$	$L_{Amax\ 1\ hour}$	$L_{A90\ 1\ hour}$
07:00-08:00 HOUR	63.8	78.6	60.0
08:00-09:00 HOUR	62.3	78.3	58.9
09:00-10:00 HOUR	62.5	80.6	58.5
10:00-11:00 HOUR	61.9	81.0	58.2
11:00-12:00 HOUR	61.8	77.4	58.4
12:00-13:00 HOUR	59.9	76.1	56.7
13:00-14:00 HOUR	59.2	75.4	55.9
14:00-15:00 HOUR	63.3	82.2	59.7
15:00-16:00 HOUR	61.0	79.8	57.3
16:00-17:00 HOUR	62.2	79.5	58.4
17:00-18:00 HOUR	59.2	74.1	55.0
18:00-19:00 HOUR	63.4	82.9	60.2
19:00-20:00 HOUR	58.7	77.8	54.7
20:00-21:00 HOUR	58.1	74.5	54.0
21:00-22:00 HOUR	56.8	71.9	53.7
22:00-23:00 HOUR	52.5	74.2	48.7
23:00-00:00 HOUR	53.3	73.8	49.7
00:00-01:00 HOUR	54.4	69.4	50.7
01:00-02:00 HOUR	52.9	70.5	49.7
02:00-03:00 HOUR	53.6	68.8	50.2
03:00-04:00 HOUR	51.8	72.9	47.6
04:00-05:00 HOUR	52.4	73.3	48.8
05:00-06:00 HOUR	57.3	74.9	53.6
06:00-07:00 HOUR	61.2	81.0	57.2
$L_{Aeq\ 24\ hours}$	60.0		
L_{Adn}	63.5		

(MR SILA BANJONGJAIRUK)
LABORATORY SUPERVISOR

JULY 7, 2023

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- End of Analysis Report -

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Tel.0 2763 2828 Fax 0 2763 2800 www.uaeconsultant.com E-mail: uae@uaeconsultant.com

ANALYSIS REPORT

CUSTOMER NAME : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
ADDRESS : 42/3 MOO 1, SUKHUMVIT ROAD KM. 124 THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 08 5314 3115 e-mail : kingkarn.kh@gpscgroup.com
MEASURING SOURCE : ริมรั้วโครงการ GPSC
MEASURING TYPE : AMBIENT (NOISE) **RECEIVED DATE** : JUNE 23-30, 2023
MEASURING DATE : JUNE 23-30, 2023 **ANALYTICAL DATE** : JUNE 23-30, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U055827
MEASURING METHOD : INTEGRATED SOUND LEVEL METER **WORK NO.** : 2022-006185
MEASURED BY : MR TOSSAPORN TANAPIRUN **ANALYSIS NO.** : T23AM584-0008 - T23AM584-0014

TIME*	RESULT dB(A) ริมรั้วโครงการ GPSC JUNE 23-24, 2023 T23AM584-0008		
	$L_{Aeq\ 1\ hour}$	$L_{Amax\ 1\ hour}$	$L_{A90\ 1\ hour}$
07:00-08:00 HOUR	61.3	78.1	60.0
08:00-09:00 HOUR	60.0	76.5	58.6
09:00-10:00 HOUR	61.2	79.4	59.7
10:00-11:00 HOUR	62.2	80.0	60.5
11:00-12:00 HOUR	62.7	80.3	61.2
12:00-13:00 HOUR	61.9	77.6	60.5
13:00-14:00 HOUR	62.0	78.4	61.0
14:00-15:00 HOUR	63.2	80.4	61.7
15:00-16:00 HOUR	62.3	78.8	60.9
16:00-17:00 HOUR	63.7	80.1	62.3
17:00-18:00 HOUR	61.8	78.2	60.2
18:00-19:00 HOUR	63.1	79.5	62.1
19:00-20:00 HOUR	61.7	78.7	60.2
20:00-21:00 HOUR	60.8	77.5	59.7
21:00-22:00 HOUR	60.2	78.1	59.1
22:00-23:00 HOUR	57.4	75.0	56.5
23:00-00:00 HOUR	59.1	76.4	57.7
00:00-01:00 HOUR	59.1	77.2	57.9
01:00-02:00 HOUR	57.4	74.0	56.1
02:00-03:00 HOUR	59.5	75.6	58.5
03:00-04:00 HOUR	57.7	73.9	56.5
04:00-05:00 HOUR	59.3	75.2	57.6
05:00-06:00 HOUR	61.8	77.9	60.3
06:00-07:00 HOUR	63.0	78.8	61.7
$L_{Aeq\ 24\ hours}$	61.3		
L_{Adn}	66.6		

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TIME*	RESULT dB(A) ริมรั้วโครงการ GPSC JUNE 24-25, 2023 T23AM584-0009		
	$L_{Aeq\ 1\ hour}$	$L_{Amax\ 1\ hour}$	$L_{A90\ 1\ hour}$
07:00-08:00 HOUR	61.3	77.6	59.8
08:00-09:00 HOUR	60.9	79.0	59.4
09:00-10:00 HOUR	63.3	80.7	61.9
10:00-11:00 HOUR	63.7	81.4	62.7
11:00-12:00 HOUR	61.6	79.3	60.0
12:00-13:00 HOUR	63.5	79.5	62.5
13:00-14:00 HOUR	62.9	81.2	61.3
14:00-15:00 HOUR	62.3	79.0	61.2
15:00-16:00 HOUR	62.2	78.5	61.0
16:00-17:00 HOUR	62.8	80.8	61.9
17:00-18:00 HOUR	62.9	79.4	61.4
18:00-19:00 HOUR	63.4	80.2	62.1
19:00-20:00 HOUR	59.4	78.0	58.3
20:00-21:00 HOUR	60.0	76.5	58.3
21:00-22:00 HOUR	59.8	75.6	58.6
22:00-23:00 HOUR	57.5	74.0	56.2
23:00-00:00 HOUR	57.2	75.4	55.5
00:00-01:00 HOUR	58.6	75.7	57.6
01:00-02:00 HOUR	59.1	75.8	57.9
02:00-03:00 HOUR	58.8	75.7	57.5
03:00-04:00 HOUR	59.1	76.3	58.0
04:00-05:00 HOUR	57.2	74.8	55.8
05:00-06:00 HOUR	60.8	77.3	59.3
06:00-07:00 HOUR	63.0	80.7	62.1
$L_{Aeq\ 24\ hours}$	61.4		
L_{Adn}	66.4		

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TIME*	RESULT dB(A) รีมรั่วโครงการ GPSC JUNE 25-26, 2023 T23AM584-0010		
	$L_{Aeq\ 1\ hour}$	$L_{Amax\ 1\ hour}$	$L_{A90\ 1\ hour}$
07:00-08:00 HOUR	63.5	80.1	61.8
08:00-09:00 HOUR	63.2	81.6	62.1
09:00-10:00 HOUR	63.1	80.2	61.6
10:00-11:00 HOUR	61.1	77.2	59.5
11:00-12:00 HOUR	63.8	81.2	62.1
12:00-13:00 HOUR	62.1	79.8	60.5
13:00-14:00 HOUR	63.3	80.3	62.1
14:00-15:00 HOUR	61.6	78.0	60.5
15:00-16:00 HOUR	62.5	81.2	61.1
16:00-17:00 HOUR	62.6	80.3	61.7
17:00-18:00 HOUR	63.7	80.8	62.2
18:00-19:00 HOUR	61.0	78.1	59.5
19:00-20:00 HOUR	59.8	78.3	58.6
20:00-21:00 HOUR	61.6	79.4	60.6
21:00-22:00 HOUR	60.9	78.6	59.7
22:00-23:00 HOUR	58.4	76.6	57.2
23:00-00:00 HOUR	57.4	75.2	55.8
00:00-01:00 HOUR	58.0	74.9	56.5
01:00-02:00 HOUR	56.8	72.8	55.3
02:00-03:00 HOUR	58.2	74.2	56.5
03:00-04:00 HOUR	57.1	74.0	55.7
04:00-05:00 HOUR	57.1	74.4	55.5
05:00-06:00 HOUR	59.6	75.7	58.5
06:00-07:00 HOUR	62.8	81.0	61.4
$L_{Aeq\ 24\ hours}$	61.4		
L_{Adn}	66.0		

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TIME*	RESULT dB(A)		
	จิมเว็วโครงการ GPSC		
	JUNE 26-27, 2023		
	T23AM584-0011		
	$L_{Aeq\ 1\ hour}$	$L_{Amax\ 1\ hour}$	$L_{A90\ 1\ hour}$
07:00-08:00 HOUR	63.0	80.4	61.6
08:00-09:00 HOUR	63.4	80.7	61.9
09:00-10:00 HOUR	63.4	79.9	62.0
10:00-11:00 HOUR	64.0	80.7	63.0
11:00-12:00 HOUR	61.5	78.4	59.8
12:00-13:00 HOUR	63.5	81.0	61.9
13:00-14:00 HOUR	64.2	80.4	62.7
14:00-15:00 HOUR	63.4	80.1	61.7
15:00-16:00 HOUR	61.9	78.8	60.3
16:00-17:00 HOUR	62.0	78.9	61.0
17:00-18:00 HOUR	61.7	79.7	60.6
18:00-19:00 HOUR	61.5	78.5	60.2
19:00-20:00 HOUR	59.3	76.6	57.8
20:00-21:00 HOUR	60.3	78.0	58.7
21:00-22:00 HOUR	61.4	79.9	60.3
22:00-23:00 HOUR	58.1	74.7	56.4
23:00-00:00 HOUR	58.7	75.9	57.7
00:00-01:00 HOUR	59.1	75.4	57.5
01:00-02:00 HOUR	56.9	75.1	55.2
02:00-03:00 HOUR	56.9	74.9	55.2
03:00-04:00 HOUR	59.3	78.1	58.2
04:00-05:00 HOUR	59.7	77.9	58.8
05:00-06:00 HOUR	59.4	76.4	57.9
06:00-07:00 HOUR	63.4	79.9	62.2
$L_{Aeq\ 24\ hours}$	61.6		
L_{Adn}	66.5		

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Tel.0 2763 2828 Fax 0 2763 2800 www.uaeconsultant.com E-mail: uae@uaeconsultant.com

TIME*	RESULT dB(A) ริมรั้วโครงการ GPSC JUNE 27-28, 2023 T23AM584-0012		
	$L_{Aeq\ 1\ hour}$	$L_{Amax\ 1\ hour}$	$L_{A90\ 1\ hour}$
07:00-08:00 HOUR	62.5	80.8	61.2
08:00-09:00 HOUR	61.8	79.1	60.2
09:00-10:00 HOUR	63.3	80.9	62.1
10:00-11:00 HOUR	61.8	78.3	60.9
11:00-12:00 HOUR	64.0	80.4	63.0
12:00-13:00 HOUR	63.5	78.4	62.5
13:00-14:00 HOUR	62.2	79.1	61.1
14:00-15:00 HOUR	64.2	80.2	62.8
15:00-16:00 HOUR	63.6	80.1	62.4
16:00-17:00 HOUR	62.9	79.5	61.9
17:00-18:00 HOUR	62.0	79.0	60.9
18:00-19:00 HOUR	63.9	81.7	62.3
19:00-20:00 HOUR	60.8	78.2	59.9
20:00-21:00 HOUR	61.2	78.6	59.7
21:00-22:00 HOUR	61.1	77.0	60.1
22:00-23:00 HOUR	56.7	74.8	55.8
23:00-00:00 HOUR	59.0	77.2	57.8
00:00-01:00 HOUR	58.7	76.6	57.5
01:00-02:00 HOUR	57.2	72.3	55.7
02:00-03:00 HOUR	59.6	76.2	58.3
03:00-04:00 HOUR	57.4	74.1	56.4
04:00-05:00 HOUR	59.2	76.9	58.1
05:00-06:00 HOUR	61.2	79.1	60.2
06:00-07:00 HOUR	63.4	79.7	62.5
$L_{Aeq\ 24\ hours}$	61.8		
L_{Adn}	66.7		

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TIME*	RESULT dB(A) ริมรั้วโครงการ GPSC JUNE 28-29, 2023 T23AM584-0013		
	$L_{Aeq\ 1\ hour}$	$L_{Amax\ 1\ hour}$	$L_{A90\ 1\ hour}$
07:00-08:00 HOUR	61.1	78.2	60.2
08:00-09:00 HOUR	63.3	78.9	61.9
09:00-10:00 HOUR	62.1	78.5	61.0
10:00-11:00 HOUR	61.8	79.2	60.7
11:00-12:00 HOUR	61.9	79.1	60.5
12:00-13:00 HOUR	62.8	81.2	61.8
13:00-14:00 HOUR	63.3	79.7	61.9
14:00-15:00 HOUR	63.9	81.4	62.4
15:00-16:00 HOUR	63.5	79.5	62.5
16:00-17:00 HOUR	63.1	80.7	61.6
17:00-18:00 HOUR	60.8	76.3	59.8
18:00-19:00 HOUR	64.1	82.5	62.4
19:00-20:00 HOUR	60.7	78.1	59.0
20:00-21:00 HOUR	60.2	76.3	58.5
21:00-22:00 HOUR	59.4	77.5	58.4
22:00-23:00 HOUR	59.3	77.1	58.0
23:00-00:00 HOUR	59.4	75.8	58.4
00:00-01:00 HOUR	59.0	75.9	57.7
01:00-02:00 HOUR	59.2	77.3	57.7
02:00-03:00 HOUR	59.1	76.6	57.8
03:00-04:00 HOUR	58.4	77.0	56.8
04:00-05:00 HOUR	57.3	74.3	55.7
05:00-06:00 HOUR	61.2	77.6	60.0
06:00-07:00 HOUR	62.1	79.1	61.1
$L_{Aeq\ 24\ hours}$	61.5		
L_{Adn}	66.6		

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3 Soi Udomsuk 41, Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260
Tel. 0 2763 2828 Fax 0 2763 2800 www.uaeconsultant.com E-mail: uae@uaeconsultant.com

TIME*	RESULT dB(A) ริมรั้วโครงการ GPSC JUNE 29-30, 2023 T23AM584-0014		
	$L_{Aeq\ 1\ hour}$	$L_{Amax\ 1\ hour}$	$L_{A90\ 1\ hour}$
07:00-08:00 HOUR	61.7	79.5	60.6
08:00-09:00 HOUR	63.8	80.0	62.6
09:00-10:00 HOUR	62.6	80.3	60.9
10:00-11:00 HOUR	62.6	80.0	61.7
11:00-12:00 HOUR	63.1	80.8	61.6
12:00-13:00 HOUR	62.9	80.2	61.5
13:00-14:00 HOUR	61.4	77.1	59.9
14:00-15:00 HOUR	63.1	81.3	61.4
15:00-16:00 HOUR	61.5	79.6	60.2
16:00-17:00 HOUR	63.1	78.7	61.9
17:00-18:00 HOUR	61.8	79.3	60.9
18:00-19:00 HOUR	63.7	81.4	62.1
19:00-20:00 HOUR	61.3	78.7	60.0
20:00-21:00 HOUR	59.8	77.1	58.7
21:00-22:00 HOUR	60.2	76.7	58.7
22:00-23:00 HOUR	59.6	76.7	58.6
23:00-00:00 HOUR	60.0	76.6	58.9
00:00-01:00 HOUR	57.5	74.5	56.0
01:00-02:00 HOUR	57.6	74.5	56.2
02:00-03:00 HOUR	57.4	74.1	56.0
03:00-04:00 HOUR	57.1	73.1	55.7
04:00-05:00 HOUR	58.6	75.2	57.5
05:00-06:00 HOUR	59.2	74.9	58.2
06:00-07:00 HOUR	62.4	79.5	60.8
$L_{Aeq\ 24\ hours}$	61.4		
L_{Adn}	66.2		

(MR SILA BANJONGJAIRUK)
LABORATORY SUPERVISOR

JULY 7, 2023

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- End of Analysis Report -

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3 Soi Udomsuk 41, Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260
Tel.0 2763 2828 Fax 0 2763 2800 www.uaeconsultant.com E-mail: uae@uaeconsultant.com

ANALYSIS REPORT

CUSTOMER NAME : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
ADDRESS : 42/3 MOO 1, SUKHUMVIT ROAD KM. 124 THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 08 5314 3115 e-mail : kingkarn.kh@gpscgroup.com
MEASURING SOURCE : บ้านอ่าวอุดม
MEASURING TYPE : AMBIENT (NOISE)
MEASURING DATE : JUNE 23-30, 2023
MEASURING TIME : *
MEASURING METHOD : INTEGRATED SOUND LEVEL METER
MEASURED BY : MR TOSSAPORN TANAPIRUN
RECEIVED DATE : JUNE 23-30, 2023
ANALYTICAL DATE : JUNE 23-30, 2023
REPORT NO. : 2023-U055828
WORK NO. : 2022-006185
ANALYSIS NO. : T23AM584-0015 - T23AM584-0021

TIME*	RESULT dB(A) บ้านอ่าวอุดม JUNE 23-24, 2023 T23AM584-0015		
	$L_{Aeq\ 1\ hour}$	$L_{Amax\ 1\ hour}$	$L_{A90\ 1\ hour}$
07:00-08:00 HOUR	53.8	71.3	52.9
08:00-09:00 HOUR	52.3	73.3	51.4
09:00-10:00 HOUR	52.5	69.1	51.2
10:00-11:00 HOUR	52.4	73.1	51.1
11:00-12:00 HOUR	51.9	68.7	50.3
12:00-13:00 HOUR	53.2	71.2	51.7
13:00-14:00 HOUR	54.4	71.4	53.0
14:00-15:00 HOUR	55.5	75.5	54.3
15:00-16:00 HOUR	54.3	74.2	53.3
16:00-17:00 HOUR	52.5	75.6	51.2
17:00-18:00 HOUR	53.9	73.2	53.0
18:00-19:00 HOUR	52.6	69.4	51.1
19:00-20:00 HOUR	46.8	66.0	45.7
20:00-21:00 HOUR	47.9	68.2	46.3
21:00-22:00 HOUR	49.8	70.5	48.4
22:00-23:00 HOUR	44.0	64.4	43.1
23:00-00:00 HOUR	46.4	65.0	44.9
00:00-01:00 HOUR	45.1	63.4	44.1
01:00-02:00 HOUR	46.3	68.3	45.0
02:00-03:00 HOUR	45.1	63.7	44.0
03:00-04:00 HOUR	45.4	66.3	43.9
04:00-05:00 HOUR	45.9	65.7	44.9
05:00-06:00 HOUR	47.0	65.0	45.5
06:00-07:00 HOUR	54.4	77.1	53.4
$L_{Aeq\ 24\ hours}$	51.5		
L_{Adn}	55.5		

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TIME*	RESULT dB(A)		
	บ้านอาวอุดม		
	JUNE 24-25, 2023		
	T23AM584-0016		
	$L_{Aeq\ 1\ hour}$	$L_{Amax\ 1\ hour}$	$L_{A90\ 1\ hour}$
07:00-08:00 HOUR	53.6	72.8	52.1
08:00-09:00 HOUR	53.0	75.1	52.0
09:00-10:00 HOUR	54.2	73.0	53.0
10:00-11:00 HOUR	53.5	71.3	52.4
11:00-12:00 HOUR	54.9	73.6	53.5
12:00-13:00 HOUR	54.8	71.4	53.3
13:00-14:00 HOUR	52.6	74.5	51.7
14:00-15:00 HOUR	51.8	68.5	50.6
15:00-16:00 HOUR	51.8	69.9	50.8
16:00-17:00 HOUR	50.8	67.5	49.4
17:00-18:00 HOUR	53.2	73.8	52.0
18:00-19:00 HOUR	51.1	72.7	50.2
19:00-20:00 HOUR	48.7	68.3	47.1
20:00-21:00 HOUR	47.0	70.1	45.4
21:00-22:00 HOUR	49.1	68.9	47.7
22:00-23:00 HOUR	44.2	63.6	42.6
23:00-00:00 HOUR	43.3	62.7	42.4
00:00-01:00 HOUR	45.7	67.3	44.6
01:00-02:00 HOUR	44.8	65.6	43.7
02:00-03:00 HOUR	46.7	68.7	45.6
03:00-04:00 HOUR	46.2	64.5	44.8
04:00-05:00 HOUR	43.4	63.9	42.2
05:00-06:00 HOUR	48.9	71.3	47.7
06:00-07:00 HOUR	54.0	76.5	52.9
$L_{Aeq\ 24\ hours}$	51.3		
L_{Adn}	55.3		

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Tel.0 2763 2828 Fax 0 2763 2800 www.uaeconsultant.com E-mail: uae@uaeconsultant.com

TIME*	RESULT dB(A)		
	บ้านอ่าวอุดม		
	JUNE 25-26, 2023		
	T23AM584-0017		
	$L_{Aeq\ 1\ hour}$	$L_{Amax\ 1\ hour}$	$L_{A90\ 1\ hour}$
07:00-08:00 HOUR	52.6	73.2	51.2
08:00-09:00 HOUR	55.7	73.8	54.3
09:00-10:00 HOUR	53.1	74.2	51.5
10:00-11:00 HOUR	51.5	71.1	50.5
11:00-12:00 HOUR	51.9	70.8	50.5
12:00-13:00 HOUR	51.0	70.3	50.0
13:00-14:00 HOUR	54.0	75.4	52.8
14:00-15:00 HOUR	51.2	71.0	50.1
15:00-16:00 HOUR	52.2	73.0	51.3
16:00-17:00 HOUR	53.2	72.2	52.0
17:00-18:00 HOUR	52.6	73.0	51.7
18:00-19:00 HOUR	52.0	70.0	50.9
19:00-20:00 HOUR	46.5	67.3	45.2
20:00-21:00 HOUR	49.5	67.1	48.2
21:00-22:00 HOUR	48.1	70.1	47.0
22:00-23:00 HOUR	44.1	65.1	43.0
23:00-00:00 HOUR	46.2	63.9	44.9
00:00-01:00 HOUR	45.3	66.4	44.0
01:00-02:00 HOUR	46.3	69.2	45.2
02:00-03:00 HOUR	45.7	62.9	44.5
03:00-04:00 HOUR	45.5	64.3	43.9
04:00-05:00 HOUR	46.7	63.4	45.6
05:00-06:00 HOUR	47.1	65.5	45.8
06:00-07:00 HOUR	54.2	71.2	52.7
$L_{Aeq\ 24\ hours}$	51.0		
L_{Adn}	55.4		

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TIME*	RESULT dB(A) บ้านอ่าวอุดม JUNE 26-27, 2023 T23AM584-0018		
	$L_{Aeq\ 1\ hour}$	$L_{Amax\ 1\ hour}$	$L_{A90\ 1\ hour}$
07:00-08:00 HOUR	51.9	73.1	50.8
08:00-09:00 HOUR	50.6	71.5	49.3
09:00-10:00 HOUR	52.9	72.4	51.6
10:00-11:00 HOUR	52.9	72.0	51.4
11:00-12:00 HOUR	54.0	71.2	52.8
12:00-13:00 HOUR	52.0	70.2	50.8
13:00-14:00 HOUR	56.0	74.9	54.7
14:00-15:00 HOUR	51.8	71.6	50.4
15:00-16:00 HOUR	53.9	71.7	52.6
16:00-17:00 HOUR	52.9	72.8	51.5
17:00-18:00 HOUR	53.0	73.0	51.4
18:00-19:00 HOUR	51.8	73.0	50.3
19:00-20:00 HOUR	46.1	66.2	45.1
20:00-21:00 HOUR	48.0	66.5	47.1
21:00-22:00 HOUR	47.6	66.4	46.0
22:00-23:00 HOUR	47.4	68.5	45.9
23:00-00:00 HOUR	45.2	66.3	44.2
00:00-01:00 HOUR	44.9	62.9	43.3
01:00-02:00 HOUR	44.4	66.1	43.0
02:00-03:00 HOUR	47.8	68.7	46.9
03:00-04:00 HOUR	47.8	67.9	46.6
04:00-05:00 HOUR	47.4	69.5	46.1
05:00-06:00 HOUR	48.2	70.0	47.2
06:00-07:00 HOUR	50.7	71.4	49.7
$L_{Aeq\ 24\ hours}$	51.1		
L_{Adn}	55.0		

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TIME*	RESULT dB(A) บ้านอ่าวอุดม JUNE 27-28, 2023 T23AM584-0019		
	$L_{Aeq\ 1\ hour}$	$L_{Amax\ 1\ hour}$	$L_{A90\ 1\ hour}$
07:00-08:00 HOUR	54.1	76.4	52.5
08:00-09:00 HOUR	53.7	75.8	52.2
09:00-10:00 HOUR	51.5	69.9	50.4
10:00-11:00 HOUR	54.2	73.9	52.7
11:00-12:00 HOUR	55.2	77.9	54.0
12:00-13:00 HOUR	55.8	78.0	54.5
13:00-14:00 HOUR	53.6	70.8	52.4
14:00-15:00 HOUR	52.8	73.2	51.3
15:00-16:00 HOUR	54.0	71.9	52.9
16:00-17:00 HOUR	51.8	72.5	50.4
17:00-18:00 HOUR	52.7	72.0	51.1
18:00-19:00 HOUR	51.0	72.8	50.0
19:00-20:00 HOUR	49.6	68.8	48.2
20:00-21:00 HOUR	48.7	70.9	47.6
21:00-22:00 HOUR	47.1	65.8	45.9
22:00-23:00 HOUR	43.8	64.6	42.9
23:00-00:00 HOUR	45.8	63.4	44.5
00:00-01:00 HOUR	46.5	65.6	45.1
01:00-02:00 HOUR	43.9	63.3	43.0
02:00-03:00 HOUR	46.5	62.8	45.6
03:00-04:00 HOUR	45.5	66.4	44.4
04:00-05:00 HOUR	46.0	66.5	44.7
05:00-06:00 HOUR	48.1	68.3	47.0
06:00-07:00 HOUR	53.7	73.7	52.7
$L_{Aeq\ 24\ hours}$	51.6		
L_{Adn}	55.5		

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United Analyst and Engineering Consultant Co., Ltd.
3 Soi Udomsuk 41, Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260
Tel.0 2763 2828 Fax 0 2763 2800 www.uaeconsultant.com E-mail: uae@uaeconsultant.com

TIME*	RESULT dB(A) บ้านอ่าวฉุตม JUNE 28-29, 2023 T23AM584-0020		
	$L_{Aeq\ 1\ hour}$	$L_{Amax\ 1\ hour}$	$L_{A90\ 1\ hour}$
07:00-08:00 HOUR	51.5	69.5	50.0
08:00-09:00 HOUR	54.5	72.0	53.2
09:00-10:00 HOUR	52.6	74.5	51.5
10:00-11:00 HOUR	53.6	70.3	52.5
11:00-12:00 HOUR	51.6	71.6	50.5
12:00-13:00 HOUR	54.4	75.1	53.3
13:00-14:00 HOUR	52.3	69.9	50.7
14:00-15:00 HOUR	51.7	73.1	50.6
15:00-16:00 HOUR	52.5	69.1	50.9
16:00-17:00 HOUR	53.7	71.4	52.6
17:00-18:00 HOUR	55.8	76.6	54.4
18:00-19:00 HOUR	54.5	75.7	53.0
19:00-20:00 HOUR	48.0	66.5	46.9
20:00-21:00 HOUR	47.4	67.5	46.0
21:00-22:00 HOUR	48.9	67.9	47.9
22:00-23:00 HOUR	45.1	66.4	44.2
23:00-00:00 HOUR	43.7	63.8	42.4
00:00-01:00 HOUR	46.3	68.2	45.0
01:00-02:00 HOUR	44.6	64.4	43.1
02:00-03:00 HOUR	45.4	64.1	44.4
03:00-04:00 HOUR	44.5	64.5	42.9
04:00-05:00 HOUR	45.4	66.0	44.4
05:00-06:00 HOUR	47.1	67.0	45.9
06:00-07:00 HOUR	55.5	73.1	54.6
$L_{Aeq\ 24\ hours}$	51.6		
L_{Adn}	55.8		

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United Analyst and Engineering Consultant Co., Ltd.
3 Soi Udomsuk 41, Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260
Tel.0 2763 2828 Fax 0 2763 2800 www.uaeconsultant.com E-mail: uae@uaeconsultant.com

TIME*	RESULT dB(A)		
	บ้านอ่าวอุดม		
	JUNE 29-30, 2023		
	T23AM584-0021		
	$L_{Aeq\ 1\ hour}$	$L_{Amax\ 1\ hour}$	$L_{A90\ 1\ hour}$
07:00-08:00 HOUR	53.9	72.0	52.5
08:00-09:00 HOUR	55.8	73.1	54.6
09:00-10:00 HOUR	54.8	75.4	53.5
10:00-11:00 HOUR	54.1	71.8	53.1
11:00-12:00 HOUR	54.5	76.9	53.3
12:00-13:00 HOUR	54.8	72.3	53.5
13:00-14:00 HOUR	53.2	75.1	52.2
14:00-15:00 HOUR	52.3	71.0	51.3
15:00-16:00 HOUR	55.5	75.0	54.5
16:00-17:00 HOUR	55.7	72.7	54.2
17:00-18:00 HOUR	53.4	70.5	52.4
18:00-19:00 HOUR	53.6	71.6	52.2
19:00-20:00 HOUR	46.3	64.4	44.7
20:00-21:00 HOUR	49.8	71.0	48.2
21:00-22:00 HOUR	48.5	67.1	47.3
22:00-23:00 HOUR	46.5	66.3	45.6
23:00-00:00 HOUR	46.0	68.3	44.6
00:00-01:00 HOUR	45.0	65.3	43.7
01:00-02:00 HOUR	47.3	64.1	46.0
02:00-03:00 HOUR	47.1	65.4	45.8
03:00-04:00 HOUR	44.7	61.6	43.2
04:00-05:00 HOUR	45.8	64.4	44.2
05:00-06:00 HOUR	49.1	69.3	47.7
06:00-07:00 HOUR	54.1	71.4	52.9
$L_{Aeq\ 24\ hours}$	52.4		
L_{Adn}	56.1		

(MR SILA BANJONGJAIRUK)
LABORATORY SUPERVISOR

JULY 7, 2023

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- End of Analysis Report -

ภาคผนวก ก-4

ผลการติดตามตรวจสอบ
คุณภาพน้ำทิ้งที่ปล่อยออกจากพื้นที่โครงการ



3.4 Waste Water Quality

Waste Water Effluent

Sampling Date : 10 January 2023 11:05 AM

Parameter	Unit	Effluent	Standard Values [1]	Method of Analysis
1. Temperature	°C	29.4	40 °C	Based on APHA (2017), 2550 B
2. pH		8.40	5.5 - 9.0	Based on APHA (2017), 4500-H (B)
3. Conductivity	µS/cm	1,389	-	Based on APHA (2017), 2510 B
4. Total Dissolved Solids (TDS)	mg/l	848	Not more than 3,000	Based on APHA (2017), 2540 C
5. Suspended Solids (SS)	mg/l	<5	Not more than 50	Based on APHA (2017), 2540 D
6. Sulfide as H_2S	mg/l	<0.5	Not more than 1.0	Based on APHA (2017), 4500-S2(C), (F)
7. Cyanide as HCN	mg/l	0.009	Not more than 0.2	Based on APHA (2017), 4500-CN(C), (E)
8. Formaldehyde	mg/l	<0.1	Not more than 1.0	Based on Wastewater Analysis
9. Phenols	mg/l	Not detected	Not more than 1.0	Based on APHA (2017), 5530 D
10. Biochemical Oxygen Demand (BOD)	mg/l	<2	Not more than 20	Based on APHA (2017), 5210 B
11. Total Kjedahl Nitrogen (TKN)	mg/l	4.10	Not more than 100	Based on APHA (2017), 4500-Norg (D)
12. Chemical Oxygen Demand (COD)	mg/l	26.0	Not more than 120	Based on APHA (2017), 5220 D
13. Fat , Oil and Grease (F-O-G)	mg/l	<3	Not more than 5.0	Based on APHA (2017), 5520 B
14. Total Phosphate (as PO_4^{3-})	mg/l	0.242	-	Based on APHA (2017), 4500-P€
15. Free Residual Chlorine	mg/l	0.1	Not more than 1.0	Based on APHA (2017), 4500-Cl(F)
16. Heavy Metal				
1. Chromium Hexavalent (Cr^{6+})	mg/l	Not detected	Not more than 0.25	Based on APHA (2017), 3500-Cr (B)
2. Chromium trivalent (Cr^{3+})	mg/l	<0.01	Not more than 0.75	Based on APHA (2017), Calculated
3. Zinc (Zn)	mg/l	0.005	Not more than 5.0	Based on APHA (2017), 3125
4. Copper (Cu)	mg/l	0.006	Not more than 2.0	Based on APHA (2017), 3125
5. Cadmium (Cd)	mg/l	Not detected	Not more than 0.03	Based on APHA (2017), 3125
6. Barium (Ba)	mg/l	0.20	Not more than 1.0	Based on APHA (2017), 3125
7. Lead (Pb)	mg/l	Not detected	Not more than 0.2	Based on APHA (2017), 3125
8. Nickel (Ni)	mg/l	0.004	Not more than 1.0	Based on APHA (2017), 3125
9. Manganese (Mn)	mg/l	0.030	Not more than 5.0	Based on APHA (2017), 3125
10. Arsenic (As)	mg/l	0.004	Not more than 0.25	Based on APHA (2017), 3125
11. Selenium (Se)	mg/l	0.0005	Not more than 0.02	Based on APHA (2017), 3125
12. Mercury (Hg)	mg/l	Not detected	Not more than 0.005	Based on US EPA, Method 1631 Rev.E

Remarks:
1. Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
2. The above results are valid only for the analyzed/tested sample(s) as indicated in this report.

Neutralizing Pit

Sampling Date : 10:55 AM 10:45 AM 10 January 2023

Parameter	Unit	Neutralizing Pit	Oily Waste	Standard Values [1]	Method of Analysis
1. Appearance	-	Clear	Clear	-	Observation method
2. pH	-	3.4	8.3	5.5 - 9.0	Based on APHA (2017), 4500-H (B)
3. Total Dissolved Solids (TDS)	mg/l	2,840	1,200	Not more than 3,000	Based on APHA (2017), 2540 C
4. Biochemical Oxygen Demand (BOD)	mg/l	<2	<2	Not more than 20	Based on APHA (2017), 2540 D
5. Chemical Oxygen Demand (COD)	mg/l	8	40	Not more than 120	Based on APHA (2017), 5220 D
6. Fat, Oil and Grease (F-O-G)	mg/l	<3	<3	Not more than 5.0	Based on APHA (2017), 5210 B

Remarks: 1. Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

2. The above results are valid only for the analyzed/tested sample(s) as indicated in this report.

3. The pH of neutralized pit sample was lower than standard valve of 5.5. It was again neutralized by caustic soda addition in night shift same day and later pH resulting 7.99 at 11:40 PM.

3.4 Waste Water Quality

Waste Water Effluent

Sampling Date : 14 February 2023 10:05 AM

Parameter	Unit	Effluent	Standard Values [1]	Method of Analysis
1. Temperature	°C	30.6	40 °C	Based on APHA (2017), 2550 B
2. pH		8.50	5.5 - 9.0	Based on APHA (2017), 4500-H (B)
3. Conductivity	µS/cm	1,490	-	Based on APHA (2017), 2510 B
4. Total Dissolved Solids (TDS)	mg/l	908	Not more than 3,000	Based on APHA (2017), 2540 C
5. Suspended Solids (SS)	mg/l	<5	Not more than 50	Based on APHA (2017), 2540 D
6. Sulfide as H_2S	mg/l	<0.5	Not more than 1.0	Based on APHA (2017), 4500-S2(C), (F)
7. Cyanide as HCN	mg/l	Not detected	Not more than 0.2	Based on APHA (2017), 4500-CN(C), (E)
8. Formaldehyde	mg/l	<0.1	Not more than 1.0	Based on Wastewater Analysis
9. Phenols	mg/l	Not detected	Not more than 1.0	Based on APHA (2017), 5530 D
10. Biochemical Oxygen Demand (BOD)	mg/l	<2	Not more than 20	Based on APHA (2017), 5210 B
11. Total Kjedahl Nitrogen (TKN)	mg/l	3.70	Not more than 100	Based on APHA (2017), 4500-Norg (D)
12. Chemical Oxygen Demand (COD)	mg/l	37.0	Not more than 120	Based on APHA (2017), 5220 D
13. Fat , Oil and Grease (F-O-G)	mg/l	<3	Not more than 5.0	Based on APHA (2017), 5520 B
14. Total Phosphate (as PO_4^{3-})	mg/l	0.156	-	Based on APHA (2017), 4500-P€
15. Free Residual Chlorine	mg/l	<0.1	Not more than 1.0	Based on APHA (2017), 4500-Cl(F)
16. Heavy Metal				
1. Chromium Hexavalent (Cr^{6+})	mg/l	Not detected	Not more than 0.25	Based on APHA (2017), 3500-Cr (B)
2. Chromium trivalent (Cr^{3+})	mg/l	<0.01	Not more than 0.75	Based on APHA (2017), Calculated
3. Zinc (Zn)	mg/l	0.005	Not more than 5.0	Based on APHA (2017), 3125
4. Copper (Cu)	mg/l	0.007	Not more than 2.0	Based on APHA (2017), 3125
5. Cadmium (Cd)	mg/l	Not detected	Not more than 0.03	Based on APHA (2017), 3125
6. Barium (Ba)	mg/l	0.17	Not more than 1.0	Based on APHA (2017), 3125
7. Lead (Pb)	mg/l	Not detected	Not more than 0.2	Based on APHA (2017), 3125
8. Nickel (Ni)	mg/l	0.003	Not more than 1.0	Based on APHA (2017), 3125
9. Manganese (Mn)	mg/l	0.010	Not more than 5.0	Based on APHA (2017), 3125
10. Arsenic (As)	mg/l	0.004	Not more than 0.25	Based on APHA (2017), 3125
11. Selenium (Se)	mg/l	0.0006	Not more than 0.02	Based on APHA (2017), 3125
12. Mercury (Hg)	mg/l	Not detected	Not more than 0.005	Based on US EPA, Method 1631 Rev.E

Remarks:
1. Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
2. The above results are valid only for the analyzed/tested sample(s) as indicated in this report.

Neutralizing Pit

Sampling Date : 10:00 AM 14 February 2023

Parameter	Unit	Neutralizing Pit	Oily Waste	Standard Values [1]	Method of Analysis
1. Appearance	-	-	Clear	-	Observation method
2. pH	-	-	8.4	5.5 - 9.0	Based on APHA (2017), 4500-H (B)
3. Total Dissolved Solids (TDS)	mg/l	-	1,210	Not more than 3,000	Based on APHA (2017), 2540 C
4. Biochemical Oxygen Demand (BOD)	mg/l	-	<2	Not more than 20	Based on APHA (2017), 2540 D
5. Chemical Oxygen Demand (COD)	mg/l	-	50	Not more than 120	Based on APHA (2017), 5220 D
6. Fat, Oil and Grease (F-O-G)	mg/l	-	3	Not more than 5.0	Based on APHA (2017), 5210 B

Remarks: 1. Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

2. The above results are valid only for the analyzed/tested sample(s) as indicated in this report.

3. Neutralized pit was skipped because of no sample.

3.4 Waste Water Quality

Waste Water Effluent

Sampling Date : 14 March 2023 9:40 AM (reserved shutdown)

Parameter	Unit	Effluent	Standard Values [1]	Method of Analysis
1. Temperature	$^{\circ}$C	-	40 $^{\circ}$C	Based on APHA (2017), 2550 B
2. pH		-	5.5 - 9.0	Based on APHA (2017), 4500-H (B)
3. Conductivity	µS/cm	-	-	Based on APHA (2017), 2510 B
4. Total Dissolved Solids (TDS)	mg/l	-	Not more than 3,000	Based on APHA (2017), 2540 C
5. Suspended Solids (SS)	mg/l	-	Not more than 50	Based on APHA (2017), 2540 D
6. Sulfide as H_2S	mg/l	-	Not more than 1.0	Based on APHA (2017), 4500-S2(C), (F)
7. Cyanide as HCN	mg/l	-	Not more than 0.2	Based on APHA (2017), 4500-CN(C), (E)
8. Formaldehyde	mg/l	-	Not more than 1.0	Based on Wastewater Analysis
9. Phenols	mg/l	-	Not more than 1.0	Based on APHA (2017), 5530 D
10. Biochemical Oxygen Demand (BOD)	mg/l	-	Not more than 20	Based on APHA (2017), 5210 B
11. Total Kjedahl Nitrogen (TKN)	mg/l	-	Not more than 100	Based on APHA (2017), 4500-Norg (D)
12. Chemical Oxygen Demand (COD)	mg/l	-	Not more than 120	Based on APHA (2017), 5220 D
13. Fat , Oil and Grease (F-O-G)	mg/l	-	Not more than 5.0	Based on APHA (2017), 5520 B
14. Total Phosphate (as PO_4^{3-})	mg/l	-	-	Based on APHA (2017), 4500-P€
15. Free Residual Chlorine	mg/l	-	Not more than 1.0	Based on APHA (2017), 4500-Cl(F)
16. Heavy Metal		-		
1. Chromium Hexavalent (Cr^{6+})	mg/l	-	Not more than 0.25	Based on APHA (2017), 3500-Cr (B)
2. Chromium trivalent (Cr^{3+})	mg/l	-	Not more than 0.75	Based on APHA (2017), Calculated
3. Zinc (Zn)	mg/l	-	Not more than 5.0	Based on APHA (2017), 3125
4. Copper (Cu)	mg/l	-	Not more than 2.0	Based on APHA (2017), 3125
5. Cadmium (Cd)	mg/l	-	Not more than 0.03	Based on APHA (2017), 3125
6. Barium (Ba)	mg/l	-	Not more than 1.0	Based on APHA (2017), 3125
7. Lead (Pb)	mg/l	-	Not more than 0.2	Based on APHA (2017), 3125
8. Nickel (Ni)	mg/l	-	Not more than 1.0	Based on APHA (2017), 3125
9. Manganese (Mn)	mg/l	-	Not more than 5.0	Based on APHA (2017), 3125
10. Arsenic (As)	mg/l	-	Not more than 0.25	Based on APHA (2017), 3125
11. Selenium (Se)	mg/l	-	Not more than 0.02	Based on APHA (2017), 3125
12. Mercury (Hg)	mg/l	-	Not more than 0.005	Based on US EPA, Method 1631 Rev.E

Remarks: 1. Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

2. The above results are valid only for the analyzed/tested sample(s) as indicated in this report.

Neutralizing Pit

Sampling Date : 10:00 AM 14 March 2023

Parameter	Unit	Neutralizing Pit	Oily Waste	Standard Values [1]	Method of Analysis
1. Appearance	-	-	Clear	-	Observation method
2. pH	-	-	6.9	5.5 - 9.0	Based on APHA (2017), 4500-H (B)
3. Total Dissolved Solids (TDS)	mg/l	-	226	Not more than 3,000	Based on APHA (2017), 2540 C
4. Biochemical Oxygen Demand (BOD)	mg/l	-	4.1	Not more than 20	Based on APHA (2017), 2540 D
5. Chemical Oxygen Demand (COD)	mg/l	-	43	Not more than 120	Based on APHA (2017), 5220 D
6. Fat, Oil and Grease (F-O-G)	mg/l	-	3	Not more than 5.0	Based on APHA (2017), 5210 B

Remarks:

1. Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
2. The above results are valid only for the analyzed/tested sample(s) as indicated in this report.
3. Neutralized pit was skipped because of no sample.

United Analyst and Engineering Consultant Co., Ltd.
3 Soi Udomsuk 41, Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260
Tel.0 2763 2828 Fax 0 2763 2800 www.uaeconsultant.com E-mail: uae@uaeconsultant.com

TESTING
No.0063

ANALYSIS REPORT

CUSTOMER NAME : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
ADDRESS : 555/2 ENERGY COMPLEX BUILDING B, 14 TH FLOOR, VIBHVADI-RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 3840 7407 #7446 e-mail : chawanrat.t@gpscgroup.com
SAMPLING SOURCE : -
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : APRIL 5, 2023
SAMPLING TIME : 13:45 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR THANADET WANSANOR
ANALYZED BY : MISS NATACHA WAENNAIMUANG

RECEIVED DATE : APRIL 7, 2023
ANALYTICAL DATE : APRIL 7-18, 2023
REPORT NO. : 2023-U029576
WORK NO. : 2023-002132
ANALYSIS NO. : T23AG244-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			COOLING EFFLUENT T23AG244-0002	
pH [c]	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H^+ B)	8.4 (30°C)	-
ELECTRICAL CONDUCTIVITY [c]	µmhos/cm	ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B)	1,019 (30°C)	0.1
BIOCHEMICAL OXYGEN DEMAND [c]	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	ND	2.0
CHEMICAL OXYGEN DEMAND [c]	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: PART 5220 D)	ND	25.0
TOTAL SUSPENDED SOLIDS [c]	mg/L	TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	ND	5.0
TOTAL DISSOLVED SOLIDS [b]	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	584	25
SAMPLE CONDITION				
WATER'S COLOUR/TURBID			YELLOW/CLEAR	
SEDIMENT			YELLOW	

[a] : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)
[b] : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)
[c] : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23 rd EDITION, 2017.
ND : NON-DETECTABLE.

Piyapat S.
(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

MAY 8, 2023

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United Analyst and Engineering Consultant Co., Ltd.
3 Soi Udomsuk 41, Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260
Tel.0 2763 2828 Fax 0 2763 2800 www.uaeconsultant.com E-mail: uae@uaeconsultant.com

TESTING
No.0063

ANALYSIS REPORT

CUSTOMER NAME : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
ADDRESS : 555/2 ENERGY COMPLEX BUILDING B, 14 TH FLOOR, VIBHVADI-RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 3840 7407 #7446 e-mail : chawanrat.t@gpscgroup.com
SAMPLING SOURCE : -
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : APRIL 5, 2023
SAMPLING TIME : 13:45 HOUR
SAMPLING METHOD [c] : GRAB
SAMPLING BY [c] : MR THANADET WANSANOR
ANALYZED BY : MISS NATACHA WAENNAIMUANG

RECEIVED DATE : APRIL 7, 2023
ANALYTICAL DATE : APRIL 7-21, 2023
REPORT NO. : 2023-U029575
WORK NO. : 2023-002132
ANALYSIS NO. : T23AG244-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			COOLING EFFLUENT T23AG244-0001	
TEMPERATURE [c]	°C	THERMOMETER AT SITE (SM: PART 2550 B)	30	-
ELECTRICAL CONDUCTIVITY [c]	µmhos/cm	ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B)	1,019 (30°C)	0.1
TOTAL PHOSPHATE [c]	mg/L PO_4^{3-}	PERSULPHATE DIGESTION AND ASCORBIC ACID METHOD (SM: PART 4500-P B AND PART 4500-P E)	0.89	0.03
TOTAL KJELDAHL NITROGEN [b]	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	< LOQ	1.5
FAT, OIL AND GREASE [c]	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	3
SAMPLE CONDITION				
WATER'S COLOUR/TURBID			YELLOW/CLEAR	
SEDIMENT			YELLOW	

[a] : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)
[b] : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)
[c] : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23 rdEDITION, 2017.
SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23 rdEDITION, 2017.
ND : NON-DETECTABLE.
< LOQ : < LIMIT OF QUANTITATION (TOTAL KJELDAHL NITROGEN ≥ 1.5 AND < 5.0 mg/L).

Piyapat S.
(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

MAY 8, 2023

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United Analyst and Engineering Consultant Co., Ltd.
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Tel.0 2763 2828 Fax 0 2763 2800 www.uaeconsultant.com E-mail: uae@uaeconsultant.com

TESTING
No.0063

ANALYSIS REPORT

CUSTOMER NAME : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
ADDRESS : 555/2 ENERGY COMPLEX BUILDING B, 14 TH FLOOR, VIBHVADI-RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 3840 7407 #7446 e-mail : chawanrat.t@gpscgroup.com
SAMPLING SOURCE : -
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : MAY 3, 2023
SAMPLING TIME : 14:30 HOUR
SAMPLING METHOD [c] : GRAB
SAMPLING BY [c] : MR THANADET WANSANOR
ANALYZED BY : MISS ARIYA THARAROM

RECEIVED DATE : MAY 3, 2023
ANALYTICAL DATE : MAY 3-15, 2023
REPORT NO. : 2023-U036973
WORK NO. : 2023-002132
ANALYSIS NO. : T23AH853-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			COOLING EFFLUENT T23AH853-0001	
pH [c]	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H' B)	7.9 (28°C)	-
ELECTRICAL CONDUCTIVITY [c]	µmhos/cm	ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B)	824 (28°C)	0.1
BIOCHEMICAL OXYGEN DEMAND [c]	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	ND	2.0
CHEMICAL OXYGEN DEMAND [c]	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: PART 5220 D)	ND	25.0
TOTAL SUSPENDED SOLIDS [c]	mg/L	TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	ND	5.0
TOTAL DISSOLVED SOLIDS [b]	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	502	25
SAMPLE CONDITION				
WATER'S COLOUR/TURBID			YELLOW/CLEAR	
SEDIMENT			YELLOW	

[a] : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)
[b] : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)
[c] : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23 rd EDITION, 2017.
ND : NON-DETECTABLE.

Piyapat S.
(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

MAY 19, 2023

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ANALYSIS REPORT

CUSTOMER NAME : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
ADDRESS : 555/2 ENERGY COMPLEX BUILDING B, 14 TH FLOOR, VIBHVADI-RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 3840 7407 #7446 e-mail : chawanrat.t@gpscgroup.com
SAMPLING SOURCE : -
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : MAY 3, 2023
SAMPLING TIME : 14:30 HOUR
SAMPLING METHOD [c] : GRAB
SAMPLING BY [c] : MR THANADET WANSANOR
ANALYZED BY : MISS NATACHA WAENNAIMUANG

RECEIVED DATE : MAY 3, 2023
ANALYTICAL DATE : MAY 3-16, 2023
REPORT NO. : 2023-U036974
WORK NO. : 2023-002132
ANALYSIS NO. : T23AH853-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			COOLING EFFLUENT T23AH853-0002	
TEMPERATURE [c]	°C	THERMOMETER AT SITE (SM: PART 2550 B)	28	-
ELECTRICAL CONDUCTIVITY [c]	µmhos/cm	ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B)	824 (28°C)	0.1
TOTAL PHOSPHATE [c]	mg/L PO_4^{3-}	PERSULPHATE DIGESTION AND ASCORBIC ACID METHOD (SM: PART 4500-P B AND PART 4500-P E)	0.86	0.03
TOTAL KJELDAHL NITROGEN [b]	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	< LOQ	1.5
FAT, OIL AND GREASE [c]	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	3
SAMPLE CONDITION				
WATER'S COLOUR/TURBID			YELLOW/CLEAR	
SEDIMENT			YELLOW	

[a] : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)
[b] : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)
[c] : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23 rdEDITION, 2017.
SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23 rdEDITION, 2017.
ND : NON-DETECTABLE.
< LOQ : < LIMIT OF QUANTITATION (TOTAL KJELDAHL NITROGEN ≥ 1.5 AND < 5.0 mg/L).

Piyapat S.
(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

MAY 19, 2023

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CUSTOMER NAME : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
ADDRESS : 555/2 ENERGY COMPLEX BUILDING B, 14 TH FLOOR, VIBHVADI-RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 3840 7407 #7446 e-mail : chawanrat.t@gpscgroup.com
SAMPLING SOURCE : -

SAMPLE TYPE	: EFFLUENT	**RECEIVED DATE**	: JUNE 7, 2023
SAMPLING DATE	: JUNE 7, 2023	**ANALYTICAL DATE**	: JUNE 7-16, 2023
SAMPLING TIME	: 14:00 HOUR	**REPORT NO.**	: 2023-U048579
SAMPLING METHOD [c]	: GRAB	**WORK NO.**	: 2023-002132
SAMPLING BY [c]	: MR THANADET WANSANOR	**ANALYSIS NO.**	: T23AK547-0001

ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			COOLING EFFLUENT T23AK547-0001	
pH [c]	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H+ B)	7.9 (29°C)	-
ELECTRICAL CONDUCTIVITY [c]	µmhos/cm	ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B)	524 (29°C)	0.1
BIOCHEMICAL OXYGEN DEMAND [c]	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	ND	2.0
CHEMICAL OXYGEN DEMAND [c]	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: PART 5220 D)	ND	25.0
TOTAL SUSPENDED SOLIDS [c]	mg/L	TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	ND	5.0
TOTAL DISSOLVED SOLIDS [b]	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	308	25
SAMPLE CONDITION				
WATER'S COLOUR/TURBID			YELLOW/CLEAR	
SEDIMENT			BROWN	

[a] : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)
[b] : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)
[c] : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23 rd EDITION, 2017.
ND : NON-DETECTABLE.

Benjawan V.
(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

JUNE 19, 2023

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CUSTOMER NAME : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
ADDRESS : 555/2 ENERGY COMPLEX BUILDING B, 14 TH FLOOR, VIBHVADI-RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 3840 7407 #7446 e-mail : chawanrat.t@gpscgroup.com
SAMPLING SOURCE : -

SAMPLE TYPE	: EFFLUENT	**RECEIVED DATE**	: JUNE 7, 2023
SAMPLING DATE	: JUNE 7, 2023	**ANALYTICAL DATE**	: JUNE 7-16, 2023
SAMPLING TIME	: 14:00 HOUR	**REPORT NO.**	: 2023-U048580
SAMPLING METHOD [c]	: GRAB	**WORK NO.**	: 2023-002132
SAMPLING BY [c]	: MR THANADET WANSANOR	**ANALYSIS NO.**	: T23AK547-0002
ANALYZED BY	: MISS NATACHA WAENNAIMUANG		

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			COOLING EFFLUENT T23AK547-0002	
TEMPERATURE [c]	°C	THERMOMETER AT SITE (SM: PART 2550 B)	29	-
ELECTRICAL CONDUCTIVITY [c]	µmhos/cm	ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B)	524 (29°C)	0.1
TOTAL PHOSPHATE [c]	mg/L PO_4^{3-}	PERSULPHATE DIGESTION AND ASCORBIC ACID METHOD (SM: PART 4500-P B AND PART 4500-P E)	0.31	0.03
TOTAL KJELDAHL NITROGEN [b]	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	< LOQ	1.5
FAT, OIL AND GREASE [c]	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	3
SAMPLE CONDITION				
WATER'S COLOUR/TURBID			COLOURLESS/CLEAR	
SEDIMENT			-	

[a] : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)
[b] : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)
[c] : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23 rdEDITION, 2017.
SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23 rdEDITION, 2017.
ND : NON-DETECTABLE.
< LOQ : < LIMIT OF QUANTITATION (TOTAL KJELDAHL NITROGEN ≥ 1.5 AND < 5.0 mg/L).

Benjawan V.
(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

JUNE 19, 2023

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United Analyst and Engineering Consultant Co., Ltd.
3 Soi Udomsuk 41, Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260
Tel.0 2763 2828 Fax 0 2763 2800 www.uaeconsultant.com E-mail: uae@uaeconsultant.com

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ANALYSIS REPORT

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ADDRESS : 555/2 ENERGY COMPLEX BUILDING B, 14 TH FLOOR, VIBHVADI-RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 08 5314 3115 e-mail : kingkarn.kh@gpscgroup.com
SAMPLING SOURCE : IN FRONT OF THAI OIL PUBLIC COMPANY LIMITED (42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSUKLA, SRIRACHA, CHONBURI 20230.)
SAMPLE TYPE : SEAWATER
SAMPLING DATE : APRIL 11, 2023
SAMPLING TIME : 13:30 HOUR
SAMPLING METHOD [c] : COMPOSITE
SAMPLING BY [c] : MR ANUSART SUAYDEE
ANALYZED BY : MISS KANNIKAR SUMLEETHA

RECEIVED DATE : APRIL 12, 2023
ANALYTICAL DATE : APRIL 12-25, 2023
REPORT NO. : 2023-U031103
WORK NO. : 2022-006185
ANALYSIS NO. : T23AG611-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			REFINERY OUTFALL T23AG611-0001	
pH [c]	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H' B)	8.1 (31°C)	-
TEMPERATURE [c]	°C	THERMOMETER AT SITE (SM: PART 2550 B)	31	-
DISSOLVED OXYGEN [c]	mg/L	MEMBRANE ELECTRODE METHOD AT SITE (SM: PART 4500-O G)	4.8	0.5
BIOCHEMICAL OXYGEN DEMAND [c]	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	1.4	0.5
TOTAL AMMONIA [b]	µg/L N	IN-HOUSE METHOD: UAE.TP.WAT.001 BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA&WEF, 23rd ED., 2017, PART 4500-NH_3 H	170	10.0
FAT, OIL AND GREASE [c]	mg/L	SOXHLET EXTRACTION METHOD (SM: PART 5520 D)	ND	3
SAMPLE CONDITION				
WATER'S COLOUR/TURBID			COLOURLESS/CLEAR	
SEDIMENT			YELLOW	

[a] : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)
[b] : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)
[c] : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23 rd EDITION, 2017.
ND : NON-DETECTABLE.

(MISS PAWEENA CHARASCHOTEPINIT)
LABORATORY SUPERVISOR

MAY 2, 2023

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Tel.0 2763 2828 Fax 0 2763 2800 www.uaeconsultant.com E-mail: uae@uaeconsultant.com

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ANALYSIS REPORT

CUSTOMER NAME : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
ADDRESS : 555/2 ENERGY COMPLEX BUILDING B, 14 TH FLOOR, VIBHVADI-RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 08 5314 3115 e-mail : kingkarn.kh@gpscgroup.com
SAMPLING SOURCE : IN FRONT OF THAI OIL PUBLIC COMPANY LIMITED (42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSUKLA, SRIRACHA, CHONBURI 20230.)
SAMPLE TYPE : SEAWATER
SAMPLING DATE : APRIL 11, 2023
SAMPLING TIME : 13:10 HOUR
SAMPLING METHOD [b] : COMPOSITE
SAMPLING BY [c] : MR ANUSART SUAYDEE
ANALYZED BY : MISS KANNIKAR SUMLEETHA

RECEIVED DATE : APRIL 12, 2023
ANALYTICAL DATE : APRIL 12-25, 2023
REPORT NO. : 2023-U031104
WORK NO. : 2022-006185
ANALYSIS NO. : T23AG611-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			JETTY # 3 T23AG611-0002	
pH [c]	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H+ B)	8.2 (31°C)	-
TEMPERATURE [c]	°C	THERMOMETER AT SITE (SM: PART 2550 B)	31	-
DISSOLVED OXYGEN [c]	mg/L	MEMBRANE ELECTRODE METHOD AT SITE (SM: PART 4500-O G)	5.0	0.5
BIOCHEMICAL OXYGEN DEMAND [c]	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	1.2	0.5
TOTAL AMMONIA [b]	µg/L N	IN-HOUSE METHOD: UAE.TP.WAT.001 BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA&WEF, 23rd ED., 2017, PART 4500-NH_3 H	187	10.0
FAT, OIL AND GREASE [c]	mg/L	SOXHLET EXTRACTION METHOD (SM: PART 5520 D)	ND	3
SAMPLE CONDITION				
WATER'S COLOUR/TURBID			COLOURLESS/CLEAR	
SEDIMENT			YELLOW	

[a] : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)
[b] : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)
[c] : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23 rd EDITION, 2017.
ND : NON-DETECTABLE.

(MISS PAWEENA CHARASCHOTEPINIT)
LABORATORY SUPERVISOR

MAY 2, 2023

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No.0063

ANALYSIS REPORT

CUSTOMER NAME : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
ADDRESS : 555/2 ENERGY COMPLEX BUILDING B, 14 TH FLOOR, VIBHVADI-RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 08 5314 3115 e-mail : kingkarn.kh@gpscgroup.com
SAMPLING SOURCE : IN FRONT OF THAI OIL PUBLIC COMPANY LIMITED (42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSUKLA, SRIRACHA, CHONBURI 20230.)
SAMPLE TYPE : SEAWATER
SAMPLING DATE : APRIL 11, 2023
SAMPLING TIME : 12:25 HOUR
SAMPLING METHOD [c] : COMPOSITE
SAMPLING BY [c] : MR ANUSART SUAYDEE
ANALYZED BY : MISS KANNIKAR SUMLEETHA

RECEIVED DATE : APRIL 12, 2023
ANALYTICAL DATE : APRIL 12-25, 2023
REPORT NO. : 2023-U031105
WORK NO. : 2022-006185
ANALYSIS NO. : T23AG611-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			CONVENTIONAL BUOY MOORING T23AG611-0003	
pH [c]	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H^+ B)	8.2 (31°C)	-
TEMPERATURE [c]	°C	THERMOMETER AT SITE (SM: PART 2550 B)	31	-
DISSOLVED OXYGEN [c]	mg/L	MEMBRANE ELECTRODE METHOD AT SITE (SM: PART 4500-O G)	5.2	0.5
BIOCHEMICAL OXYGEN DEMAND [c]	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	0.8	0.5
TOTAL AMMONIA [b]	µg/L N	IN-HOUSE METHOD: UAE.TP.WAT.001 BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA&WEF, 23rd ED., 2017, PART 4500-NH_3 H	187	10.0
FAT, OIL AND GREASE [c]	mg/L	SOXHLET EXTRACTION METHOD (SM: PART 5520 D)	ND	3
SAMPLE CONDITION				
WATER'S COLOUR/TURBID			COLOURLESS/CLEAR	
SEDIMENT			YELLOW	

[a] : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)
[b] : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)
[c] : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23 rd EDITION, 2017.
ND : NON-DETECTABLE.

(MISS PAWEENA CHARASCHOTEPINIT)
LABORATORY SUPERVISOR

MAY 2, 2023

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ANALYSIS REPORT

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ADDRESS : 555/2 ENERGY COMPLEX BUILDING B, 14 TH FLOOR, VIBHVADI-RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 08 5314 3115 e-mail : kingkarn.kh@gpscgroup.com
SAMPLING SOURCE : IN FRONT OF THAI OIL PUBLIC COMPANY LIMITED (42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSUKLA, SRIRACHA, CHONBURI 20230.)
SAMPLE TYPE : SEAWATER
SAMPLING DATE : APRIL 11, 2023
SAMPLING TIME : 11:55 HOUR
SAMPLING METHOD [c] : COMPOSITE
SAMPLING BY [c] : MR ANUSART SUAYDEE
ANALYZED BY : MISS KANNIKAR SUMLEETHA

RECEIVED DATE : APRIL 12, 2023
ANALYTICAL DATE : APRIL 12-25, 2023
REPORT NO. : 2023-U031106
WORK NO. : 2022-006185
ANALYSIS NO. : T23AG611-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			SINGLE BUOY MOORING 1 T23AG611-0004	
pH [c]	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H^+ B)	8.2 (30°C)	-
TEMPERATURE [c]	°C	THERMOMETER AT SITE (SM: PART 2550 B)	30	-
DISSOLVED OXYGEN [c]	mg/L	MEMBRANE ELECTRODE METHOD AT SITE (SM: PART 4500-O G)	5.2	0.5
BIOCHEMICAL OXYGEN DEMAND [c]	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	0.7	0.5
TOTAL AMMONIA [b]	µg/L N	IN-HOUSE METHOD: UAE.TP.WAT.001 BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA&WEF, 23rd ED., 2017, PART 4500-NH_3 H	161	10.0
FAT, OIL AND GREASE [c]	mg/L	SOXHLET EXTRACTION METHOD (SM: PART 5520 D)	ND	3
SAMPLE CONDITION				
WATER'S COLOUR/TURBID			COLOURLESS/CLEAR	
SEDIMENT			YELLOW	

[a] : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)
[b] : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)
[c] : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23 rd EDITION, 2017.
ND : NON-DETECTABLE.

(MISS PAWEENA CHARASCHOTEPINIT)
LABORATORY SUPERVISOR

MAY 2, 2023

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3 Soi Udomsuk 41, Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260
Tel.0 2763 2828 Fax 0 2763 2800 www.uaeconsultant.com E-mail: uae@uaeconsultant.com

ANALYSIS REPORT

CUSTOMER NAME : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
ADDRESS : 42/3 MOO 1, SUKHUMVIT ROAD KM. 124 THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 09 6713 9936 e-mail : angsana.t@gpscgroup.com
MEASURING PLACE : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
MEASURING TYPE : WORKPLACE (NOISE)
MEASURING DATE : MARCH 23, 2023
MEASURING TIME : *
MEASURING EQUIPMENT : INTEGRATED SOUND LEVEL METER
MEASURED BY : MISS PATJIRA KADEEPISAN

RECEIVED DATE : MARCH 23, 2023
ANALYTICAL DATE : MARCH 23, 2023
REPORT NO. : 2023-U024232
WORK NO. : 2022-006185
ANALYSIS NO. : T23AF476-0001 - T23AF476-0024

ANALYSIS NO.	MEASURING SITE	TIME* (HOUR)	RESULT (dB(A))	
			$L_{Aeq\ 5\ min}$	$L_{Amax\ 5\ min}$
T23AF476-0001	BFP CT2	09:15-09:20	67.9	71.4
T23AF476-0002	STEAM LINE HRSG 2	09:17-09:22	74.4	75.3
T23AF476-0003	CT2 ENCLOSURE 1	09:19-09:24	81.7	82.2
T23AF476-0004	BLOW DOWN TANK CT2	09:25-09:30	69.7	72.9
T23AF476-0005	CT2 ENCLOSURE 2	09:27-09:32	73.5	75.2
T23AF476-0006	AIR INLET CT2	09:29-09:34	77.5	79.1
T23AF476-0007	CT2 TRANSFORMER	09:35-09:40	68.8	69.9
T23AF476-0008	CT2 GENERATOR	09:37-09:42	78.6	79.3
T23AF476-0009	MECHANICAL PACKAGE 2	09:39-09:44	76.8	77.1
T23AF476-0010	BFP CT1	09:45-09:50	68.5	69.0
T23AF476-0011	STEAM LINE HRSG 1	09:47-09:52	75.8	76.5
T23AF476-0012	CT1 ENCLOSURE 1	09:49-09:54	82.2	82.8
T23AF476-0013	BLOW DOWN TANK CT1	09:56-10:01	72.7	73.6
T23AF476-0014	CT1 ENCLOSURE 2	09:58-10:03	73.6	74.1
T23AF476-0015	AIR INLET CT1	10:00-10:05	76.9	77.4
T23AF476-0016	CT1 TRANSFORMER	10:06-10:11	70.0	73.8
T23AF476-0017	CT1 GENERATOR	10:08-10:13	79.4	79.7
T23AF476-0018	MECHANICAL PACKAGE 1	10:10-10:15	76.8	77.2
T23AF476-0019	ST TRANSFORMER	10:16-10:21	66.1	67.7
T23AF476-0020	ST GENERATOR	10:18-10:23	73.9	74.3
T23AF476-0021	CONDENSER	10:20-10:25	71.9	74.5
T23AF476-0022	ST LUBE OIL COOLER	10:26-10:31	70.9	71.3
T23AF476-0023	AUXILIATY CW PUMP	10:28-10:33	70.2	71.5
T23AF476-0024	CIRCULATING PUMP	10:30-10:35	70.3	72.4

Nattawat.

(MR NATTAWAT DANGSAWAT)
LABORATORY SUPERVISOR

APRIL 3, 2023

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CONTACT INFORMATION : TEL : 09 6713 9936 e-mail : angsana.t@gpscgroup.com
MEASURING PLACE : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
MEASURING TYPE : WORKPLACE (NOISE)
MEASURING DATE : MAY 5, 2023
MEASURING TIME : *
MEASURING EQUIPMENT : INTEGRATED SOUND LEVEL METER
MEASURED BY : MR KHWANCHAI PHONTHUK

RECEIVED DATE : MAY 5, 2023
ANALYTICAL DATE : MAY 5, 2023
REPORT NO. : 2023-U035503
WORK NO. : 2022-006185
ANALYSIS NO. : T23AI319-0001 - T23AI319-0024

ANALYSIS NO.	MEASURING SITE	TIME* (HOUR)	RESULT (dB(A))	
			$L_{Aeq\ 5\ min}$	$L_{Amax\ 5\ min}$
T23AI319-0001	BFP CT2	08:10-08:15	66.1	69.8
T23AI319-0002	STEAM LINE HRSG 2	08:12-08:17	73.7	74.7
T23AI319-0003	CT2 ENCLOSURE 1	08:14-08:19	81.1	81.6
T23AI319-0004	BLOW DOWN TANK CT2	08:20-08:25	70.4	71.4
T23AI319-0005	CT2 ENCLOSURE 2	08:22-08:27	71.6	76.1
T23AI319-0006	AIR INLET CT2	08:24-08:29	74.6	78.9
T23AI319-0007	CT2 TRANSFORMER	08:30-08:35	66.9	68.0
T23AI319-0008	CT2 GENERATOR	08:32-08:37	77.1	77.4
T23AI319-0009	MECHANICAL PACKAGE 2	08:34-08:39	76.4	77.2
T23AI319-0010	BFP CT1	08:40-08:45	67.7	68.4
T23AI319-0011	STEAM LINE HRSG 1	08:42-08:47	74.7	76.1
T23AI319-0012	CT1 ENCLOSURE 1	08:44-08:49	81.9	82.3
T23AI319-0013	BLOW DOWN TANK CT1	08:50-08:55	71.5	72.1
T23AI319-0014	CT1 ENCLOSURE 2	08:52-08:57	72.9	74.1
T23AI319-0015	AIR INLET CT1	08:54-08:59	76.7	77.5
T23AI319-0016	CT1 TRANSFORMER	09:00-09:05	69.5	71.8
T23AI319-0017	CT1 GENERATOR	09:02-09:07	77.7	78.1
T23AI319-0018	MECHANICAL PACKAGE 1	09:04-09:09	76.0	76.4
T23AI319-0019	ST TRANSFORMER	09:10-09:15	66.0	66.5
T23AI319-0020	ST GENERATOR	09:12-09:17	73.5	75.1
T23AI319-0021	CONDENSER	09:14-09:19	72.0	74.9
T23AI319-0022	ST LUBE OIL COOLER	09:20-09:25	70.4	71.1
T23AI319-0023	AUXILIATY CW PUMP	09:22-09:27	70.0	70.9
T23AI319-0024	CIRCULATING PUMP	09:24-09:29	69.1	71.3

Nattawat.
(MR NATTAWAT DANGSAWAT)
LABORATORY SUPERVISOR

MAY 12, 2023

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Tel.0 2763 2828 Fax 0 2763 2800 www.uaeconsultant.com E-mail: uae@uaeconsultant.com

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CONTACT INFORMATION : TEL : 09 6713 9936 e-mail : angsana.t@gpscgroup.com
MEASURING PLACE : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
MEASURING TYPE : WORKPLACE (NOISE)
MEASURING DATE : MARCH 23, 2023
MEASURING TIME : *
MEASURING EQUIPMENT : INTEGRATED SOUND LEVEL METER
MEASURED BY : MISS PATJIRA KADEEPISAN
RECEIVED DATE : MARCH 23, 2023
ANALYTICAL DATE : MARCH 23, 2023
REPORT NO. : 2023-U024234
WORK NO. : 2022-006185
ANALYSIS NO. : T23AF477-0001

ANALYSIS NO.	MEASURING SITE	TIME* (HOUR)	RESULT (dB(A))	
			$L_{Aeq\ 8\ hours}$	$L_{Amax\ 8\ hours}$
T23AF477-0001	บริเวณหน่วยผลิต	08:21-16:21	64.5	75.9

Nattawat.

(MR NATTAWAT DANGSAWAT)
LABORATORY SUPERVISOR

APRIL 3, 2023

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CONTACT INFORMATION : TEL : 09 6713 9936 e-mail : angsana.t@gpscgroup.com
MEASURING PLACE : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
MEASURING TYPE : WORKPLACE (NOISE)
MEASURING DATE : MARCH 23, 2023
MEASURING TIME : *
MEASURING EQUIPMENT : INTEGRATED SOUND LEVEL METER
MEASURED BY : MISS PATJIRA KADEEPISAN
RECEIVED DATE : MARCH 23, 2023
ANALYTICAL DATE : MARCH 23, 2023
REPORT NO. : 2023-U024236
WORK NO. : 2022-006185
ANALYSIS NO. : T23AF478-0001

ANALYSIS NO.	MEASURING SITE	TIME* (HOUR)	RESULT (dB(A))	
			$L_{Aeq\ 12\ hours}$	$L_{Amax\ 12\ hours}$
T23AF478-0001	บริเวณหน่วยผลิต	08:21-20:21	64.4	75.9

Nattawat.

(MR NATTAWAT DANGSAWAT)
LABORATORY SUPERVISOR

APRIL 3, 2023

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Tel.0 2763 2828 Fax 0 2763 2800 www.uaeconsultant.com E-mail: uae@uaeconsultant.com

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CONTACT INFORMATION : TEL : 09 6713 9936 e-mail : angsana.t@gpscgroup.com
MEASURING PLACE : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
MEASURING TYPE : WORKPLACE (NOISE DOSE)
MEASURING DATE : MARCH 23, 2023
MEASURING TIME : *
MEASURING EQUIPMENT : NOISE DOSE METER
MEASURED BY : MISS PATJIRA KADEEPISAN
RECEIVED DATE : MARCH 23, 2023
ANALYTICAL DATE : MARCH 23, 2023
REPORT NO. : 2023-U024239
WORK NO. : 2022-006185
ANALYSIS NO. : T23AF480-0001 - T23AF480-0002

ANALYSIS NO.	MEASURING SITE	TIME* (HOUR)	RESULT			
			$LAVG_{12\ HOUR}$ (dB(A))	$TWA_{8\ HOUR}$ (dB(A))	L_{Amax} (dB(A))	DOSE (%)
T23AF480-0001	บริเวณ F1 ช่วงเช้า (คุณพลวัต เกตุพุฒ)	07:03-19:03	74.2	75.8	102	12.1
T23AF480-0002	บริเวณ F2 ช่วงเช้า (คุณจาตุรนต์ ใจทาญ)	07:06-19:06	72.1	71.0	106	3.99

Nattawat.

(MR NATTAWAT DANGSAWAT)
LABORATORY SUPERVISOR

APRIL 3, 2023

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ANALYSIS REPORT

CUSTOMER NAME : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
ADDRESS : 42/3 MOO 1, SUKHUMVIT ROAD KM. 124 THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 09 6713 9936 e-mail : angsanat@gpscgroup.com
MEASURING PLACE : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
MEASURING TYPE : WORKPLACE (NOISE DOSE)
MEASURING DATE : MARCH 23-24, 2023
MEASURING TIME : *
MEASURING EQUIPMENT : NOISE DOSE METER
MEASURED BY : MISS PATJIRA KADEEPISAN

RECEIVED DATE : MARCH 23-24, 2023
ANALYTICAL DATE : MARCH 23-24, 2023
REPORT NO. : 2023-U024242
WORK NO. : 2022-006185
ANALYSIS NO. : T23AF480-0003 - T23AF480-0004

ANALYSIS NO.	MEASURING SITE	TIME* (HOUR)	RESULT			
			$LAVG_{12\ HOUR}$(dB(A))	$TWA_{8\ HOUR}$ (dB(A))	L_{Amax} (dB(A))	DOSE (%)
T23AF480-0003	บริเวณ F1 ข่วงดึก (คุณเอนุพล โนนเทา)	19:11-07:11	69.3	70.8	112	3.83
T23AF480-0004	บริเวณ F2 ข่วงดึก (คุณศุภโชค ประพฤติชอบ)	19:21-07:21	74.1	74.2	101	8.40

Nattawat.

(MR NATTAWAT DANGSAWAT)
LABORATORY SUPERVISOR

APRIL 3, 2023

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CONTACT INFORMATION : TEL : 09 6713 9936 e-mail : angsana.t@gpscgroup.com
MEASURING PLACE : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
MEASURING TYPE : WORKPLACE (NOISE DOSE) **RECEIVED DATE** : MARCH 23, 2023
MEASURING DATE : MARCH 23, 2023 **ANALYTICAL DATE** : MARCH 23, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U024244
MEASURING EQUIPMENT : NOISE DOSE METER **WORK NO.** : 2022-006185
MEASURED BY : MISS PATJIRA KADEEPISAN **ANALYSIS NO.** : T23AF483-0001 - T23AF483-0002

ANALYSIS NO.	MEASURING SITE	TIME* (HOUR)	RESULT		
			$TWA_{8\ HOUR}$ (dB(A))	L_{Amax} (dB(A))	DOSE (%)
T23AF483-0001	บริเวณ F1 ช่างเช้า (คุณเพลวัต เกตุพุฒ)	07:03-15:03	75.8	102	12.1
T23AF483-0002	บริเวณ F2 ช่างเช้า (คุณจาตุรนต์ ใจหาญ)	07:06-15:06	71.0	106	4.00

Nattawat.

(MR NATTAWAT DANGSAWAT)
LABORATORY SUPERVISOR

APRIL 3, 2023

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CONTACT INFORMATION : TEL : 09 6713 9936 e-mail : angsana.t@gpscgroup.com
MEASURING PLACE : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
MEASURING TYPE : WORKPLACE (NOISE DOSE)
MEASURING DATE : MARCH 23-24, 2023
MEASURING TIME : *
MEASURING EQUIPMENT : NOISE DOSE METER
MEASURED BY : MISS PATJIRA KADEEPISAN
RECEIVED DATE : MARCH 23-24, 2023
ANALYTICAL DATE : MARCH 23-24, 2023
REPORT NO. : 2023-U024245
WORK NO. : 2022-006185
ANALYSIS NO. : T23AF483-0003 - T23AF483-0004

ANALYSIS NO.	MEASURING SITE	TIME* (HOUR)	RESULT		
			$TWA_{8\ HOUR}$ (dB(A))	L_{Amax} (dB(A))	DOSE (%)
T23AF483-0003	บริเวณ F1 ข่วงดึก (คุณอนุพล โนนเทา)	19:11-03:11	70.8	112	3.80
T23AF483-0004	บริเวณ F2 ข่วงดึก (คุณศุภโชค ประพฤติชอบ)	19:21-03:21	74.2	101	8.40

Nattawat.

(MR NATTAWAT DANGSAWAT)
LABORATORY SUPERVISOR

APRIL 3, 2023

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United Analyst and Engineering Consultant Co., Ltd.
3 Soi Udomsuk 41, Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260
Tel.0 2763 2828 Fax 0 2763 2800 www.uaeconsultant.com E-mail: uae@uaeconsultant.com

ANALYSIS REPORT

CUSTOMER NAME : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
ADDRESS : 555/2 ENERGY COMPLEX BUILDING B, 14 TH FLOOR, VIBHVADI-RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 09 6713 9936 e-mail : angsana.t@gpscgroup.com
SAMPLING SOURCE : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED 42/3 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSUKLA SIRACHA, CHONBURI 20230.
SAMPLE TYPE : WORKPLACE
SAMPLING DATE : MARCH 23, 2023
SAMPLING TIME : 08:28-09:58 HOUR
SAMPLING BY : MISS PATJIRA KADEEPISAN
ANALYZED BY : MISS SUWAN KONGTHONG
RECEIVED DATE : MARCH 27, 2023
ANALYTICAL DATE : MARCH 27-28, 2023
REPORT NO. : 2023-U024198
WORK NO. : 2022-006185
ANALYSIS NO. : T23AF386-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			COOLING TOWER
			T23AF386-0001
SODIUM HYPOCHLORITE	mg/m^3	ION CHROMATOGRAPHIC METHOD (NIOSH METHOD 6011) AND CALCULATION METHOD	< 0.001
SAMPLE CONDITION			COMPLETE

REMARK
RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.

Budsakorn

(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR

APRIL 6, 2023

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ADDRESS : 555/2 ENERGY COMPLEX BUILDING B, 14 TH FLOOR, VIBHVADI-RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 09 6713 9936 e-mail : angsana.t@gpscgroup.com
SAMPLING SOURCE : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED 42/3 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSUKLA SIRACHA, CHONBURI 20230.
SAMPLE TYPE : WORKPLACE
SAMPLING DATE : MARCH 23, 2023
SAMPLING TIME : 08:32-16:32 HOUR
SAMPLING BY : MISS PATJIRA KADEEPISAN
ANALYZED BY : MISS JETJARIN TUMSA-AT
RECEIVED DATE : MARCH 27, 2023
ANALYTICAL DATE : MARCH 27-30, 2023
REPORT NO. : 2023-U024201
WORK NO. : 2022-006185
ANALYSIS NO. : T23AF386-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			DEMIN BUILDING
			T23AF386-0002
SODIUM HYDROXIDE	mg/m³	TITRATION METHOD (NIOSH METHOD 7401)	< 0.04
SULPHURIC ACID	mg/m³	ION CHROMATOGRAPHIC METHOD (NIOSH METHOD 7903)	0.002
SAMPLE CONDITION			COMPLETE

REMARK
RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.

Budsakorn

(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR

APRIL 6, 2023

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United Analyst and Engineering Consultant Co., Ltd.
3 Soi Udomsuk 41, Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260
Tel.0 2763 2828 Fax 0 2763 2800 www.uaeconsultant.com E-mail: uae@uaeconsultant.com

ANALYSIS REPORT

CUSTOMER NAME : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
ADDRESS : 555/2 ENERGY COMPLEX BUILDING B, 14 TH FLOOR, VIBHVADI-RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 09 6713 9936 e-mail : angsana.t@gpscgroup.com
SAMPLING SOURCE : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED 42/3 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSUKLA SIRACHA, CHONBURI 20230.
SAMPLE TYPE : WORKPLACE
SAMPLING DATE : MARCH 23, 2023
SAMPLING TIME : 08:37-16:37 HOUR
SAMPLING BY : MISS PATJIRA KADEEPISAN
ANALYZED BY : MISS JETJARIN TUMSA-AT
RECEIVED DATE : MARCH 27, 2023
ANALYTICAL DATE : MARCH 27-30, 2023
REPORT NO. : 2023-U024202
WORK NO. : 2022-006185
ANALYSIS NO. : T23AF386-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			NEUTRALIZATION SUMP T23AF386-0003
SODIUM HYDROXIDE	mg/m³	TITRATION METHOD (NIOSH METHOD 7401)	< 0.04
SULPHURIC ACID	mg/m³	ION CHROMATOGRAPHIC METHOD (NIOSH METHOD 7903)	< 0.001
SAMPLE CONDITION			COMPLETE

REMARK
RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.

Budsakorn

(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR

APRIL 6, 2023

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Tel. 0 2763 2828 Fax 0 2763 2800 www.uaeconsultant.com E-mail: uae@uaeconsultant.com

ANALYSIS REPORT

CUSTOMER NAME : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
ADDRESS : 42/3 MOO 1, SUKHUMVIT ROAD KM. 124 THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 09 6713 9936 e-mail : angsana.t@gpscgroup.com
MEASURING PLACE : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
MEASURING TYPE : WORKPLACE (AIR)
MEASURING DATE : MARCH 23, 2023
MEASURING TIME : *
MEASURING EQUIPMENT : THC ANALYZER
MEASURED BY : MISS PATJIRA KADEEPISAN
RECEIVED DATE : MARCH 23, 2023
ANALYTICAL DATE : MARCH 23, 2023
REPORT NO. : 2023-U024197
WORK NO. : 2022-006185
ANALYSIS NO. : T23AF386-0004 - T23AF386-0005

ANALYSIS NO.	MEASURING SITE	TIME*	RESULT (ppm)
			TOTAL HYDROCARBONS
T23AF386-0004	GPSC PROPANE TANK	08:41-16:41 HOUR	3.43
T23AF386-0005	GPSC NG GAS SEPARATOR OF GT-11	08:54-16:54 HOUR	2.70

Nattawat.

(MR NATTAWAT DANGSAWAT)
LABORATORY SUPERVISOR

APRIL 3, 2023

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ผลการติดตามตรวจสอบความร้อนในสถานประกอบการ



United Analyst and Engineering Consultant Co., Ltd.
3 Soi Udomsuk 41, Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260
Tel.0 2763 2828 Fax 0 2763 2800 www.uaeconsultant.com E-mail: uae@uaeconsultant.com

ANALYSIS REPORT

CUSTOMER NAME : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
ADDRESS : 42/3 MOO 1, SUKHUMVIT ROAD KM. 124 THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 09 6713 9936 e-mail : angsana.t@gpscgroup.com
MEASURING PLACE : GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED
MEASURING TYPE : WORKPLACE (HEAT STRESS)
MEASURING DATE : MARCH 23, 2023
MEASURING TIME : *
MEASURING EQUIPMENT : WET BULB GLOBE TEMPERATURE
MEASURED BY : MISS PATJIRA KADEEPISAN

RECEIVED DATE : MARCH 23, 2023
ANALYTICAL DATE : MARCH 23, 2023
REPORT NO. : 2023-U024246
WORK NO. : 2022-006185
ANALYSIS NO. : T23AF484-0001 - T23AF484-0007

ANALYSIS NO.	MEASURING SITE	DURATION TIME*	RESULT (DEGREE CELSIUS)				
			NWB	DB	GT	WBGT	WBGT AVG
T23AF484-0001	STEAM LINE HRSG 2 (คุณจิรภัทร จันทร์ช่วย)	10:00-11:20 HOUR	26.7	31.9	37.0	29.8	28.4
		11:20-12:00 HOUR	25.0	26.2	27.9	25.8	
T23AF484-0002	COMBUSTION TURBINE 2 (คุณจาตุรนต์ ใจหาญ)	10:05-11:25 HOUR	26.2	31.5	33.6	28.4	27.6
		11:25-12:05 HOUR	25.1	26.4	28.2	26.0	
T23AF484-0003	STEAM LINE HRSG 1 (คุณวงศธร ใจหล้า)	10:10-11:30 HOUR	27.5	31.9	33.3	29.2	28.1
		11:30-12:10 HOUR	25.1	26.2	27.9	26.0	
T23AF484-0004	COMBUSTION TURBINE 1 (คุณพลวัต เกตุพุฒ)	10:15-11:35 HOUR	26.1	31.5	32.9	28.1	27.4
		11:35-12:15 HOUR	25.0	26.3	27.9	25.9	
T23AF484-0005	BOILER 2 (คุณจาตุรนต์ ใจหาญ)	13:10-14:30 HOUR	27.6	32.8	41.8	31.9	29.8
		14:30-15:10 HOUR	24.8	25.9	27.5	25.6	
T23AF484-0006	BOILER 1 (คุณพลวัต เกตุพุฒ)	13:20-14:40 HOUR	27.8	33.6	40.6	31.6	29.7
		14:40-15:20 HOUR	24.9	26.1	27.8	25.8	
T23AF484-0007	STEAM TURBINE (คุณมานพ ทองหนุ่ง)	13:30-14:50 HOUR	28.0	33.5	39.1	31.3	29.4
		14:50-15:30 HOUR	24.8	25.7	27.2	25.5	

Nattawat.

(MR NATTAWAT DANGSAWAT)
LABORATORY SUPERVISOR

APRIL 3, 2023

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