

ภาคผนวก ข-19

ผลการตรวจวัดซีโอดี (รายวัน) เขตประกอบการ
อุตสาหกรรมดับบลิวเอชเอ ระยอง ช่วงเดือนกรกฎาคม-ธันวาคม 2567

[illegible]

Station	Air Pump Station Inlet/outlet					EQ		Atmos		S/Race					Electrical		Sum	Station
Item	Flow	PH	TDS	COD	COD	DO	Level	DO	SYS	PH	TDS	BOD	COD	Flow	Normal	Emergency		
Time	m3	5-9	>300	<75	<75	<1.5	m	<1.5		5.5-9	<200	<20	<15	m3	10-15-100	10-15-160	Unit	
8:00	0.00	7.95													0.00	0.00		
8:05						5.3	0.50	4.9				70	40.0			17.7		
8:10						5.3	0.50	4.9				10	10.0					
8:15						5.3	0.50	4.9				10	10.0					
8:20	3.55	7.95	97			5.3	0.50	4.9	100	7.80	100	10	10.0					
8:25						5.3	0.50	4.9				10	10.0					
8:30						5.3	0.50	4.9				10	10.0					
8:35						5.3	0.50	4.9				10	10.0					
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17:40						5.3	0.50	4.9				10	10					

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Lift Pump Station Inflow				EQ				Aeration				Effluent				Effluent				Total	
Item	Flow m3	TSS g/g	TDS mg/l	COO mg/l	DO mg/l	Level m	Flow m3	DO mg/l	Flow m3	TSS g/g	COO mg/l	DO mg/l	Flow m3	TSS g/g	COO mg/l	Flow m3	TSS g/g	COO mg/l	Flow m3	TSS g/g	COO mg/l
0:00	36552						36552														
0:05						5.4	3.51			4.4			10	35.49							
0:10						5.9	3.49			4.4			10	35.42							
0:15						3.4	3.48			4.3	1.0	7.50	1017	4	36.92						
0:20						3.4	3.45			4.3			9	32.61							
0:25						3.9	3.45			4.4			9	38.56							
0:30						3.4	3.48			4.3			9	31.04							
0:35						3.3	3.42			4.4			9	38.34							
0:40						3.5	3.40			4.2			8	31.43							
0:45						3.4	3.39			4.1			8	31.54							
0:50						3.9	3.37			4.1			8	33.01							
0:55						3.5	3.34			4.1			8	34.53							
1:00						3.1	3.35			4.0			8	30.12							
1:05						3.1	3.35			4.0			9	31.43							
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Lift Pump Station Inflow				EQ			Aeration		Effluent			Electrical			WQ/Quality	
Start Time	Flow m3	PH	TDS	COD	COD <750	<1.5	Level m	Flow m3	PH	TDS	COD	Flow m3	Normal	Emergency		Sum
		5-9	<300	<750		<1.5			5.5-9	<300	<400	<150	Flow m3	Normal	Emergency	Sum
0:00	0.00															
0:05	0.00															
0:10	0.00															
0:15	0.00															
0:20	0.00															
0:25	0.00															
0:30	0.00															
0:35	0.00															
0:40	0.00															
0:45	0.00															
0:50	0.00															
0:55	0.00															
1:00	0.00															
1:05	0.00															
1:10	0.00															
1:15	0.00															
1:20	0.00															
1:25	0.00															
1:30	0.00															
1:35	0.00															
1:40	0.00															
1:45	0.00															
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1:55	0.00															
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2:05	0.00															
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2:15	0.00															
2:20	0.00															
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Inlet Pump Station Inflow				EQ				Aeration				Effluent				Electrical			
Start	Flow	PH	TDS	COO	COO	DO	Level	DO	PH	TDS	WOD	COO	COO	Flow	Normal	Emergency	Sur		
(hrs)	(m3)	5-9	<1000	<750	<750	<1.5	m	(m3)	<1.5	5.5-9	<100	<20	<120	(m3)	kw=87300	kw=140	(w)		
9:00	7894													22.146	1250.7	6790.9			
9:05							8.0	7.97					20	24.4					
9:10							4.0	8.97					10	30.97					
9:15	7899	1560	59	50			4.0	7.97	1.00	41.0	12.0		20	26.97					
9:20							3.9	8.97					10	25.0					
9:25							3.9	8.97					10	25.0					
9:30							3.9	8.97					10	25.0					
9:35							3.9	8.97					10	25.0					
9:40							3.9	8.97					10	25.0					
9:45							3.9	8.97					10	25.0					
9:50							3.9	8.97					10	25.0					
9:55							3.9	8.97					10	25.0					
10:00							3.9	8.97					10	25.0					
10:05							3.9	8.97					10	25.0					
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10:15							3.9	8.97					10	25.0					
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10:55							3.9	8.97					10	25.0					
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11:35							3.9	8.97					10	25.0					
11:40							3.9	8.97					10	25.0					
11:45							3.9	8.97					10	25.0					
11:50							3.9	8.97					10	25.0					
11:55							3.9	8.97					10	25.0					
12:00							3.9	8.97					10	25.0					
12:05							3.9	8.97					10	25.0					
12:10							3.9	8.97					10	25.0					
12:15							3.9	8.97					10	25.0					
12:20							3.9	8.97					10	25.0					
12:25							3.9	8.97					10	25.0					
12:30							3.9	8.97					10	25.0					
12:35							3.9	8.97					10	25.0					
12:40							3.9	8.97					10	25.0					
12:45							3.9	8.97					10	25.0					
12:50							3.9	8.97					10	25.0					
12:55							3.9	8.97					10	25.0					
13:00							3.9	8.97					10	25.0					
13:05							3.9	8.97					10	25.0					
13:10							3.9	8.97					10	25.0					
13:15							3.9	8.97					10	25.0					
13:20							3.9	8.97					10	25.0					
13:25							3.9	8.97					10	25.0					
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13:55							3.9	8.97					10	25.0					
14:00							3.9	8.97					10	25.0					
14:05							3.9	8.97					10	25.0					
14:10							3.9	8.97					10	25.0					
14:15							3.9	8.97					10	25.0					
14:20							3.9	8.97					10	25.0					
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15:40							3.9	8.97					10	25.0					
15:45							3.9	8.97					10	25.0					
15:50							3.9	8.97					10	25.0					
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16:00							3.9	8.97					10	25.0					
16:05							3.9	8.97					10	25.0					
16:10							3.9	8.97					10	25.0					
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16:40							3.9	8.97					10	25.0					
16:45							3.9	8.97					10	25.0					
16:50							3.9	8.97					10	25.0					
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17:00							3.9	8.97					10	25.0					
17:05							3.9	8.97					10	25.0					
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17:15							3.9	8.97					10	25.0					
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18:00							3.9	8.97					10	25.0					
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18:15							3.9	8.97					10	25.0					
18:20							3.9	8.97					10	25.0					
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18:30							3.9	8.97					10	25.0					
18:35							3.9	8.97					10	25.0					
18:40							3.9	8.97					10	25.0					
18:45							3.9	8.97					10	25.0					
18:50							3.9	8.97					10	25.0					
18:55							3.9	8.97					10	25.0					
19:00							3.9	8.97					10	25.0					
19:05																			

Series	Lift Pump Station Inflow				EQ			Aeration			Effluent				Electrical			Remarks
	Flow m ³	PH	TDS mg/l	CO ₂ mg/l	CO ₂ mg/l	DO mg/l	Level m	Flow m ³	PH	TDS mg/l	DO ₂ mg/l	CO ₂ mg/l	Flow m ³	Normal kw/h/200	Emergency kw/h/100	Sum Unit		
6:00					<70	<1.5												
6:30							3.2	5.2				14	24.4					
7:00							5.4	6.4				9	11.35					
7:30	7.51	15.1	17	11		3.45	2.1	3.6	1.5	5.4	15.4	9	16.4					
8:00						3.7	2.0	3.7				9	15.1					
8:30						3.3	2.5	3.5				7	13.4					
9:00						3.7	2.7	3.7				7	13.1					
9:30						3.7	2.6	3.4				9	15.3					
10:00						3.6	2.4	3.4				9	14.4					
10:30						3.7	2.4	3.5				9	15.1					
11:00						3.5	2.1	3.6				9	15.1					
11:30						3.5	2.1	3.6				9	15.1					
12:00						3.5	2.1	3.6				9	15.1					
12:30						3.5	2.1	3.6				9	15.1					
13:00						3.5	2.1	3.6				9	15.1					
13:30						3.5	2.1	3.6				9	15.1					
14:00						3.5	2.1	3.6				9	15.1					
14:30						3.5	2.1	3.6				9	15.1					
15:00						3.5	2.1	3.6				9	15.1					
15:30						3.5	2.1	3.6				9	15.1					
16:00						3.5	2.1	3.6				9	15.1					
16:30						3.5	2.1	3.6				9	15.1					
17:00						3.5	2.1	3.6				9	15.1					
17:30						3.5	2.1	3.6				9	15.1					
18:00						3.5	2.1	3.6				9	15.1					
18:30						3.5	2.1	3.6				9	15.1					
19:00						3.5	2.1	3.6				9	15.1					
19:30						3.5	2.1	3.6				9	15.1					
20:00						3.5	2.1	3.6				9	15.1					
20:30						3.5	2.1	3.6				9	15.1					
21:00						3.5	2.1	3.6				9	15.1					
21:30						3.5	2.1	3.6				9	15.1					
22:00						3.5	2.1	3.6				9	15.1					
22:30						3.5	2.1	3.6				9	15.1					
23:00						3.5	2.1	3.6				9	15.1					
23:30						3.5	2.1	3.6				9	15.1					
24:00						3.5	2.1	3.6				9	15.1					
24:30						3.5	2.1	3.6				9	15.1					
25:00						3.5	2.1	3.6				9	15.1					
25:30						3.5	2.1	3.6				9	15.1					
26:00						3.5	2.1	3.6				9	15.1					
26:30						3.5	2.1	3.6				9	15.1					
27:00						3.5	2.1	3.6				9	15.1					
27:30						3.5	2.1	3.6				9	15.1					
28:00						3.5	2.1	3.6				9	15.1					
28:30						3.5	2.1	3.6				9	15.1					
29:00						3.5	2.1	3.6				9	15.1					
29:30						3.5	2.1	3.6				9	15.1					
30:00						3.5	2.1	3.6				9	15.1					
30:30						3.5	2.1	3.6				9	15.1					
31:00						3.5	2.1	3.6				9	15.1					
31:30						3.5	2.1	3.6				9	15.1					
32:00						3.5	2.1	3.6				9	15.1					
32:30						3.5	2.1	3.6				9	15.1					
33:00						3.5	2.1	3.6				9	15.1					
33:30						3.5	2.1	3.6				9	15.1					
34:00						3.5	2.1	3.6				9	15.1					
34:30						3.5	2.1	3.6				9	15.1					
35:00						3.5	2.1	3.6				9	15.1					
35:30						3.5	2.1	3.6				9	15.1					
36:00						3.5	2.1	3.6				9	15.1					
36:30						3.5	2.1	3.6				9	15.1					
37:00						3.5	2.1	3.6				9	15.1					
37:30						3.5	2.1	3.6				9	15.1					
38:00						3.5	2.1	3.6				9	15.1					
38:30						3.5	2.1	3.6				9	15.1					
39:00						3.5	2.1	3.6				9	15.1					
39:30						3.5	2.1	3.6				9	15.1					
40:00						3.5	2.1	3.6				9	15.1					
40:30						3.5	2.1	3.6				9	15.1					
41:00						3.5	2.1	3.6				9	15.1					
41:30						3.5	2.1	3.6				9	15.1					
42:00						3.5	2.1	3.6				9	15.1					
42:30						3.5	2.1	3.6				9	15.1					
43:00						3.5	2.1	3.6				9	15.1					
43:30						3.5	2.1	3.6				9	15.1					
44:00						3.5	2.1	3.6				9	15.1					
44:30						3.5	2.1	3.6				9	15.1					
45:00						3.5	2.1	3.6				9	15.1					
45:30						3.5	2.1	3.6				9	15.1					
46:00						3.5	2.1	3.6				9	15.1					
46:30						3.5	2.1	3.6				9	15.1					
47:00						3.5	2.1	3.6				9	15.1					
47:30						3.5	2.1	3.6				9	15.1					
48:00						3.5	2.1	3.6				9	15.1					
48:30						3.5	2.1	3.6				9	15.1					
49:00						3.5	2.1	3.6				9	15.1					
49:30						3.5	2.1	3.6				9	15.1					
50:00						3.5	2.1	3.6				9	15.1					
50:30						3.5	2.1	3.6				9	15.1					
51:00						3.5	2.1	3.6				9	15.1					
51:30						3.5	2.1	3.6				9	15.1					
52:00						3.5	2.1	3.6				9	15.1					
52:30						3.5	2.1	3.6				9	15.1					
53:00						3.5	2.1	3.6				9	15.1					
53:30						3.5	2.1	3.6				9	15.1					
54:00						3.5	2.1	3.6				9	15.1					
54:30						3.5	2.1	3.6				9	15.1					
55:00						3.5	2.1	3.6				9	15.1					
55:30						3.5	2.1	3.6				9	15.1					
56:00						3.5	2.1	3.6				9	15.1					
56:30						3.5	2.1	3.6				9	15.1					
57:00						3.5	2.1	3.6				9	15.1					
57:30						3.5	2.1	3.6				9	15.1					
58:00						3.5	2.1	3.6				9	15.1					
58:30						3.5	2.1	3.6				9	15.1					
59:00						3.5	2.1	3.6				9	15.1					
59:30						3.5	2.1	3.6				9	15.1					
60:00						3.5	2.1	3.6				9	15.1					
60:30						3.5	2.1	3.6				9	15.1					
61:00						3.5	2.1	3.6				9	15.1					
61:30						3.5	2.1	3.6				9	15.1					
62:00						3.5	2.1	3.6				9	15.1					
62:30						3.5	2.1	3.6				9	15.1					
63:00						3.5	2.1	3.6				9	15.1					
63:30						3.5	2.1	3.6				9	15.1					
64:00						3.5	2.1	3.6				9	15.1					
64:30						3.5	2.1	3.6				9	15.1					
65:00						3.5	2.1	3.6				9	15.1					
65:30						3.5	2.1	3.6				9	15.1					
66:00						3.5	2.1	3.6				9	15.1					
66:30						3.5	2.1	3.6				9	15.1					
67:00						3.5	2.1	3.6				9	15.1					
67:30						3.5	2.1	3.6				9	15.1					
68:00						3.5	2.1	3.6		</								

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Lift Pump Station Inflow				EQ				Aeration				Effluent				Electrical				
Station	Flow	PH	TDS	COD	COD	DO	Level	Flow	PH	TDS	BOD	COD	Flow	Normal	Emergency	Sur				
Time	m ³ /s	°	mg/L	mg/L	<15	<1.5	m	m ³ /s	<1.5	mg/L	mg/L	<15	m ³ /s	10-1500	1500-10000	Unit	Notes			
0:00	0.00						5.4	2.4	5.4				9	38.5						
0:30							5.5	2.9	5.5				9	36.5						
1:00							5.5	2.9	5.5	1.0	7.0	35.0	10	37.0						
1:30	2.5	11.0	45				5.5	2.9	5.5				10	36.5						
2:00							5.4	2.9	5.4				9	36.5						
2:30							5.4	2.9	5.4				9	36.5						
3:00							5.4	2.9	5.4				9	36.5						
3:30							5.4	2.9	5.4				9	36.5						
4:00							5.4	2.9	5.4				9	36.5						
4:30							5.4	2.9	5.4				9	36.5						
5:00							5.4	2.9	5.4				9	36.5						
5:30							5.4	2.9	5.4				9	36.5						
6:00							5.4	2.9	5.4				9	36.5						
6:30							5.4	2.9	5.4				9	36.5						
7:00							5.4	2.9	5.4				9	36.5						
7:30							5.4	2.9	5.4				9	36.5						
8:00							5.4	2.9	5.4				9	36.5						
8:30							5.4	2.9	5.4				9	36.5						
9:00							5.4	2.9	5.4				9	36.5						
9:30							5.4	2.9	5.4				9	36.5						
10:00							5.4	2.9	5.4				10	36.5						
10:30																				
11:00																				
11:30																				
12:00																				
12:30																				
13:00																				
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15:30																				
16:00																				
16:30																				
17:00																				
18:00																				
19:00																				
20:00																				
24:00																				

Station	Lift Pump Station Inflow				EQ			Aeration			Effluent				Effluent				Sum	WQMPing
	Flow m3	PH	TDS	COD	COD	DO	Level m	Flow m3	PH	TDS	COD	BOD	DO	Flow m3	Normal	Emergency	Level m	Unit		
Time	3-9	<1000	<150	<150	<150	<1.5		<1.5	3.5-9	PH	TDS	<1000	<150	<120						
0:00	7070						7070							10	7447	10	7447			
0:30							850	850						10	7471	10	7471			
1:00							850	850						10	7471	10	7471			
1:30		630	744	77	81		850	850						10	7471	10	7471			
2:00							850	850						10	7471	10	7471			
2:30							850	850						10	7471	10	7471			
3:00							850	850						10	7471	10	7471			
3:30							850	850						10	7471	10	7471			
4:00							850	850						10	7471	10	7471			
4:30							850	850						10	7471	10	7471			
5:00							850	850						10	7471	10	7471			
5:30							850	850						10	7471	10	7471			
6:00							850	850						10	7471	10	7471			
6:30							850	850						10	7471	10	7471			
7:00							850	850						10	7471	10	7471			
7:30							850	850						10	7471	10	7471			
8:00							850	850						10	7471	10	7471			
8:30							850	850						10	7471	10	7471			
9:00							850	850						10	7471	10	7471			
9:30							850	850						10	7471	10	7471			
10:00							850	850						10	7471	10	7471			
10:30							850	850						10	7471	10	7471			
11:00							850	850						10	7471	10	7471			
11:30							850	850						10	7471	10	7471			
12:00							850	850						10	7471	10	7471			
12:30							850	850						10	7471	10	7471			
13:00							850	850						10	7471	10	7471			
13:30							850	850						10	7471	10	7471			
14:00							850	850						10	7471	10	7471			
14:30							850	850						10	7471	10	7471			
15:00							850	850						10	7471	10	7471			
15:30							850	850						10	7471	10	7471			
16:00							850	850						10	7471	10	7471			
16:30							850	850						10	7471	10	7471			
17:00							850	850						10	7471	10	7471			
17:30							850	850						10	7471	10	7471			
18:00							850	850						10	7471	10	7471			
18:30							850	850						10	7471	10	7471			
19:00							850	850						10	7471	10	7471			
19:30							850	850						10	7471	10	7471			
20:00							850	850						10	7471	10	7471			
20:30							850	850						10	7471	10	7471			
21:00							850	850						10	7471	10	7471			
21:30							850	850						10	7471	10	7471			
22:00							850	850						10	7471	10	7471			
22:30							850	850						10	7471	10	7471			
23:00							850	850						10	7471	10	7471			
23:30							850	850						10	7471	10	7471			
Total																				

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Station		Lift Pump Station Inboard				EQ			Aeration			Effluent				Electrical				Wardens
Turn	Flow m3	PH	TDS	COD	COD	Level m	Flow m3	PH	DO	PH	TDS	BOD	COD	Flow m3	Normal 1000	Emergency 1000	Sum			
Time	5-9	<100	<150	<150	<150	<1.5	<1.5	<1.5	5.5-9	<200	<100	<10	<120	m3			Unit			
8:00																				
8:05						3.3	2.74	3.5				7	50.15							
8:10						3.4	2.75	3.4				7	29.40							
8:15						3.5	2.74	3.5				6	21.50							
8:20		7.25	107	73	34	3.5	2.74	3.5	1.0	7.15	109.9	6	21.50							
8:25						3.4	2.74	3.5				6	50.11							
8:30						3.5	2.74	3.4				6	29.20							
8:35						3.5	2.74	3.4				6	21.50							
8:40						3.5	2.74	3.4				6	21.50							
8:45						3.5	2.74	3.4				6	21.50							
8:50						3.5	2.74	3.4				6	21.50							
8:55						3.5	2.74	3.4				6	21.50							
9:00						3.5	2.74	3.5				6	21.50							
9:05						3.5	2.74	3.5				6	21.50							
9:10						3.5	2.74	3.5				6	21.50							
9:15						3.5	2.74	3.5				6	21.50							
9:20						3.5	2.74	3.5				6	21.50							
9:25						3.5	2.74	3.5				6	21.50							
9:30						3.5	2.74	3.5				6	21.50							
9:35						3.5	2.74	3.5				6	21.50							
9:40						3.5	2.74	3.5				6	21.50							
9:45						3.5	2.74	3.5				6	21.50							
9:50						3.5	2.74	3.5				6	21.50							
9:55						3.5	2.74	3.5				6	21.50							
10:00						3.5	2.74	3.5				6	21.50							
10:05						3.5	2.74	3.5				6	21.50							
10:10						3.5	2.74	3.5				6	21.50							
10:15						3.5	2.74	3.5				6	21.50							
10:20						3.5	2.74	3.5				6	21.50							
10:25						3.5	2.74	3.5				6	21.50							
10:30						3.5	2.74	3.5				6	21.50							
10:35						3.5	2.74	3.5				6	21.50							
10:40						3.5	2.74	3.5				6	21.50							
10:45						3.5	2.74	3.5				6	21.50							
10:50						3.5	2.74	3.5				6	21.50							
10:55						3.5	2.74	3.5				6	21.50							
11:00						3.5	2.74	3.5				6	21.50							
11:05						3.5	2.74	3.5				6	21.50							
11:10						3.5	2.74	3.5				6	21.50							
11:15						3.5	2.74	3.5				6	21.50							
11:20						3.5	2.74	3.5				6	21.50							
11:25						3.5	2.74	3.5				6	21.50							
11:30						3.5	2.74	3.5				6	21.50							
11:35						3.5	2.74	3.5				6	21.50							
11:40						3.5	2.74	3.5				6	21.50							
11:45						3.5	2.74	3.5				6	21.50							
11:50						3.5	2.74	3.5				6	21.50							
11:55						3.5	2.74	3.5				6	21.50							
12:00						3.5	2.74	3.5				6	21.50							
12:05						3.5	2.74	3.5				6	21.50							
12:10						3.5	2.74	3.5				6	21.50							
12:15						3.5	2.74	3.5				6	21.50							
12:20						3.5	2.74	3.5				6	21.50							
12:25						3.5	2.74	3.5				6	21.50							
12:30						3.5	2.74	3.5				6	21.50							
12:35						3.5	2.74	3.5				6	21.50							
12:40						3.5	2.74	3.5				6	21.50							
12:45						3.5	2.74	3.5				6	21.50							
12:50						3.5	2.74	3.5				6	21.50							
12:55						3.5	2.74	3.5				6	21.50							
13:00						3.5	2.74	3.5				6	21.50							
13:05						3.5	2.74	3.5				6	21.50							
13:10						3.5	2.74	3.5				6	21.50							
13:15						3.5	2.74	3.5				6	21.50							
13:20						3.5	2.74	3.5				6	21.50							
13:25						3.5	2.74	3.5				6	21.50							
13:30						3.5	2.74	3.5				6	21.50							
13:35						3.5	2.74	3.5				6	21.50							
13:40						3.5	2.74	3.5				6	21.50							
13:45						3.5	2.74	3.5				6	21.50							
13:50						3.5	2.74	3.5				6	21.50							
13:55						3.5	2.74	3.5				6	21.50							
14:00						3.5	2.74	3.5				6	21.50							
14:05						3.5	2.74	3.5				6	21.50							
14:10						3.5	2.74	3.5				6	21.50							
14:15						3.5	2.74	3.5				6	21.50							
14:20						3.5	2.74	3.5				6	21.50							
14:25						3.5	2.74	3.5				6	21.50							
14:30						3.5	2.74	3.5				6	21.50							
14:35						3.5	2.74	3.5				6	21.50							
14:40						3.5	2.74	3.5				6	21.50							
14:45						3.5	2.74	3.5				6	21.50							
14:50						3.5	2.74	3.5				6	21.50							
14:55						3.5	2.74	3.5				6	21.50							
15:00						3.5	2.74	3.5				6	21.50							
15:05						3.5	2.74	3.5				6	21.50							
15:10						3.5	2.74	3.5				6	21.50							
15:15						3.5	2.74	3.5				6	21.50							
15:20						3.5	2.74	3.5				6	21.50							
15:25						3.5	2.74	3.5				6	21.50							
15:30						3.5	2.74	3.5				6	21.50							
15:35						3.5	2.74	3.5				6	21.50							
15:40						3.5	2.74	3.5				6	21.50							
15:45						3.5	2.74	3.5				6	21.50							
15:50						3.5	2.74	3.5				6	21.50							
15:55						3.5	2.74	3.5				6	21.50							
16:00						3.5	2.74	3.5				6	21.50							
16:05						3.5	2.74	3.5				6	21.50							
16:10						3.5	2.74	3.5				6	21.50							
16:15						3.5	2.74	3.5				6	21.50							
16:20						3.5	2.74	3.5				6	21.50							
16:25						3.5	2.74	3.5				6	21.50							
16:30						3.5	2.74	3.5				6	21.50							
16:35						3.5	2.74	3.5				6	21.50							
16:40						3.5	2.74	3.5				6	21.50							
16:45						3.5	2.74	3.5				6	21.50							
16:50						3.5	2.74	3.5				6	21.50							
16:55						3.5	2.74	3.5				6	21.50							
17:00						3.5	2.74	3.5				6	21.50							
17:05						3.5	2.74	3.5				6	21.50							
17:10						3.5	2.74	3.5				6	21.50							
17:15						3.5	2.74	3.5				6	21.50							
17:20						3.5	2.74	3.5				6	21.50							
17:25						3.5	2.74	3.5				6	21.50							
17:30						3.5	2.74	3.5				6	21.50							
17:35						3.5	2.74	3.5				6	21.50							
17:40						3.5	2.74	3.5				6								

[illegible]

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Lift Pump Station Inflow				EQ			Arrivals			T/Effluent				Effluents					
Station	Flow	PII	TSS	COD	DO	Level	Flow	DO	SV30	PII	TSS	BOD	COD	Flow	Normal	Emergency	San	W/Use	
Time	m3	5-9	<100	<150	<15	m		<1.5		5.5-9	<100	<10	<133	m3	tw/4*100	tw/4*100	Unit		
0:00																721.6	6715.5		
3:00					3.9	3.55		3.9				6	74.00						
6:00					3.9	3.55		3.9				6	77.10						
9:00					3.9	3.55		3.9				7	78.16						
12:00		9.82	118.4	6.6	4.2	3.88		3.9	1.00	7.51	110.7	7	79.20						
15:00					4.2	3.86		3.9				7	79.20						
18:00					3.9	3.56		3.9				6	79.20						
21:00					3.9	3.56		3.7				6	79.50						
24:00					3.6	3.56		3.7				6	78.97						
3:00					3.9	3.56		3.6				6	79.50						
6:00					3.6	3.57		3.7				6	78.70						
9:00					3.6	3.57		3.9				7	79.50						
12:00					3.6	3.57		3.9				7	79.70						
15:00					3.6	3.57		3.9				7	79.70						
18:00					3.6	3.57		3.9				7	79.70						
21:00					3.6	3.57		3.9				7	79.70						
24:00					3.6	3.57		3.6				6	79.70						

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Station	Lift Pump Station Inflow				EQ			Aeration			Effluent			Electrical			WWTW Eff
Time	Flow m3	P11	TDS <-9	COD <-100	DO <-19	Level m <-15	Flow m3	DO <-1.5	P11 5.5-9	TDS <-100	BOD <-20	COD <-10	Flow m3	Normal kw=10/100	Emergency kw=1/100	Sum Unit	
0:00															175.53	0741.7	
0:30						5.7	7.94	4.7				6	29.0				
1:00						5.1	7.32	4.1				6	29.0				
1:30		9.05	110.0	1.1	5.1	1.04		1.00	6.97	9.97	7	36.50					
2:00						5.1	1.04	5.9				7	39.40				
2:30						5.7	1.03	6.1				7	39.40				
3:00						5.7	1.03	6.1				6	39.70				
3:30						5.7	1.03	6.1				6	39.70				
4:00						5.7	1.03	6.1				6	39.70				
4:30						5.7	1.03	6.1				6	39.70				
5:00						5.7	1.03	6.1				6	39.70				
5:30						5.7	1.03	6.1				6	39.70				
6:00						5.7	1.03	6.1				6	39.70				
6:30						5.7	1.03	6.1				6	39.70				
7:00						5.7	1.03	6.1				6	39.70				
7:30						5.7	1.03	6.1				6	39.70				
8:00						5.7	1.03	6.1				6	39.70				
8:30						5.7	1.03	6.1				6	39.70				
9:00						5.7	1.03	6.1				6	39.70				
9:30						5.7	1.03	6.1				6	39.70				
10:00						5.7	1.03	6.1				6	39.70				

Lat Pump Station Inflow			EQ				Aeration			Effluent				Electrical				W/S (m³/s)	
Time	Flow m³	PK	TDS	COD	COD	DO	Level m	Flow m³	DO	SVS	PK	TDS	W/D	COD	Flow m³	Normal kw=7500	Emergency kw=1400		Scm
8:00	2500	5.9	<100	<50	<15	<1.5	0.77	4.6					9	9.0	2500	77.1	14.0		
9:00							0.77	4.6					9	9.0					
10:00	7.70	5.9	74		65		0.77	4.7	1.00	7.71	12.1		9	29.7					
11:00							0.77	4.7					10	30.7					
12:00							0.77	4.7					10	30.7					
13:00							0.77	4.7					12	36.7					
14:00							0.77	4.7					12	36.7					
15:00							0.77	4.7					12	36.7					
16:00							0.77	4.7					12	36.7					
17:00							0.77	4.7					12	36.7					
18:00							0.77	4.7					12	36.7					
19:00							0.77	4.7					12	36.7					
20:00							0.77	4.7					12	36.7					

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Station	Lak Pump Station Inflow				EQ				Aeration				Effluent				Disinfectant				Sum		WS/1000L
Inflow	Flow	PH	TDS	COD	D0	Level	Flow	D0	SV30	PH	TDS	BOD	COD	Flow	NaOCl	Emergency	Sum						
Time	m3		5-6	<3000	<150	<150	<1.5	m3		<1.5			<5.9	<100	<20	<120	m3		kw-h/100	Unit			
8:00																							
8:05							5.60	2.10		5.60				9	22.40								
8:10							5.60	2.04		5.60				9	21.60								
8:15							5.60	1.99		5.60	1.06	4.70	7.80	9	5.60								
8:20							5.60	1.96		5.60				9	20.56								
8:25							5.60	1.94		5.60				9	20.56								
8:30							5.60	1.92		5.60				9	20.56								
8:35							5.60	1.90		5.60				9	20.56								
8:40							5.60	1.88		5.60				9	20.56								
8:45							5.60	1.86		5.60				9	20.56								
8:50							5.60	1.84		5.60				9	20.56								
8:55							5.60	1.82		5.60				9	20.56								
9:00							5.60	1.80		5.60				9	20.56								
9:05							5.60	1.78		5.60				9	20.56								
9:10							5.60	1.76		5.60				9	20.56								
9:15							5.60	1.74		5.60				9	20.56								
9:20							5.60	1.72		5.60				9	20.56								
9:25							5.60	1.70		5.60				9	20.56								
9:30							5.60	1.68		5.60				9	20.56								
9:35							5.60	1.66		5.60				9	20.56								
9:40							5.60	1.64		5.60				9	20.56								
9:45							5.60	1.62		5.60				9	20.56								
9:50							5.60	1.60		5.60				9	20.56								
9:55							5.60	1.58		5.60				9	20.56								
10:00							5.60	1.56		5.60				9	20.56								
10:05							5.60	1.54		5.60				9	20.56								
10:10							5.60	1.52		5.60				9	20.56								
10:15							5.60	1.50		5.60				9	20.56								
10:20							5.60	1.48		5.60				9	20.56								
10:25							5.60	1.46		5.60				9	20.56								
10:30							5.60	1.44		5.60				9	20.56								
10:35							5.60	1.42		5.60				9	20.56								
10:40							5.60	1.40		5.60				9	20.56								
10:45							5.60	1.38		5.60				9	20.56								
10:50							5.60	1.36		5.60				9	20.56								
10:55							5.60	1.34		5.60				9	20.56								
11:00							5.60	1.32		5.60				9	20.56								
11:05							5.60	1.30		5.60				9	20.56								
11:10							5.60	1.28		5.60				9	20.56								
11:15							5.60	1.26		5.60				9	20.56								
11:20							5.60	1.24		5.60				9	20.56								
11:25							5.60	1.22		5.60				9	20.56								
11:30							5.60	1.20		5.60				9	20.56								
11:35							5.60	1.18		5.60				9	20.56								
11:40							5.60	1.16		5.60				9	20.56								
11:45							5.60	1.14		5.60				9	20.56								
11:50							5.60	1.12		5.60				9	20.56								
11:55							5.60	1.10		5.60				9	20.56								
12:00							5.60	1.08		5.60				9	20.56								
12:05							5.60	1.06		5.60				9	20.56								
12:10							5.60	1.04		5.60				9	20.56								
12:15							5.60	1.02		5.60				9	20.56								
12:20							5.60	1.00		5.60				9	20.56								
12:25							5.60	0.98		5.60				9	20.56								
12:30							5.60	0.96		5.60				9	20.56								
12:35							5.60	0.94		5.60				9	20.56								
12:40							5.60	0.92		5.60				9	20.56								
12:45							5.60	0.90		5.60				9	20.56								
12:50							5.60	0.88		5.60				9	20.56								
12:55							5.60	0.86		5.60				9	20.56								
13:00							5.60	0.84		5.60				9	20.56								
13:05							5.60	0.82		5.60				9	20.56								
13:10							5.60	0.80		5.60				9	20.56								
13:15							5.60	0.78		5.60				9	20.56								
13:20							5.60	0.76		5.60				9	20.56								
13:25							5.60	0.74		5.60				9	20.56								
13:30							5.60	0.72		5.60				9	20.56								
13:35							5.60	0.70		5.60				9	20.56								
13:40							5.60	0.68		5.60				9	20.56								
13:45							5.60	0.66		5.60				9	20.56								
13:50							5.60	0.64		5.60				9	20.56								
13:55							5.60	0.62		5.60				9	20.56								
14:00							5.60	0.60		5.60				9	20.56								
14:05							5.60	0.58		5.60				9	20.56								
14:10							5.60	0.56		5.60				9	20.56								
14:15							5.60	0.54		5.60				9	20.56								
14:20							5.60	0.52		5.60				9	20.56								
14:25							5.60	0.50		5.60				9	20.56								
14:30							5.60	0.48		5.60				9	20.56								
14:35							5.60	0.46		5.60				9	20.56								
14:40							5.60	0.44		5.60				9	20.56								
14:45							5.60	0.42		5.60				9	20.56								
14:50							5.60	0.40		5.60				9	20.56								
14:55							5.60	0.38		5.60				9	20.56								
15:00							5.60	0.36		5.60				9	20.56								
15:05							5.60	0.34		5.60				9	20.56								
15:10							5.60	0.32		5.60				9	20.56								
15:15							5.60	0.30		5.60				9	20.56								
15:20							5.60	0.28		5.60				9	20.56								
15:25							5.60	0.26		5.60				9	20.56								
15:30							5.60	0.24		5.60				9	20.56								
15:35							5.60	0.22		5.60				9	20.56								
15:40							5.60	0.20		5.60				9	20.56								
15:45							5.60	0.18		5.60				9	20.56								
15:50							5.60	0.16		5.60				9	20.56								
15:55							5.60	0.14		5.60				9	20.56								
16:00							5.60	0.12		5.60				9	20.56								
16:05							5.60	0.10		5.60				9	20.56								
16:10							5.60	0.08		5.60				9	20.56								
16:15							5.60	0.06		5.60													

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แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน (ECO-1-057 F1)

REV.01

แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน 16/06/67

Station	Lift Pump Station Influent				EQ				Aeration				Effluent				Electrical				รวม	หมายเหตุ
	Item	Flow	PH	TDS	COD	COD	DO	Level	Flow	DO	SV30	PH	TDS	BOD	COD	Flow	Normal	Emergency	Sum			
Time	Flow	m3	5-9	<1000	<120	<750	<1.5	m	m3	<1.5	5-9	<1000	<750	<120	<120	m3	kw-h/1000	kw-h/1000	Unit			
8:00							3.2	2.15		2.2				1.5	40.31							
9:00							3.2	2.15		2.4				1.6	37.90							
10:00		7.21	132.1	7.9		52	3.1	2.43		2.5	100	2.09	1210	10	35.51							
11:00							3.1	2.74		3.6				11	33.12							
12:00							3.5	2.35		3.5				10	35.44							
13:00							3.4	2.72		3.5				9	34.13							
14:00							3.1	2.68		2.9				10	34.41							
15:00							3.5	2.44		2.5				9	35.44							
16:00							2.5	2.42		2.6				9	35.71							
17:00							2.4	2.59		3.1				4	34.11							
18:00							2.5	2.51		3.2				9	35.65							
19:00							2.6	2.57		3.2				9	34.24							
20:00							3.1	2.51		3.4				9	33.22							
24:00																						



แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน (ECO-1-057 F1)

REV.01

แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน 19/08/67

Station		Lift Pump Station Influent				EQ				Aeration				Effluent				Electrical				Sum	10/10/06
Item	Flow	PH	TDS	COD	COD	DO	Level	Flow	DO	SV30	PH	TDS	BOD	COD	Flow	Normal	Emergency	Unit					
Time	m3	5-9	<1000	<750	<750	<1.5	m	m3	<1.5	5-9	<1000	<750	<120	<120	m3	kw-h/1000	kw-h/1000	Unit					
8:00	452.935					3.2	2.15	3.3					8	35.67									
9:00						3.6	2.24	3.4					8	34.61									
10:00	2.09	135.4	8.4	52		3.5	2.51	3.2	100	2.11	1095	9	34.94										
11:00						3.2	2.81	3.3					9	34.67									
12:00						3.7	2.35	3.3					8	34.78									
13:00						3.6	2.37	3.4					9	34.11									
14:00						3.4	2.34	3.4					9	32.48									
15:00						3.5	2.41	3.3					9	32.17									
16:00						3.5	2.44	3.2					10	33.53									
17:00						3.4	2.42	3.2					10	34.17									
18:00						3.5	2.38	3.1					9	33.11									
19:00						3.5	2.36	3.4					9	32.61									
20:00						3.4	2.34	3.4					9	34.71									
24:00						3.6	2.34	3.3					9	34.51									



แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน (ECO-1-057 F1)

REV.01

แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน 10/09/67

Station		Lift Pump Station Influent				EQ				Aeration				Effluent				Electrical				รวม	หมายเหตุ
Item	Flow	PH	TDS	COD	COD	DO	Level	Flow	DO	SV30	PH	TDS	BOD	COD	Flow	Normal	Emergency	Sum					
Time	m3	5-9	<1000	<750	<750	<1.5	m	m3	<1.5	5-9	<1000	<750	<120	<120	m3	kw-h/1000	kw-h/1000	Unit					
8:00	100.00					3.2	2.15	3.2					10	35.92									
9:00						3.2	2.15	3.2					10	35.92									
10:00	2.11	135.4	8.4	52		3.2	2.15	3.2					10	35.92									
11:00						3.2	2.15	3.2					10	35.92									
12:00						3.2	2.15	3.2					10	35.92									
13:00						3.2	2.15	3.2					10	35.92									
14:00						3.2	2.15	3.2					10	35.92									
15:00						3.2	2.15	3.2					10	35.92									
16:00						3.2	2.15	3.2					10	35.92									
17:00						3.2	2.15	3.2					10	35.92									
18:00						3.2	2.15	3.2					10	35.92									
19:00						3.2	2.15	3.2					10	35.92									
20:00						3.2	2.15	3.2					10	35.92									
24:00						3.2	2.15	3.2					10	35.92									



แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน (ECO-1-057 F1)

REV.01

แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน 10/09/67

Station		Lift Pump Station Influent				EQ		Aeration			Effluent				Electrical				รวม	หมายเหตุ
Item	Flow	PH	TDS	COD	COD	DO	Level	Flow	DO	SV30	PH	TDS	BOD	COD	Flow	Normal	Emergency	Sum		
Time	m3	5-9	<1000	<750	<750	<1.5	m	m3	<1.5	5-9	<1000	<750	<120	<120	m3	kw-h/1000	kw-h/1000	Unit		
8:00						3.2	2.15	3.2					10	35.92						
9:00						3.2	2.15	3.2					10	35.92						
10:00	2.11	135.4	8.4	52		3.2	2.15	3.2					10	35.92						
11:00						3.2	2.15	3.2					10	35.92						
12:00						3.2	2.15	3.2					10	35.92						
13:00						3.2	2.15	3.2					10	35.92						
14:00						3.2	2.15	3.2					10	35.92						
15:00						3.2	2.15	3.2					10	35.92						
16:00						3.2	2.15	3.2					10	35.92						
17:00						3.2	2.15	3.2					10	35.92						
18:00						3.2	2.15	3.2					10	35.92						
19:00						3.2	2.15	3.2					10	35.92						
20:00						3.2	2.15	3.2					10	35.92						
24:00						3.2	2.15	3.2					10	35.92						



แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน (ECO-1-057 F1)

REV.01

แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน 14.8.67

Station		Lift Pump Station Influent				EQ				Aeration				Effluent				Electrical				รวม	หมายเหตุ
Item	Flow	PH	TDS	COD	COD	DO	Level	Flow	DO	SV30	PH	TDS	BOD	COD	Flow	Normal	Emergency	Sum					
Time	m3	5-9	<1000	<750	<750	<1.5	m	m3	<1.5	5-9	<1000	<750	<120	<120	m3	kw-h/1000	kw-h/1000	Unit					
8:00						3.2	2.15	3.2					10	35.92									
9:00						3.2	2.15	3.2					10	35.92									
10:00	2.11	135.4	8.4	52		3.2	2.15	3.2					10	35.92									
11:00						3.2	2.15	3.2					10	35.92									
12:00						3.2	2.15	3.2					10	35.92									
13:00						3.2	2.15	3.2					10	35.92									
14:00						3.2	2.15	3.2					10	35.92									
15:00						3.2	2.15	3.2					10	35.92									
16:00						3.2	2.15	3.2					10	35.92									
17:00						3.2	2.15	3.2					10	35.92									
18:00						3.2	2.15	3.2					10	35.92									
19:00						3.2	2.15	3.2					10	35.92									
20:00						3.2	2.15	3.2					10	35.92									
24:00																							

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Station		Lift Pump Station Inflows				EQ		Aeration		Effluent				Electrical		Sewer	100' Depth
Time	Flow m ³	PH	TDS	COD	COD	DO	Level m	Flow m ³	PH	TDS	BOD	DO	Flow m ³	Normal Power kW/1000	Emergency Power kW/1000		
0:00	0.00	5.9	<200	<10	<15	<1.5		0.00	5.9	<200	<12	<1.5	0.00	775.5	775.5		
0:30	0.00							0.00					0.00				
1:00	0.00							0.00					0.00				
1:30	0.00							0.00					0.00				
2:00	0.00							0.00					0.00				
2:30	0.00							0.00					0.00				
3:00	0.00							0.00					0.00				
3:30	0.00							0.00					0.00				
4:00	0.00							0.00					0.00				
4:30	0.00							0.00					0.00				
5:00	0.00							0.00					0.00				
5:30	0.00							0.00					0.00				
6:00	0.00							0.00					0.00				
6:30	0.00							0.00					0.00				
7:00	0.00							0.00					0.00				
7:30	0.00							0.00					0.00				
8:00	0.00							0.00					0.00				
8:30	0.00							0.00					0.00				
9:00	0.00							0.00					0.00				
9:30	0.00							0.00					0.00				
10:00	0.00							0.00					0.00				
10:30	0.00							0.00					0.00				
11:00	0.00							0.00					0.00				
11:30	0.00							0.00					0.00				
12:00	0.00							0.00					0.00				
12:30	0.00							0.00					0.00				
13:00	0.00							0.00					0.00				
13:30	0.00							0.00					0.00				
14:00	0.00							0.00					0.00				
14:30	0.00							0.00					0.00				
15:00	0.00							0.00					0.00				
15:30	0.00							0.00					0.00				
16:00	0.00							0.00					0.00				
16:30	0.00							0.00					0.00				
17:00	0.00							0.00					0.00				
17:30	0.00							0.00					0.00				
18:00	0.00							0.00					0.00				
18:30	0.00							0.00					0.00				
19:00	0.00							0.00					0.00				
19:30	0.00							0.00					0.00				
20:00	0.00							0.00					0.00				
20:30	0.00							0.00					0.00				
21:00	0.00							0.00					0.00				
21:30	0.00							0.00					0.00				
22:00	0.00							0.00					0.00				
22:30	0.00							0.00					0.00				
23:00	0.00							0.00					0.00				
23:30	0.00							0.00					0.00				
24:00	0.00							0.00					0.00				
Total																	

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Lift Pump Station Inflow				EQ				Attrition				Erosion				Electrical				Notes
Station	Flow m ³ /s	PH	TDS <50	COD <70	<10	Level m	Flow m ³ /s	<1.5	SV30	PH	TDS <50	ROD <10	COD <10	Flow m ³ /s	Normal Flow m ³ /s	Emergency Flow m ³ /s	Time Unit			
8:00	7.5						5.60	5.04					7	10.10						
8:30							5.00	5.02					7	10.05						
9:00							5.40	5.00					7	10.05						
9:30							5.50	5.00					7	10.05						
10:00	7.10	9.10					5.40	5.00					7	10.05						
11:00							5.00	5.00					7	10.05						
12:00							5.50	5.00					7	10.05						
13:00							5.20	5.00					7	10.05						
14:00							5.70	5.00					7	10.05						
15:00							5.00	5.00					7	10.05						
16:00							5.00	5.00					7	10.05						
17:00							5.00	5.00					7	10.05						
18:00							5.10	5.00					7	10.05						
19:00							5.10	5.00					7	10.05						
20:00							5.00	5.00					7	10.05						

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Station		Lift Pump Station Inflow				RQ				Aeration				Effluent				Electrical				Water	
Time	Flow m3	PH	TDS	COD	COD	DO	Level m	Flow m3	PH	TDS	COD	DO	COD	PH	TDS	COD	DO	Flow m3	Normal kw-hr/1000	Emergency kw-hr/1000	Sum	Water	
0:00	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
0:30	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
1:00	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
1:30	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
2:00	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
2:30	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
3:00	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
3:30	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
4:00	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
4:30	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
5:00	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
5:30	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
6:00	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
6:30	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
7:00	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
7:30	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
8:00	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
8:30	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
9:00	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
9:30	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
10:00	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
10:30	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
11:00	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
11:30	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
12:00	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
12:30	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
13:00	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
13:30	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
14:00	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
14:30	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
15:00	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
15:30	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
16:00	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
16:30	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
17:00	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
17:30	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
18:00	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
18:30	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
19:00	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
19:30	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
20:00	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
20:30	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
21:00	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
21:30	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
22:00	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
22:30	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
23:00	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
23:30	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	
24:00	20.0	7.5	5.0	<100	<100	1.5	5.0	5.0	7.5	5.0	<100	1.5	5.0	7.5	5.0	<100	1.5	5.0	20.0	25.0	25.0	50.0	

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แบบฟอร์มรายงานการปล่อยน้ำเสียประจําวัน (EO-487 F1)

REV.01

แบบฟอร์มรายงานผลการปล่อยน้ำเสียประจําวัน 16 ก.ค. 2562

Station	Lift Pump Station Influent					EQ				Aeration				Effluent				Electrical				Sum	หมายเหตุ
	Item	Flow m3	PH	TDS mg/l	COD mg/l	COD mg/l	DO mg/l	Level m	Flow m3	DO mg/l	SV30	PH	TDS mg/l	BOD mg/l	COD mg/l	Flow m3	Normal kw-h/1000	Emergency kw-h/100	Unit				
0.00	Time		5-9	<3000	<750	<150	<1.5						5.5-9	<3000	<20	<120							
8.00	08:30								4.77							7.01	9.93	30.6	g				
9.00						3.3	3.46		8.7						9	26.7							
10.00						3.4	3.48		8.7						9	26.3							
11.00		9.48	7.58			3.7	3.41		8.7	3.0	7.16	11.65	11		11	11.1							
12.00						3.7	3.39		8.7						11	26.17							
13.00						3.5	3.47		8.7						9	26.45							
14.00						3.4	3.34		8.7						9	26.33							
15.00						3.3	3.31		8.6						8	26.30							
16.00						3.2	3.19		8.6						8	25.21							
17.00						3.4	3.47		8.9						9	26.17							
18.00						3.6	3.41		8.5						9	26.33							
19.00						3.4	3.35		8.5						9	26.41							
20.00						3.4	3.43		8.8						10	26.15							
24.00						3.6	3.44		8.1						10	26.30							
Total															70	261							



แบบฟอร์มรายงานการปล่อยน้ำเสียประจําวัน (EO-487 F1)

REV.01

แบบฟอร์มรายงานผลการปล่อยน้ำเสียประจําวัน 17 ก.ค. 62

Station	Lift Pump Station Influent					EQ			Aeration			Effluent			Electrical				รวม	1/1/2566
	Item	Flow m3	PH	TDS	COD	COD	DO	Level m	Flow m3	DO	SV30	PH	TDS	BOD	COD	Flow m3	Normal	Emergency		
0.00	Time	12:00	5-9	<3000	<750	<150	<1.5	m	m3	<1.5		5.5-9	<3000	<20	<120		kw-h/1000	kw-h/100	Unit	
8.00																				
9.00																				
10.00		7.11	7.59	Q1	A5					1.00	7.23	7.71					735.5	7182.6		
11.00																				
12.00																				
13.00																				
14.00																				
15.00																				
16.00																				
17.00																				
18.00																				
19.00																				
20.00																				
24.00																				
Total																				
Sum																				



แบบฟอร์มรายงานการปล่อยน้ำเสียประจําวัน (EO-487 F1)

REV.01

แบบฟอร์มรายงานผลการปล่อยน้ำเสียประจําวัน 13 ก.ค. 2562

Station	Lift Pump Station Influent				EQ				Aeration			Effluent			Electrical				
Item	Flow m3	PH	TDS	COD	COD	DO	Level m	Flow m3	DO	SV30	PH	TDS	BOD	COD	Flow m3	Normal kw-h/1000	Emergency kw-h/100	Sum Unit	หมายเหตุ
Time	5-9	<3000	<750	<150	<1.5			5.5-9	<3000	<20	<120								
8.00																			
9.00																			
10.00																			
11.00																			
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14.00																			
15.00																			
16.00																			
17.00																			
18.00																			
19.00																			
20.00																			
24.00																			
Total																			



แบบฟอร์มรายงานการปล่อยน้ำเสียประจําวัน (EO-487 F1)

REV.01

แบบฟอร์มรายงานผลการปล่อยน้ำเสียประจําวัน 14 ก.ค. 62

Station	Lift Pump Station Influent					EQ					Aeration					Effluent					Electrical					Sum Unit	หมายเหตุ
	Item	Flow m3	PH	TDS	COD	COD	DO	Level m	Flow m3	DO	SV30	PH	TDS	BOD	COD	Flow m3	Normal kw-h/1000	Emergency kw-h/100									
8:00	10/10/14										10/10/14							955.3	7013.1								
9:00									5.2	2.34						9	33.12										
10:00									5.2	2.32						9	33.96										
11:00		3.11	15.94	5.2		4.8			5.6	2.33		1.08	7.31	11.94		8	36.41										
12:00									3.1	2.31						7	31.42										
13:00									2.4	2.31						7	31.69										
14:00									3.2	2.31						8	32.62										
15:00									5.2	2.19						8	31.49										
16:00									5.2	2.19						9	35.16										
17:00									3.4	2.33						8	32.84										
18:00									3.2	2.23						4	33.15										
19:00									5.2	2.19						9	35.94										
20:00									3.2	2.32						8	32.62										
24:00									5.2	2.12						8	35.92										



แบบฟอร์มรายงานการปล่อยน้ำเสียประจําวัน (EO-487 F1)

REV.01

แบบฟอร์มรายงานผลการปล่อยน้ำเสียประจําวัน 12 ก.ค. 2562

Station	Lift Pump Station Influent				EQ				Aeration				Effluent				Electrical				Sum Unit	Remark
Time	Flow m3	PH	TDS <3000	COD <750	COD <150	DO <1.5	Level m	Flow m3	DO <1.5	SV30	PH	TDS <3000	BOD <20	COD <120	Flow m3	Normal kw-h/1000	Emergency kw-h/100					
8.00																	17.38.6	7075.4				
9.00	MATH				3.9	1.72		3.2						9	29.10							
10.00					3.9	1.24		3.2						9	29.50							
11.00		6.95	1534	21	52	3.0	1.73		3.4	1.0	6.9	1504	9	30.30								
12.00						4.0	1.94		3.3					9	31.60							
13.00						4.1	1.91		3.4					9	30.30							
14.00					4.0	2.09		3.6					9	30.50								
15.00					3.9	2.76		3.5					9	34.70								
16.00					3.7	2.59		3.2					9	29.80								
17.00					4.0	2.99		3.0					9	29.60								
18.00					4.1	3.05		3.4					9	28.90								
19.00					4.0	3.04		3.7					9	34.50								
20.00					3.9	3.04		3.3					9	30.30								
24.00					3.9	3.11		3.2					9	30.90								
Total																						



แบบฟอร์มรายงานการปล่อยน้ำเสียประจําวัน (EO-487 F1)

REV.01

แบบฟอร์มรายงานผลการปล่อยน้ำเสียประจําวัน 15 ก.ค. 2562

Station	Lift Pump Station Influent					EQ			Aeration			Effluent				Electrical				Sem Unit	Year 2558
	Item	Flow m3	PH	TDS	COD	COD	DO	Level m	Flow m3	DO	SV30	PH	TDS	BOD	COD	Flow m3	Normal kw-h/100	Emergency kw-h/100			
0.00	14/11/12					400		200									2255.5	2047.0			
8.00						30.9	0.30		3.6					11	42.63						
9.00						30.8	0.30		3.5					11	39.43						
10.00		1.66	1422	7.0	81		0.6	0.24		4.0	7.11	1144		19	36.42						
11.00						30.9	0.32		3.6					10	37.6						
12.00						30.9	0.31		3.5					9	35.99						
13.00						30.8	0.34		3.6					9	35.99						
14.00						3.7	0.72		3.7					10	40.74						
15.00						3.6	0.76		3.6					10	39.41						
16.00						3.6	0.30		3.7					9	35.45						
17.00						3.7	0.46		3.7					9	35.72						
18.00						3.7	0.31		3.7					9	35.81						
19.00						3.6	0.36		3.6					9	35.84						
20.00						3.8	0.79		3.5					9	35.81						
24.00																					
Total																					

[illegible]

Station				Lift Pump Station Inflow				EQ				Aeration				Effluent				Electrical				Dom Unit	10/1/2015
Inns Time	Flow m3	PH	TDS	COD	COD <75	<150	<250	DO Level m	Flow m3	<1.5	DVWS	PH	TDS	DO	COD <120	Flow m3	Normal flow 17000	Emergency flow 1160	17500	10770					
8:00																									
8:00								5.9	1.15						5	95.10									
9:00								5.5	1.15						5	95.10									
10:00								5.5	1.15						5	95.10									
11:00								5.5	1.15						5	95.10									
12:00								5.5	1.15						5	95.10									
13:00								5.5	1.15						5	95.10									
14:00								5.5	1.15						5	95.10									
15:00								5.5	1.15						5	95.10									
16:00								5.5	1.15						5	95.10									
17:00								5.5	1.15						5	95.10									
18:00								5.5	1.15						5	95.10									
19:00								5.5	1.15						5	95.10									
20:00								5.5	1.15						5	95.10									
21:00								5.5	1.15						5	95.10									
22:00								5.5	1.15						5	95.10									

[illegible]

Station	Lift Pump Station Inflow					EQ			Aeration			Effluent			Electrical			Notes
Instr Time	Flow m3	PI1	TD1	CCD	CCD	CCD	Low	Level m	Flow m3	CCD	SV30	PI1	TD1	CCD	Flow m3	Normal kW-h/150	Emergency kW-h/150	Sec Unit
9:00	14.5	5																
9:05							3.7	2.01	3.1						9	40.9		
9:10							3.7	2.03	3.1						9	44.5		
9:15							3.1	1.95	3.3	100		7.11	1102	9	52.3			
9:20							3.2	2.04	3.2						10	64.9		
9:25							3.2	2.11	3.1						10	75.6		
9:30							4.7	2.14	4.0						10	85.5		
9:35							3.2	2.19	3.3						11	94.7		
9:40							4.1	2.2	3.5						10	55.5		
9:45							3.2	2.21	3.5						12	61.3		
9:50							3.2	2.19	3.3						11	60.0		
9:55							3.2	2.20	3.3						11	59.4		
10:00							3.2	2.22	3.7						10	61.9		
10:05							3.2	2.23	3.4						11	63.9		

[illegible][illegible]

[illegible][illegible][illegible][illegible][illegible][illegible]



แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน (EO-1-057 F1)

REV.01

แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน 25 มิ.ย. 2567

Station	Lift Pump Station Influent					EQ					Aeration					Effluent					Electrical			หมายเหตุ
Item	Flow	PH	TDS	COD	COD	DO	Level	Flow	DO	SV30	PH	TDS	BOD	COD	Flow	Normal	Emergency	Sum	Unit					
	m3	5-9	<1000	<150	<150	<1.5	m	m3	<1.5		5.5-9	<1000	<10	<120	m3	kw-h/100	kw-h/100							
0:00							2.17											73.41	9.29	5.3				
0:30							4.1	2.55	3.9					10	37.10									
0:45							3.9	2.43	2.1					9	35.40									
1:00							3.9	2.57	3.1	1.00	6.58	11.1		9	30.90									
1:15							4.0	2.91	3.2					9	31.10									
1:30							4.1	2.61	3.3					10	30.90									
1:45							4.0	2.94	3.1					9	28.50									
2:00							3.9	2.99	3.2					9	29.30									
2:15							3.9	3.02	3.4					1	30.30									
2:30							3.4	3.00	3.1					10	31.10									
2:45							3.9	3.06	3.9					9	30.10									
3:00							4.0	3.05	3.9					1	31.30									
3:15							3.9	3.10	3.1					9	30.10									
3:30							4.1	3.09	3.1					9	29.50									
Total																								



แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน (EO-1-057 F1)

REV.01

แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน 20-07-2567

Station		Lift Pump Station Influent					EQ		Aeration		Effluent					Electrical				หมายเหตุ
Item	Flow	PH	TDS	COD	COD	DO	Level	Flow	DO	SV30	PH	TDS	BOD	COD	Flow	Normal	Emergency	Sum	Unit	
Time	m3	5-9	<1000	<150	<150	<1.5	m	m3	<1.5	SV30	5.5-9	<1000	<10	<120	m3	kw-h/100	kw-h/100			
0:00																				
0:30							4.2	2.52	3.7						8	30.90				
0:45							4.3	2.71	3.7						9	29.60				
1:00							3.7	2.54	3.7	1.00	6.41	10.3		9	30.80					
1:15							4.3	2.26	3.9						9	30.70				
1:30							3.6	2.15	3.9						9	30.10				
1:45							4.3	2.71	3.6						9	31.01				
2:00							4.3	2.48	3.3						9	30.10				
2:15							4.4	2.68	3.6						9	30.10				
2:30							3.7	2.59	3.7						7	31.10				
2:45							4.4	2.62	3.2						9	30.10				
3:00							4.6	2.68	3.9						9	30.10				
3:15							4.3	2.70	3.9						9	31.10				
3:30							4.4	2.76	3.6						7	30.10				
3:45																				
Total																				



แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน (EO-1-057 F1)

REV.01

แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน 29 มิ.ย. 2567

Station		Lift Pump Station Influent				EQ		Aeration			Effluent				Electrical			หมายเหตุ		
Item	Time	Flow m3	PH	TDS 5-9	COD 1000-1500	COD 150	DO 1.5	Level m	Flow m3	DO 1.5	SV30	PH	TDS 1000	BOD 10	COD 120	Flow m3	Normal kw-h/100	Emergency kw-h/100	Sum	Unit
100000	0:00						2.17							10	37.10		73.41	9.29	5.3	
	0:30						4.1	2.55	3.9					9	35.40					
	0:45						3.9	2.43	2.1					9	35.40					
	1:00						3.9	2.57	3.1	1.00	6.58	11.1		9	30.90					
	1:15						4.0	2.91	3.2					9	31.10					
	1:30						4.1	2.61	3.3					10	30.90					
	1:45						4.0	2.94	3.1					9	28.50					
	2:00						3.9	2.99	3.2					9	29.30					
	2:15						3.9	3.02	3.4					1	30.30					
	2:30						3.4	3.00	3.1					10	31.10					
	2:45						3.9	3.04	3.9					9	30.10					
	3:00						4.0	3.05	3.9					1	31.30					
	3:15						3.9	3.10	3.1					9	30.10					
	3:30						4.1	3.09	3.1					9	29.50					
	Total																			



แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน (EO-1-057 F1)

REV.01

แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน 29 มิ.ย. 2567

Station		Lift Pump Station Influent				EQ		Aeration		Effluent				Electrical			หมายเหตุ		
Item	Time	Flow m3	PH	TDS mg/l	COD mg/l	COD mg/l	DO mg/l	Flow m3	DO mg/l	SV30	PH	TDS mg/l	BOD mg/l	COD mg/l	Flow m3	Normal kw-h/100		Emergency kw-h/100	Sum Unit
	0:00																		
	0:30																		
	0:45																		
	1:00																		
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แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน (EO-1-057 F1)

REV.01

แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน 29 มิ.ย. 2567

Station		Lift Pump Station Influent				EQ		Aeration		Effluent				Electrical			10/10/19			
Item	Time	Flow m ³	PH	TDS 5-9	COD <1000	COD <150	DO <1.5	Level m	Flow m ³	DO <1.5	SV30	PH	TDS 5.5-9	BOD <10	COD <120	Flow m ³		Normal kw-h/100	Emergency kw-h/100	Sum Unit
0:00																		73.41	9.29	5.3
0:30							2.17								6	18.80				
0:45							4.1	2.55	3.9					9	19.20					
1:00		6.9	8.4		60	49	3.6	2.41	3.9	1.00	6.48	11.1		9	19.20					
1:15							4.1	2.57	4.1					7	16.70					
1:30							4.1	2.61	4.1					6	16.50					
1:45							3.9	2.91	3.7					9	16.10					
2:00							3.9	2.94	3.9					9	19.40					
2:15							3.6	3.00	3.1					9	19.30					
2:30							3.6	3.01	4.1					9	19.30					
2:45							3.6	3.02	3.6					9	19.30					
3:00							3.7	3.03	3.6					9	19.30					
3:15							3.9	3.04	3.7					10	19.30					
3:30							3.9	3.05	3.7					10	19.30					
3:45							3.9	3.06	3.7					11	19.30					
3:59							3.9	3.07	3.7					11	19.30					
24:00																				



แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน (EO-1-057 F1)

REV.01

แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน 29 มิ.ย. 2567

Station		Lift Pump Station Influent				EQ
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แบบฟอร์มรายงานการปฏิบัติงานประจำวัน (EO-1-057 F1)

REV.01

แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน

Station	Lift Pump Station Influent				EQ				Aeration				Effluent				Electrical				Remarks
	Time	Flow m ³	PH	TDS <1000	COD <150	DO <1.5	Level m	Flow m ³	DO <1.5	SV30	PH	TDS 5.5-9	BOD <20	COD <120	Flow m ³	Normal In-b*100	Emergency In-b*160	Sun Unit			
8.00	08:00																				
9.00						5.1	2.41	3.9					9	31.14							
10.00						5.5	2.45	3.9					9	32.15							
11.00		7.17	10.51	77	64	3.6	2.63	3.5	1.9	1.94	13.6		7	35.43							
12.00						3.5	2.63	3.5					6	34.09							
13.00						3.7	2.60	3.6					7	37.72							
14.00						3.6	2.59	3.5					6	34.09							
15.00						3.1	2.61	3.3					9	34.09							
16.00						3.5	2.63	3.2					10	35.54							
17.00						3.6	2.63	3.4					7	34.11							
18.00						3.7	2.60	3.4					9	34.09							
19.00						3.3	2.59	3.4					6	33.15							
20.00						3.7	2.57	3.5					7	33.01							
24.00						3.5	2.57	3.4					9	33.11							
Total																					



แบบฟอร์มรายงานการปฏิบัติงานประจำวัน (EO-1-057 F1)

REV.01

แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน

Station	Lift Pump Station Influent					EQ					Aeration					Effluent					Electrical			Status	Remarks
	Time	Flow m ³	PH	TDS 3-9	COD <150	DO <1.5	Level m	Flow m ³	DO <1.5	SV30	PH	TDS 5.5-9	BOD <20	COD <120	Flow m ³	Normal kw-h*100	Emergency kw-h*160	Unit							
0.00																									
8.00	08:00-19:00					3.1	2.54		3.5				8	27.50											
9.00						3.3	2.54		3.4				9	27.42											
10.00		7.07	13.51	51	37	3.0	2.31		3.5	1.60	1.74	11.24	9	28.10											
11.00						3.4	2.31		3.4																
12.00						3.3	2.34		3.5					9	28.10										
13.00						3.7	2.55		3.6																
14.00						3.3	2.57		3.6																
15.00						3.5	2.63		3.5																
16.00						3.3	2.57		3.6																
17.00						3.6	2.71		3.6																
18.00					3.5	2.71		3.5																	
19.00					3.6	2.73		3.3																	
20.00					3.5	2.76		3.6																	
24.00																									
Total																									



แบบฟอร์มรายงานการปฏิบัติงานประจำวัน (EO-1-057 F1)

REV.01

แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน

Station	Lift Pump Station Influent					EQ			Aeration			Effluent			Electrical				Sun Unit	REMARKS
	Time	Flow m ³	PH	TDS	COD	DO	Level m	Flow m ³	DO	SV30	PH	TDS	BOD	COD	Flow m ³	Normal In-b*100	Emergency In-b*160			
0.00	08:00		5.9	<100	<150	<1.5					5.5-9	<100	<20	<120			7.5 ± 0.7			
8.00						3.4	2.40	3.4					9	33.31						
9.00						3.5	2.55	3.5					9	34.12						
10.00		3.19	12.27	92	64	3.3	2.41	3.5	1.60	2.04	10.27		9	31.94						
11.00						3.5	2.40	3.3					7	30.03						
12.00						3.5	2.65	3.3					7	30.54						
13.00						3.4	2.64	3.4					3	30.44						
14.00						3.6	2.74	3.6					9	32.81						
15.00						3.4	2.64	3.4					9	33.51						
16.00						3.5	2.71	3.3					7	32.74						
17.00						3.4	2.70	3.2					9	33.31						
18.00						3.4	2.74	3.2					10	34.83						
19.00						3.5	2.71	3.3					9	33.14						
20.00						3.6	2.73	3.4					9	32.73						
24.00																				
Total																				



แบบฟอร์มรายงานการปฏิบัติงานประจำวัน (EO-1-057 F1)

REV.01

แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน

Station	Lift Pump Station Influent					EQ			Aeration			Effluent				Electrical				Remarks
	Time	Flow m3	PH	TDS 5-9	COD <150	DO <1.5	Level m	Flow m3	DO <1.5	SV30	PH	TDS 5.5-9	BOD <20	COD <120	Flow m3	Normal kw-h/100	Emergency kw-h/160	Sun Unit		
0.00	08:00																			
8.00						3.6	2.36	3.8					8	28.00						
9.00						3.6	2.38	3.8					8	28.00						
10.00		3.19	13.53	63	38	3.6	2.62	3.8	1.60	6.41	11.57		9	29.70						
11.00						3.6	2.62	3.9					10	28.00						
12.00						3.9	2.60	4.3					11	27.00						
13.00						3.9	2.60	4.2					11	27.00						
14.00						4.1	2.60	4.1					11	27.00						
15.00						3.9	2.61	3.9					12	27.00						
16.00						3.6	2.64	3.6					12	27.00						
17.00						3.4	2.61	3.5					12	27.00						
18.00						3.8	2.61	3.7					10	27.00						
19.00						3.9	2.61	4.1					11	27.00						
20.00						3.6	2.62	4.9					12	27.00						
24.00						3														
Total																				



แบบฟอร์มรายงานการปฏิบัติงานประจำวัน (EO-1-057 F1)

REV.01

แบบฟอร์มรายงานผลการปฏิบัติงานประจำวัน

Station	Lift Pump Station Influent					EQ					Aeration					Effluent					Electrical			Remarks
	Time	Flow m ³	PH	TDS 5-9	COD <150	DO <1.5	Level m	Flow m ³	DO <1.5	SV30	PH	TDS 5.5-9	BOD <20	COD <120	Flow m ³	Normal In-b*100	Emergency In-b*160	Sun Unit						
0.00	08:00																							
8.00						3.4	2.44	3.2					9	32.15										
9.00						3.6	2.61	3.7					9	32.15										
10.00		7.54	10.11	47	82	3.3	2.51	3.9	1.0	1.11	10.11		10	32.15										
11.00						3.5	2.53	3.3					7	32.15										
12.00						3.5	2.56	3.4					7	32.15										
13.00						3.7	2.55	3.4					9	32.15										
14.00						3.9	2.59	3.5					9	32.15										
15.00						3.4	2.59	3.4					7	32.15										
16.00						3.7	2.49	3.7					9	32.15										
17.00						3.4	2.37	3.9					9	32.15										
18.00						3.4	2.37	3.9					9	32.15										
19.00						3.3	2.39	3.8					10	32.15										
20.00						3.0	2.31	3.9					10	32.15										
24.00																								
Total																								

[illegible]

Station		Lift Pump Station Inflow				EQ			Aeration		Effluent				Electrical			1/11/2019
Item	Flow	PH	TDS	COD	COD	Level	Flow		PH	TDS	BOD	COD	Flow	Normal	Emergency	Sec		
Time	m ³	5.0	<100	<10	<70	<1.5	m ³	<1.5	5.0-9	<100	<10	<10	m ³	kw=1000	kw=1100	Unit		
8:00																		
8:05						7.6	6.6						9	95.1				
8:10						7.6	6.6						9	95.1				
8:15						7.6	6.6						9	95.1				
8:20	7.37	7.6	6.6	6.6	7.3	7.6	6.6	7.3	7.6	6.6	6.6	6.6	7.3	95.1				
8:25						7.6	6.6						9	95.1				
8:30						7.6	6.6						9	95.1				
8:35						7.6	6.6						9	95.1				
8:40						7.6	6.6						9	95.1				
8:45						7.6	6.6						9	95.1				
8:50						7.6	6.6						9	95.1				
8:55						7.6	6.6						9	95.1				
9:00						7.6	6.6						9	95.1				
9:05						7.6	6.6						9	95.1				
9:10						7.6	6.6						9	95.1				
9:15						7.6	6.6						9	95.1				
9:20						7.6	6.6						9	95.1				
9:25						7.6	6.6						9	95.1				
9:30						7.6	6.6						9	95.1				
9:35						7.6	6.6						9	95.1				
9:40						7.6	6.6						9	95.1				
9:45						7.6	6.6						9	95.1				
9:50						7.6	6.6						9	95.1				
9:55						7.6	6.6						9	95.1				
10:00						7.6	6.6						9	95.1				

[illegible]

Station		Lift Pump Stations Inflow				EQ				Aeration				Effluent				Electrical				Totals	
Item	Flow	PH	TDS	COD	COD	Level	Flow	DO	DO	PH	TDS	BOD	COD	Flow	Normal	Emergency	Gas	Unit	Unit	Unit	Unit		
Time	m ³	5-9	<100	<150	<150	<1.5	m ³	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	kw-hr	kw-hr	Unit	Unit	Unit	Unit	Unit		
8:00	1000						1000							1000	1000	1000							
8:05						3.9	5.94							11	34.21								
8:10						3.9	5.84							10	33.19								
8:15						3.6	5.69			1.02	5.69	11.2		8	31.78								
8:20						3.2	5.01							8	31.78								
8:25						3.7	5.45							9	32.48								
8:30						3.6	5.35							9	32.77								
8:35						3.7	5.44							10	33.23								
8:40						3.7	5.46							10	33.36								
8:45						3.6	5.43							9	32.51								
8:50						3.6	5.45							10	33.28								
8:55						3.5	5.44							11	34.14								
9:00						3.5	5.41							11	34.51								
9:05						3.6	5.43							9	33.27								

[illegible][illegible]

[illegible][illegible]

Station	Lift Pump Station Inflow					RQ			Aeration			Effluent			Electrical			Notes
Date	Flow m ³	PH	TDS	CO ₂	CO ₂	DO	Level m	Flow m ³	DO	SV30	PH	TDS	CO ₂	CO ₂	Flow m ³	Normal kw-h/30	Emergency kw-h/30	Sec
Time	5-9	<100	<150	<750	<15	<1.0			<0.5		5.5-9	<100	<15	<120				
8:00	16700							1000							2700	720.50	7146.60	
8:00						5.10	6.54	9.10						9	50.10			
8:00						5.00	5.50	5.00						9	50.00			
9:00						5.10	6.54	5.10	1.00	300.00	9.00			9	50.00			
10:00		7.80	9.40	6.50	9.9									9	50.00			
11:00						5.10	6.54	5.50						9	50.10			
12:00						5.10	6.54	5.00						9	50.10			
13:00						5.10	6.54	5.10						9	50.10			
14:00						5.10	6.54	5.00						9	50.10			
15:00						5.10	6.54	5.10						9	50.10			
16:00						5.10	6.54	5.10						9	50.10			
17:00						5.10	6.54	5.10						9	50.10			
18:00						5.10	6.54	5.10						9	50.10			
19:00						5.10	6.54	5.10						9	50.10			
20:00						5.10	6.54	5.10						9	50.10			
24:00						5.10	6.54	5.10						9	50.10			

[illegible][illegible][illegible]

[illegible][illegible]

Station	Lift Pump Station Inflow					EQ					Aeration					Effluent					Electrical			Notes
Incr Time	Flow m3	PH	TS	COD	COD	TS	Flow m3	PH	TS	COD	TS	Flow m3	PH	TS	COD	TS	Flow m3	PH	TS	Flow m3	PH	TS		
7:50	957312			<100	<150										3.5-9									
							3.5	7.41		3.5							7	34.41						
8:00							3.5	7.56		3.4							8	34.79						
9:00							3.5	7.40		3.4	1.40	6.44	5.74				8	35.32						
10:00		1.54	12.51	4.6	4	1																		
11:00							3.6	7.35		3.4							8	34.51						
12:00							3.7	7.37		3.5							7	33.33						
13:00							3.6	7.39		3.4							8	34.40						
14:00							3.6	7.37		3.5							7	35.41						
15:00							3.4	7.34		3.5							7	33.42						
16:00							3.5	7.39		3.2							8	34.44						
17:00							3.4	7.35		3.2							7	34.81						
18:00							3.4	7.34		3.4							7	35.40						
19:00							3.4	7.35		3.4							8	34.36						
20:00							3.5	7.34		3.5							8	34.66						

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แบบฟอร์มรายงานผลการปฏิบัติงานเชิงประจักษ์ (ECO-1-057 FI)
แบบฟอร์มรายงานผลการปฏิบัติงานเชิงประจักษ์ 24.14.1.057

REV.01

Lift Pump Station Influent										Lift Pump Station Effluent										Electrical					
Item	Flow	PH	TDS	COD	DO	Level	Flow	DO	SV30	PH	TDS	BOD	COD	Flow	Normal	Emergency	Sum	19/10/2014							
Time	m3	5-9	<1000	<750	<1.5	m	m3	<1.5	5-9	5.5-9	<1000	<20	<120	m3	kw-h/1000	kw-h/1000	Unit								
0:00																									
1:00	1999m3				0.9	0.80			11.4					0.8	0.97										
2:00					0.9	0.80			11.4					0.8	0.97										
3:00					0.9	0.80			11.4					0.8	0.97										
4:00					0.9	0.80			11.4					0.8	0.97										
5:00					0.9	0.80			11.4					0.8	0.97										
6:00		6.77	9.87	97	0.0	0.7	1.50			4.80	7.60	900			0.8	0.97									
7:00					0.9	0.80				11.4					0.8	0.97									
8:00					0.9	0.80				11.4					0.8	0.97									
9:00					0.9	0.80				11.4					0.8	0.97									
10:00					0.9	0.80				11.4					0.8	0.97									
11:00				0.9	0.80				11.4					0.8	0.97										
12:00				0.9	0.80				11.4					0.8	0.97										
13:00				0.9	0.80				11.4					0.8	0.97										
14:00				0.9	0.80				11.4					0.8	0.97										
15:00				0.9	0.80				11.4					0.8	0.97										
16:00				0.9	0.80				11.4					0.8	0.97										
17:00				0.9	0.80				11.4					0.8	0.97										
18:00				0.9	0.80				11.4					0.8	0.97										
19:00				0.9	0.80				11.4					0.8	0.97										
20:00				0.9	0.80				11.4					0.8	0.97										
21:00				0.9	0.80				11.4					0.8	0.97										
22:00				0.9	0.80				11.4					0.8	0.97										
23:00				0.9	0.80				11.4					0.8	0.97										
24:00				0.9	0.80				11.4					0.8	0.97										
Total																									



แบบฟอร์มรายงานผลการปฏิบัติงานเชิงประจักษ์ (ECO-1-057 FI)
แบบฟอร์มรายงานผลการปฏิบัติงานเชิงประจักษ์ 24.14.1.057

REV.01

Lift Pump Station Influent																		Lift Pump Station Effluent																	
Station	Flow	PH	TDS	COD	DO	Level	Flow	DO	SV30	PH	TDS	BOD	COD	Flow	Normal	Emergency	Sum	WARNING																	
Time	m3	5-9	<1000	<750	<1.5	m	m3	<1.5	5-9	5.5-9	<1000	<20	<120	m3	kw-h/1000	kw-h/1000	Unit																		
0:00															1429.6	1524.1																			
1:00						0.9	0.80							0.8	0.97																				
2:00						0.9	0.80							0.8	0.97																				
3:00						0.9	0.80							0.8	0.97																				
4:00						0.9	0.80							0.8	0.97																				
5:00						0.9	0.80							0.8	0.97																				
6:00						0.9	0.80							0.8	0.97																				
7:00						0.9	0.80							0.8	0.97																				
8:00						0.9	0.80							0.8	0.97																				
9:00						0.9	0.80							0.8	0.97																				
10:00						0.9	0.80							0.8	0.97																				
11:00						0.9	0.80							0.8	0.97																				
12:00						0.9	0.80							0.8	0.97																				
13:00						0.9	0.80							0.8	0.97																				
14:00						0.9	0.80							0.8	0.97																				
15:00						0.9	0.80							0.8	0.97																				
16:00						0.9	0.80							0.8	0.97																				
17:00						0.9	0.80							0.8	0.97																				
18:00						0.9	0.80							0.8	0.97																				
19:00						0.9	0.80							0.8	0.97																				
20:00						0.9	0.80							0.8	0.97																				
21:00						0.9	0.80							0.8	0.97																				
22:00						0.9	0.80							0.8	0.97																				
23:00						0.9	0.80							0.8	0.97																				
24:00						0.9	0.80							0.8	0.97																				
Total																																			

Lift Pump Stations Inflow				EQ		Aeration		Effluent		Electrical						
Item	Flow	PH	TDS	COD	DO	Level	Flow	DO	SV30	PH	TDS	COD	Flow	Normal	Emergency	Unit
Time	m3	3-9	<3000	<15	<15	m	m3	<1.5		3.5-9	<3000	<10	m3	low-3-1000	low-3-160	Unit
8:00	2514					0.15	2.90						2	35.10		7011.50
9:00						0.15	2.90						2	35.10		
9:30						0.15	2.90						2	35.10		
10:00	2514					0.15	2.90		1.06				2	35.10		
11:00						0.15	2.90						2	35.10		
12:00						0.15	2.90						2	35.10		
13:00						0.15	2.90						2	35.10		
14:00						0.15	2.90						2	35.10		
15:00						0.15	2.90						2	35.10		
16:00						0.15	2.90						2	35.10		
17:00						0.15	2.90						2	35.10		
18:00						0.15	2.90						2	35.10		
19:00						0.15	2.90						2	35.10		
20:00						0.15	2.90						2	35.10		
24:00						0.15	2.90						2	35.10		

[illegible]

Station	Lift Pump Station Inflow				EQ				Accretion				Effluent				Electrical				Notes
Time	Flow m ³ /s	PH	TDs	COD	CDO	DO	Dis	Level m	Flow m ³ /s	DO	Sp/50	PH	TDs	COD	CDO	DO	Dis	Flow m ³ /s	Normal	Emergency	
		5-9	<000	<75		<70	<0					5.5-9	<000	<10	<15	<12			kw*7300	kw*4160	Unit
0:00	0.00																		774.6	7409.1	
0:30	0.00																				
1:00	0.00																				
1:30	0.00																				
2:00	0.00																				
2:30	0.00																				
3:00	0.00																				
3:30	0.00																				
4:00	0.00																				
4:30	0.00																				
5:00	0.00																				
5:30	0.00																				
6:00	0.00																				
6:30	0.00																				
7:00	0.00																				
7:30	0.00																				
8:00	0.00																				
8:30	0.00																				
9:00	0.00																				
9:30	0.00																				
10:00	0.00																				
10:30	0.00																				
11:00	0.00																				
11:30	0.00																				
12:00	0.00																				
12:30	0.00																				
13:00	0.00																				
13:30	0.00																				
14:00	0.00																				
14:30	0.00																				
15:00	0.00																				
15:30	0.00																				
16:00	0.00																				
16:30	0.00																				
17:00	0.00																				
17:30	0.00																				
18:00	0.00																				
18:30	0.00																				
19:00	0.00																				
19:30	0.00																				
20:00	0.00																				
20:30	0.00																				
21:00	0.00																				
21:30	0.00																				
22:00	0.00																				
22:30	0.00																				
23:00	0.00																				
23:30	0.00																				
Total																					

[illegible][illegible][illegible]



แบบฟอร์มรายงานผลการปฏิบัติงานเพื่อประเมิน (EO-1-057 F1)
แบบฟอร์มรายงานผลการปฏิบัติงานเพื่อประเมิน 11 4. 4. 67

REV.01

Station	Lift Pump Station Inflow					EQ			Aeration			Effluent			Electrical			Sum	หมายเหตุ
	Item	Flow m3	PH	TDS mg/l	COD mg/l	DO mg/l	Level m	Flow m3	DO mg/l	SV30	PH	TDS mg/l	BOD mg/l	COD mg/l	Flow m3	Normal kw-h/300	Emergency kw-h/160		
Time		5-9	<1000	<150	<150	<1.5					5.5-9	<1000	<100	<120					
6:00	0.00							0.00							0.00	1725.5	7.543.4		
8:00							3.2	2.4	3.4				9	35.1					
9:00							3.2	2.4	3.5				8	34.8					
10:00		6.35	84.6	78	64	3.8	2.4	3.5	1.02	1.41			8	34.6					
11:00							3.5	2.4	3.4				9	35.1					
12:00							3.2	2.4	3.4				9	35.1					
13:00							3.6	2.4	3.9				10	35.6					
14:00							3.6	2.4	3.4				9	35.1					
15:00							3.5	2.4	3.2				9	34.8					
16:00							3.5	2.4	3.1				10	34.6					
17:00							3.6	2.4	3.1				9	34.8					
18:00							3.7	2.4	3.2				8	34.6					
19:00							3.7	2.4	3.5				9	35.1					
20:00							3.6	2.4	3.5				9	35.1					
24:00																			
Total																			
Avg																			



แบบฟอร์มรายงานผลการปฏิบัติงานเพื่อประเมิน (EO-1-057 F1)
แบบฟอร์มรายงานผลการปฏิบัติงานเพื่อประเมิน 14 4. 4. 67

REV.01

Station	Lift Pump Station Inflow					EQ					Aeration					Effluent					Electrical					Sum	หมายเหตุ
	Item	Flow	PH	TDS	COD	DO	Level	Flow	DO	SV30	PH	TDS	BOD	COD	Flow	Normal	Emergency	Unit	Unit	Unit	Unit						
Time	m3	5-9	<1000	<150	<150	<1.5	m	m3	<1.5	5.5-9	<1000	<100	<120	<120	m3	kw-h/300	kw-h/160	Unit									
6:00	0.00						3.5	2.4	3.4					10 33.5													
8:00							3.6	2.05	3.9					9 32.42													
10:00		6.35	104.6	78	64	3.8	2.4	2.05	3.7	1.0	6.35	715	8	39.12													
11:00							3.5	2.10	3.8					9 34.28													
12:00							3.4	2.15	3.9					5 39.81													
13:00							3.5	2.14	3.6					11 37.93													
14:00							3.2	2.2	3.9					12 38.15													
15:00							3.9	2.25	3.7					10 39.24													
16:00							4.0	2.12	3.6					9 39.11													
17:00							4.1	2.23	3.2					9 37.62													
18:00							3.9	2.21	3.6					9 38.24													
19:00							3.6	2.24	3.4					9 36.15													
20:00							3.5	2.25	3.6					9 36.15													
24:00																											
Total																											
Avg																											



แบบฟอร์มรายงานผลการปฏิบัติงานเพื่อประเมิน (EO-1-057 F1)
แบบฟอร์มรายงานผลการปฏิบัติงานเพื่อประเมิน 10 4. 4. 67

REV.01

Station	Lift Pump Station Inflow					EQ					Aeration					Effluent					Electrical			Sum	หมายเหตุ
	Item	Flow m3	PH	TDS	COD	DO	Level m	Flow m3	DO	SV30	PH	TDS	BOD	COD	Flow m3	Normal kw-h/300	Emergency kw-h/160	Unit	Unit						
Time	06:00	5.0	5.9	<3000	<150	4700	<1.5	5.0	<1.5	5.5-9	5.5-9	<3000	<120	<120	4'	1745.5	133 P.7								
8:00	0.00	0.00					3.2	2.4	3.4				9	35.1											
9:00							3.2	2.4	3.4				9	35.1											
10:00		6.35	84.6	78	64	59	3.5	2.4	3.4	1.02	1.41	212	8	34.1											
11:00							3.5	2.4	3.4				8	34.7											
12:00							3.4	2.12	3.7				9	35.48											
13:00							3.4	2.21	3.2				8	34.54											
14:00							3.3	2.34	3.4				9	35.51											
15:00							3.3	2.32	3.4				9	35.54											
16:00							3.3	2.20	3.5				10	36.79											
17:00							3.4	2.33	3.4				9	34.41											
18:00							3.3	2.31	3.5				9	35.46											
19:00							3.3	2.34	3.5				9	35.41											
20:00							3.3	2.31	3.4				8	35.34											
24:00																									
Total																									
Avg																									



แบบฟอร์มรายงานผลการปฏิบัติงานเพื่อประเมิน (EO-1-057 F1)
แบบฟอร์มรายงานผลการปฏิบัติงานเพื่อประเมิน 15 4. 4. 67

REV.01

Station	Lift Pump Station Inflow					EQ			Aeration			Effluent			Electrical			Sum	Remarks
	Item	Flow m3	PH	TDS mg/l	COD mg/l	DO mg/l	Level m	Flow m3	DO mg/l	SV30	PH	TDS mg/l	BOD mg/l	COD mg/l	Flow m3	Normal kw-h/300	Emergency kw-h/160		
6:00	0.00	0.00						0.00								7245.4	7.343.4		
8:00							3.6 2.15	3.4					9 35.1						
9:00							3.6 2.22	3.7					9 35.1						
10:00		6.32	84.6	84	64		3.5 2.28	3.4	1.02	1.41			10 35.1						
11:00							3.5 2.25	3.4					9 35.1						
12:00							3.6 2.22	3.5					11 35.05						
13:00							3.5 2.24	3.5					11 35.15						
14:00							3.7 2.22	3.4					10 35.1						
15:00							3.6 2.21	3.2					10 35.1						
16:00							3.6 2.20	3.7					9 35.05						
17:00							3.5 2.20	3.4					9 35.1						
18:00							3.6 2.22	3.6					5 35.72						
19:00							3.5 2.21	3.4					5 35.51						
20:00							3.6 2.24	3.4					9 35.1						
24:00																			
Total																			
Avg																			



แบบฟอร์มรายงานผลการปฏิบัติงานเพื่อประเมิน (EO-1-057 F1)
แบบฟอร์มรายงานผลการปฏิบัติงานเพื่อประเมิน 9 4. 4. 67

REV.01

Station	Lift Pump Station Inflow					EQ			Aeration			Effluent			Electrical			Sum	หมายเหตุ
	Item	Flow	PH	TDS	COD	DO	Level	Flow	DO	SV30	PH	TDS	BOD	COD	Flow	Normal	Emergency		
Time	m3	5-9	<1000	<150	<150	<1.5	m	m3	<1.5	5.5-9	<1000	<100	<120	<120	m3	kw-h/300	kw-h/160	Unit	
6:00	Flow							3.2	2.30					9	35.11				
8:00								3.2	2.34					10	34.84				
10:00		6.91	84.6	78	64	3.8	2.4	3.5	1.02	1.41			10	35.31					
11:00								3.5	2.4					9	34.81				
12:00								3.2	2.35					9	35.39				
13:00								3.6	2.45					9	34.61				
14:00								3.3	2.44					9	37.13				
15:00								3.5	2.35					9	37.64				
16:00								3.5	2.35					10	34.33				
17:00								3.6	2.43					10	37.46				
18:00							3.3	2.36					10	37.63					
19:00							3.3	2.36					9	35.81					
20:00							3.4	2.34					10	37.51					
24:00																			
Total																			
Ave																			



แบบฟอร์มรายงานการบำบัดน้ำเสียประจำวัน (EO-4-057 F1)
แบบฟอร์มรายงานผลการบำบัดน้ำเสียประจำวัน ๕ พ.ย. ๒๐๑๖

REV.01

Station	Inlet Pump Station Influent				EQ				Aeration				Effluent				Electrical				หมายเหตุ
Item	Flow	PH	TDS	COD	COD	DO	Level	Flow	DO	SV30	PH	TDS	BOD	COD	Flow	Normal	Emergency	Sum			
Time	m3	5-9	<3000	<750	<750	<1.5	m	m3	<1.5		5.5-9	<3000	<20	<120	m3	kw-h/1000	kw-h/1000	Unit			
8:00	1720					3.9	1.90	1.4							10	1.00	1.00				
9:00						3.9	1.90	1.4							10	1.00	1.00				
10:00	1.13	1800	26	65	0.7	1.90	1.4	1.4	1.0	6.5	1100				10	1.00	1.00				
11:00						3.9	1.90	1.4							10	1.00	1.00				
12:00						3.9	1.90	1.4							10	1.00	1.00				
13:00						3.9	1.90	1.4							10	1.00	1.00				
14:00						3.9	1.90	1.4							10	1.00	1.00				
15:00						3.9	1.90	1.4							10	1.00	1.00				
16:00						3.9	1.90	1.4							10	1.00	1.00				
17:00						3.9	1.90	1.4							10	1.00	1.00				
18:00						3.9	1.90	1.4							10	1.00	1.00				
19:00						3.9	1.90	1.4							10	1.00	1.00				
20:00						3.9	1.90	1.4							10	1.00	1.00				
21:00						3.9	1.90	1.4							10	1.00	1.00				
22:00						3.9	1.90	1.4							10	1.00	1.00				
Total																					
Ave.																					



แบบฟอร์มรายงานการบำบัดน้ำเสียประจำวัน (EO-4-057 F1)
แบบฟอร์มรายงานผลการบำบัดน้ำเสียประจำวัน ๖ พ.ย. ๒๕๖๖

REV.01

Station		Inlet Pump Station Influent				EQ				Aeration				Effluent				Electrical				
Item	Flow	PH	TDS	COD	COD	DO	Level	Flow	DO	SV30	PH	TDS	BOD	COD	Flow	Normal	Emergency	Sum				
Time	m3	5-9	<300	<750	<750	<1.5	m	m3	<1.5		5.5-9	<3000	<20	<120	m3	kw-h/1000	kw-h/1000	Unit	หมายเหตุ			
8:00						3.9	2.31		3.9						10	36.60						
9:00						3.9	2.65		3.9						10	34.30						
10:00		641	213	71	59	3.9	2.14	4400	4.0	1.00	670	193	10	35.30	5.900	716.0	131.6					
11:00						3.9	2.59		3.9						9	32.00						
12:00						4.0	1.0		4.0						9	25.10						
13:00						3.9	2.55		3.9						9	33.00						
14:00						4.1	2.51		4.0						10	24.10						
15:00						4.0	2.53		4.0						9	35.10						
16:00						3.9	2.43		4.1						9	24.60						
17:00						3.5			3.8						10	21.00						
18:00						3.4			3.9						10	37.90						
19:00						4.0			4.0						10	24.10						
20:00						4.1			4.0						9	32.30						
21:00																						
22:00																						
Total																						
Ave																						



แบบฟอร์มรายงานการบำบัดน้ำเสียประจำวัน (EO-4-057 F1)
แบบฟอร์มรายงานผลการบำบัดน้ำเสียประจำวัน

REV.01

Station		Inlet Pump Station Influent				EQ				Aeration				Effluent				Electrical					
Item	Flow	PH	TDS	COD	COD	DO	Level	Flow	DO	SV30	PH	TDS	BOD	COD	Flow	Normal	Emergency	Sum	หมายเหตุ				
Time	m3	5-9	<3000	<750	<750	<1.5	m	m3	<1.5		5.5-9	<3000	<20	<120	m3	kw-h/1000	kw-h/1000	Unit					
8:00																							
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Total																							



แบบฟอร์มรายงานการบำบัดน้ำเสียประจำวัน (EO-4-057 F1)
แบบฟอร์มรายงานผลการบำบัดน้ำเสียประจำวัน ๗ พ.ย. ๒๕๖๖

REV.01

Station	Lift Pump Station Influent					EQ			Aeration			Effluent				Electrical			
Item	Flow	PH	TDS	COD	COD	DO	Level	Flow	DO	SV30	PH	TDS	BOD	COD	Flow	Normal	Emergency	Sum	W/c cost
Time	m3	5-9	<3000	<750	<750	<1.5	m	m3	<1.5		5.5-9	<3000	<20	<120	m3	kw-h/1000	kw-h/1000	Unit	
8:00						3.9	1.48	3.36					6	38.80			174.66	731.61	
9:00						3.9	1.53	3.34					6	38.36					
10:00						3.9	1.35	3.62		1.00	5.34	54.6	6	36.36					
11:00						3.9	1.38	3.60					6	36.66					
12:00						3.9	1.34	3.40					7	40.00					
13:00						3.9	1.35	3.10					6	31.61					
14:00						3.9	1.38	3.10					7	36.40					
15:00						3.9	1.44	3.10					6	31.61					
16:00						3.49	1.50	3.10					6	29.66					
17:00						3.49	1.51	3.10					6	29.61					
18:00						3.10	1.63	3.10					6	34.36					
19:00						3.13	1.53	3.10					6	34.03					
20:00						3.50	1.51	3.13					6	31.01					
21:00																			
22:00																			
Total																			



แบบฟอร์มรายงานการบำบัดน้ำเสียประจำวัน (EO-4-057 F1)
แบบฟอร์มรายงานผลการบำบัดน้ำเสียประจำวัน ๘ พ.ย. ๒๕๖๖

REV.01

Station		Inlet Pump Station Influent		
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แบบฟอร์มรายงานการบำบัดน้ำเสียประจําวัน (ECO-4-057 F1)
แบบฟอร์มรายงานผลการบำบัดน้ำเสียประจําวัน 19 ธันวาคม 2562

REV:01

Lift Pump Station Influent				EQ				Aeration				Effluent				Electrical				รวม	10/10/19
Item	Flow	PH	TDS	COD	DO	Level	Flow	DO	SV30	PH	TDS	BOD	COD	Flow	Normal	Emergency	Sum				
Time	m3	5-9	<1000	<150	<150	m	m3	<1.5	5-9	<1000	<120	<120	<120	m3	kw-h/7200	kw-h/160	Unit				
0:00															151.5	759.0					
0:30																					
0:45																					
1:00																					
1:15																					
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แบบฟอร์มรายงานผลการปฏิบัติงานเมื่อปีงบประมาณ 2563 (EO-4-57 F1)

REV:01

แบบฟอร์มรายงานผลการปฏิบัติงานเมื่อปีงบประมาณ 2563 5 4 6 1

Lift Pump Station Influent					EQ					Aeration					Effluent					Electrical					หมายเหตุ
Item	Flow	PH	TDS	COD	COD	DO	Level	Flow	DO	SV30	PH	TDS	BOD	COD	Flow	Normal	Emergency	Sum							
Time	m3	5-9	<3000	<150	<150	<1.5	m	m3	<1.5	m	5.5-9	<3000	<20	<120	m3	kw-h/1000	kw-h/1000	Unit							
0:00	1547.1																	1760.7							
8:00						3.8	2.27		3.7						1	36.42									
9:00						3.5	2.24		3.8						1	31.47									
10:00	1.43	104.6	45	46		3.8	2.27	3.7	1.00	6.64	1144	5	32.70												
11:00						3.5	2.24		3.4						1	31.57									
12:00						3.7	2.27		3.7						1	30.72									
13:00						4.0	2.27		3.7						1	31.16									
14:00						4.1	2.27		3.7						1	32.74									
15:00						4.1	2.27		3.7						1	33.57									
16:00						4.1	2.27		4.0						1	36.72									
17:00						4.0	2.27		3.9						1	33.82									
18:00						3.9	2.25		3.7						1	27.70									
19:00						3.8	2.24		3.6						1	24.32									
20:00						3.7	2.22		3.7						1	26.75									
24:00																									
Total																									



แบบฟอร์มรายงานผลการปฏิบัติงานเมื่อปีงบประมาณ 2563 (EO-4-57 F1)

REV:01

แบบฟอร์มรายงานผลการปฏิบัติงานเมื่อปีงบประมาณ 2563 5 4 6 1

Lift Pump Station Influent										EQ				Aeration				Effluent				Electrical				หมายเหตุ		
Item	Flow m3	PH	TDS mg/l	COD <150	COD <150	DO <1.5	Level m	Flow m3	DO <1.5	SV30	PH	TDS mg/l	BOD <100	COD <120	Flow m3	Normal kw-h/1000	Emergency kw-h/100	Sum Unit										
Time		5-9	<3000	<150	<150	<1.5					5.5-9	<3000	<20	<120		kw-h/1000	kw-h/100	Unit										
0:00	1547.1																											
8:00						3.8	2.27	3.7							1	36.42												
9:00						3.5	2.24	3.8							1	36.47												
10:00	1.43	104.6	45	46		3.8	2.27	3.7	1.00	6.64	1144	5	32.70															
11:00						3.5	2.24	3.4							1	31.57												
12:00						3.7	2.27	3.7							1	30.72												
13:00						4.0	2.27	3.7							1	31.16												
14:00						4.1	2.27	3.7							1	32.74												
15:00						4.1	2.27	3.7							1	33.57												
16:00						4.1	2.27	4.0							1	36.72												
17:00						4.0	2.27	3.9							1	33.82												
18:00						3.9	2.25	3.7							1	27.70												
19:00						3.8	2.24	3.6							1	24.32												
20:00						3.7	2.22	3.7							1	26.75												
24:00																												
Total																												



แบบฟอร์มรายงานผลการปฏิบัติงานเมื่อปีงบประมาณ 2563 (EO-4-57 F1)

REV:01

แบบฟอร์มรายงานผลการปฏิบัติงานเมื่อปีงบประมาณ 2563 5 4 6 1

Lift Pump Station Influent					EQ					Aeration					Effluent					Electrical					Sum Unit	หมายเหตุ
Item	Flow m3	PH	TDS	COD	COD	DO	Level m	Flow m3	DO	SV30	PH	TDS	BOD	COD	Flow m3	Normal	Emergency	Sum								
Time		5-9	<3000	<150	<150	<1.5		<1.5			5.5-9	<3000	<20	<120		kw-h/1000	kw-h/1000	Unit								
0:00	1547.1							3.8	2.27	3.7					1	36.42				734.2	2194.1					
8:00								3.5	2.24	3.8					1	36.47										
9:00								3.5	2.24	3.8					1	36.47										
10:00		1.43	104.6	45	46			3.8	2.27	3.7	1.00	6.23	1137	5	32.70	1	31.57									
11:00								3.5	2.24	3.4					1	31.57										
12:00								3.7	2.27	3.7					1	30.72										
13:00								4.0	2.27	3.7					1	31.16										
14:00								4.1	2.27	3.7					1	32.74										
15:00								4.1	2.27	3.7					1	33.57										
16:00								4.1	2.27	4.0					1	36.72										
17:00							4.0	2.27	3.9					1	33.82											
18:00							3.9	2.25	3.7					1	27.70											
19:00							3.8	2.24	3.6					1	24.32											
20:00							3.7	2.22	3.7					1	26.75											
24:00																										
Total																										



แบบฟอร์มรายงานผลการปฏิบัติงานเมื่อปีงบประมาณ 2563 (EO-4-57 F1)

REV:01

แบบฟอร์มรายงานผลการปฏิบัติงานเมื่อปีงบประมาณ 2563 5 4 6 1

Station					Lift Pump Station Influent					EQ					Aeration					Effluent					Electrical					หมายเหตุ
Item	Flow	PH	TDS	COD	COD	DO	Level	Flow	DO	SV30	PH	TDS	BOD	COD	Flow	Normal	Emergency	Sum												
Time	m3	5-9	<3000	<150	<150	<1.5	m	m3	<1.5	m	5.5-9	<3000	<20	<120	m3	kw-h/1000	kw-h/1000	Unit												
0:00	1547.1																													
8:00						3.8	2.27	3.7							1	36.42														
9:00						3.5	2.24	3.8							1	36.47														
10:00	1.43	104.6	45	46		3.8	2.27	3.7	1.00	6.64	1144	5	32.70																	
11:00						3.5	2.24	3.4							1	31.57														
12:00						3.7	2.27	3.7							1	30.72														
13:00						4.0	2.27	3.7							1	31.16														
14:00						4.1	2.27	3.7							1	32.74														
15:00						4.1	2.27	3.7							1	33.57														
16:00						4.1	2.27	4.0							1	36.72														
17:00						4.0	2.27	3.9							1	33.82														
18:00						3.9	2.25	3.7							1	27.70														
19:00						3.8	2.24	3.6							1	24.32														
20:00						3.	2.23	3.6							1	40.43														
24:00																														
Total																														

[illegible]

Station	Lift Pump Station Inflow				EQ		Aerobic		Effluent				Electrical		
Time	Flow	PH	TDS	COD	COD	Level	Flow	SV30	PH	TDS	BOD	COD	Flow	Normal	Emergency
mm	m ³	5-9	<500	<750	<750	<1.5	m	<1.5	5.5-9	<500	<20	<150	m ³	kw/3750w	kw>3750w
8:00															
8:05						3.7	3.05				3.95	38.51		116.9	1490.4
8:10						3.4	3.05				3.94	38.26			
8:15						3.4	3.05				3.7	38.41			
8:20	6.19	115.5	66		13	3.4	3.05	1.95	5.94	107.1		38.41			
8:25						3.7	3.04				3.94	38.11			
8:30						3.7	3.04				3.94	38.43			
8:35						3.4	3.04				3.74	38.44			
8:40						3.7	3.04				3.98	38.11			
8:45						3.7	3.01				3.94	38.04			
8:50						3.7	3.01				3.7	38.11			
8:55						3.4	3.04				3.74	38.43			
9:00						3.4	3.04				3.94	38.43			
9:05						3.4	3.04				3.74	38.43			
9:10						3.4	3.04				3.94	38.43			
9:15						3.4	3.04				3.94	38.43			
9:20						3.4	3.04				3.94	38.43			
9:25						3.4	3.04				3.94	38.43			
9:30						3.4	3.04				3.94	38.43			
9:35						3.4	3.04				3.94	38.43			
9:40						3.4	3.04				3.94	38.43			
9:45						3.4	3.04				3.94	38.43			
9:50						3.4	3.04				3.94	38.43			
9:55						3.4	3.04				3.94	38.43			
10:00						3.4	3.04				3.94	38.43			

[illegible]

ภาคผนวก ข-20

ตัวอย่างผลวิเคราะห์คุณภาพน้ำเสีย
ของโรงงานที่มีน้ำเสียทางเคมีปนเปื้อน



Analysis / Test Report

Client : Michelin Siam Co., Ltd.
129 Moo 3, Nong-Lak-Bankhai Road, Nong-Lak-Bankhai, Bankhai, Rayong Thailand 21120
P/O :
Project Name : Water Testing
Project Location :
TESTING
No.0042
Lot ID: 2469152
Date Received : Jul 23, 2024
Date Reported : Jul 31, 2024
Report Number : 3068948-1

Page 1 of 2

Sample Number	2469152-2
Sample Date	Jul 23, 2024 9:20 AM
Sample Description	Wastewater
Location	Effluent (Holding pond 5,000 m3)
Date Analysis Commenced	Jul 23, 2024
Condition of Sample	Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMT	-	5	6	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMT	-	5	6	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CI (F)	Rayong
Temperature *	Degree C	-	-	32.0	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1040	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Technical Management

Chontichak
Chonticha Subongkiet
Scientist (3)
วศินฐาญท์ 3-323-9449

Approved by

D. Chongchon
Dej Chongchon
Senior Manager
วศินฐาญท์ 3-323-9442

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.

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S:\Report_Lab_Caps (6-43PM)



Analysis / Test Report

Client : Michelin Siam Co., Ltd.
129 Moo 3, Nong-Lak-Bankhai Road, Nong-Lak-Bankhai, Bankhai, Rayong Thailand 21120
P/O :
Project Name : Water Testing
Project Location :
TESTING
No.0042
Lot ID: 2469152
Date Received : Jul 23, 2024
Date Reported : Jul 31, 2024
Report Number : 3068948-1

Page 2 of 2

Sample Number	2469152-2
Sample Date	Jul 23, 2024 9:20 AM
Sample Description	Wastewater
Location	Effluent (Holding pond 5,000 m3)
Date Analysis Commenced	Jul 23, 2024
Condition of Sample	Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	8	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2550 (2017).
Sampling By : นิตาเวฬุ อภิธรรมมรรค วศินฐาญท์ 3-323-94006 , Smart Khumplee วศินฐาญท์ 3-323-94084

Remark :

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

Technical Management

Chontichak
Chonticha Subongkiet
Scientist (3)
วศินฐาญท์ 3-323-9449

Approved by

D. Chongchon
Dej Chongchon
Senior Manager
วศินฐาญท์ 3-323-9442

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Analysis / Test Report

Client : Michelin Siam Co., Ltd.
129 Moo 3, Nong-Lai-Lok-Bankhai Road, Nong-Lai-Lok, Bankhai, Rayong Thailand 21120
P/O :
Project Name : Water Testing
Project Location :
TESTING
No.0009
Lot ID: 2469152
Date Received : Jul 23, 2024
Date Reported : Jul 31, 2024
Report Number : 3068948-2

Page 1 of 1

Sample Number	2469152-2
Sampled Date	Jul 23, 2024 9:20 AM
Sample Description	Wastewater
Location	Effluent (Holding pond 5,000 m3)
Date Analysis Commenced	Jul 24, 2024
Condition of Sample	Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Copper	mg/L	0.0003	0.0005	0.06	≤2.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.50	≤5.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

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

Sampling By : Nattawut Abthompramarat รหัสประจำตัว 7-204-9-0084

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

Technical Management

Savitree N.

Switree Noi-ngiam
Manager
รหัสประจำตัว 7-204-9-4007

Approved by

Kanokorn Anek

Kanokorn Anek
Assistant General Manager
รหัสประจำตัว 7-204-9-0004

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Analysis / Test Report

Client : Michelin Siam Co., Ltd.
129 Moo 3, Nong-Lai-Lok-Bankhai Road, Nong-Lai-Lok, Bankhai, Rayong Thailand 21120
P/O :
Project Name : Water Testing
Project Location :
TESTING
No.0009
Lot ID: 2469152
Date Received : Jul 23, 2024
Date Reported : Jul 31, 2024
Report Number : 3068948-3

Page 1 of 1

Sample Number	2469152-2
Sampled Date	Jul 23, 2024 9:20 AM
Sample Description	Wastewater
Location	Effluent (Holding pond 5,000 m3)
Date Analysis Commenced	Jul 24, 2024
Condition of Sample	Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.30	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Conductivity at 25 Degree C *	micromhos/cm *		0.5	1432	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen *	mg/L		0.1	6.4	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9500-D (C)	Rayong

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

Sampling By : Nattawut Abthompramarat , Samart Khumpluee

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

Approved by

Savitree N.

Switree Noi-ngiam
Manager

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Analysis / Test Report

Client : Michelin Siam Co., Ltd.
129 Moo 3, Nong-Lu-Lok-Bankhai Road, Nong-Lu-Lok, Bankhai, Rayong Thailand 21120
P/O :
Project Name : Water Testing
Project Location :
Sample Number : 2489966-2
Sampled Date : Aug 15, 2024 9:15 AM
Sample Description : Wastewater
Location : Effluent (Holding pond 5,000 m3)
Date Analysis Commenced : Aug 15, 2024
Condition of Sample : Contained in two BOD bottles, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

TESTING
No.0042
Lot ID: 2489966
Date Received : Aug 15, 2024
Date Reported : Aug 22, 2024
Report Number : 3089773-1

Page 1 of 2

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMT	-	5	8	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMT	-	5	8	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	4	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C	-	-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-C (F)	Rayong
Temperature *	Degree C	-	-	33.0	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1120	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Technical Management

Photchanas S.

Photchanas Seeda
Scientist (4)
วศินวุฒินัย ๓-323-๓-0028

Approved by

Dej Changchon

Senior Manager
วศินวุฒินัย ๓-323-๓-0001

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Analysis / Test Report

Client : Michelin Siam Co., Ltd.
129 Moo 3, Nong-Lu-Lok-Bankhai Road, Nong-Lu-Lok, Bankhai, Rayong Thailand 21120
P/O :
Project Name : Water Testing
Project Location :
Sample Number : 2489966-2
Sampled Date : Aug 15, 2024 9:15 AM
Sample Description : Wastewater
Location : Effluent (Holding pond 5,000 m3)
Date Analysis Commenced : Aug 15, 2024
Condition of Sample : Contained in two BOD bottles, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

TESTING
No.0042
Lot ID: 2489966
Date Received : Aug 15, 2024
Date Reported : Aug 22, 2024
Report Number : 3089773-1

Page 2 of 2

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	13	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of the Ministry of Industry dated June 07, 8, 1960 (2017).
Sampling By : Natavut Atthomprammarat วศินวุฒินัย ๓-323-๓-0006, Patarapoi Sawangjaleam วศินวุฒินัย ๓-323-๓-0002

Remark :
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- "L" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management

Photchanas S.

Photchanas Seeda
Scientist (4)
วศินวุฒินัย ๓-323-๓-0028

Approved by

Dej Changchon

Senior Manager
วศินวุฒินัย ๓-323-๓-0001

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Analysis / Test Report

Client : Michelin Siam Co., Ltd.
129 Moo 3, Nong-Lu-Lok-Bankhai Road, Nong-Lu-Lok, Bankhai, Rayong Thailand 21120
P/O :
Project Name : Water Testing
Project Location :
TESTING
No.0009
Lot ID: 2489966
Date Received : Aug 15, 2024
Date Reported : Aug 22, 2024
Report Number : 3089773-2

Page 1 of 1

Sample Number	2489966-2
Sampled Date	Aug 15, 2024 9:15 AM
Sample Description	Wastewater
Location	Effluent (Holding pond 5,000 m3)
Date Analysis Commenced	Aug 16, 2024
Condition of Sample	Contained in two BOD bottles, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Copper	mg/L	0.0003	0.0005	0.07	≤2.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.63	≤5.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Nattawat Athomprommarat รหัสประจำตัว 3-23-3-0006 , Pattarapol Sawangjittam รหัสประจำตัว 3-204-3-0002

Remark :
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Technical Management Chanatt L. Chanatagarn Inchoom Section Head
Approved by Kanokkom Anek Assistant General Manager รหัสประจำตัว 3-204-3-0004

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Analysis / Test Report

Client : Michelin Siam Co., Ltd.
129 Moo 3, Nong-Lu-Lok-Bankhai Road, Nong-Lu-Lok, Bankhai, Rayong Thailand 21120
P/O :
Project Name : Water Testing
Project Location :
TESTING
No.0009
Lot ID: 2489966
Date Received : Aug 15, 2024
Date Reported : Aug 22, 2024
Report Number : 3089773-3

Page 1 of 1

Sample Number	2489966-2
Sampled Date	Aug 15, 2024 9:15 AM
Sample Description	Wastewater
Location	Effluent (Holding pond 5,000 m3)
Date Analysis Commenced	Aug 16, 2024
Condition of Sample	Contained in two BOD bottles, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.28	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	1483	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen *	mg/L	-	0.1	8.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 1900-C (C)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Nattawat Athomprommarat , Pattarapol Sawangjittam

Remark :
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• <LOQ : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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• The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by Chanatt L. Chanatagarn Inchoom Section Head

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Analysis / Test Report

Client : Michelin Siam Co., Ltd.
129 Moo 3, Nong-Lak-Bankhai Road, Nong-Lak, Bankhai, Rayong Thailand 21120
P/O :
Project Name : Water Testing
Project Location :
TESTING
No.0042
Lot ID: 24103797
Date Received : Sep 16, 2024
Date Reported : Sep 23, 2024
Report Number : 3119104-1

Page 1 of 2

Sample Number	24103797-2						
Sample Date	Sep 16, 2024 9:35 AM						
Sample Description	Wastewater						
Location	Effluent (Holding pond 5,000 m3)						
Date Analysis Commenced	Sep 16, 2024						
Condition of Sample	Contained in two BOD bottles, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	7	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	7	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C	-	-	-	6.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (8)	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-Cl (F)	Rayong
Temperature *	Degree C	-	-	32.4	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1000	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong

Technical Management

Photchanas S.

Phatchana Seeda
Scientist (4)
วิศกรชำนาญการ 3-323-9-0028

Approved by

D. Changchon

Dej Changchon
Senior Manager
วิศกรชำนาญการ 3-323-9-0001

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Analysis / Test Report

Client : Michelin Siam Co., Ltd.
129 Moo 3, Nong-Lak-Bankhai Road, Nong-Lak, Bankhai, Rayong Thailand 21120
P/O :
Project Name : Water Testing
Project Location :
TESTING
No.0042
Lot ID: 24103797
Date Received : Sep 16, 2024
Date Reported : Sep 23, 2024
Report Number : 3119104-1

Page 2 of 2

Sample Number	24103797-2						
Sample Date	Sep 16, 2024 9:35 AM						
Sample Description	Wastewater						
Location	Effluent (Holding pond 5,000 m3)						
Date Analysis Commenced	Sep 16, 2024						
Condition of Sample	Contained in two BOD bottles, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	17	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF,	Rayong

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

Sampling By : Sansoen Khuyoksa วิศกรชำนาญการ 3-323-9-0005, Samart Khumplee วิศกรชำนาญการ 3-204-9-0084

Remark :

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Technical Management

Photchanas S.

Phatchana Seeda
Scientist (4)
วิศกรชำนาญการ 3-323-9-0028

Approved by

D. Changchon

Dej Changchon
Senior Manager
วิศกรชำนาญการ 3-323-9-0001

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Analysis / Test Report

Client : Michelin Siam Co., Ltd.
129 Moo 3, Nong-Lak-Bankhai Road, Nong-Lak-Lok, Bankhai, Rayong Thailand 21120
P/O :
Project Name : Water Testing
Project Location:

TESTING
No.0009
Lot ID: 24103797
Date Received : Sep 16, 2024
Date Reported : Sep 23, 2024
Report Number : 3119104-2

Page 1 of 1

Sample Number	24103797-2
Sampled Date	Sep 16, 2024 9:35 AM
Sample Description	Wastewater
Location	Effluent (Holding pond 5,000 m3)
Date Analysis Commenced	Sep 17, 2024
Condition of Sample	Contained in two BOD bottles, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing						
Copper	mg/L	0.0003	0.0005	0.07	≤2.0	Bangkok
					Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	
Zinc	mg/L	0.003	0.005	0.58	≤5.0	Bangkok
					Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	

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

Sampling By : Sansoen Khuyokeul วสันต์ คุ้ยเชื้อ, Smart Khumplee วสันต์ คุ้ยเชื้อ 7-204-9-0094

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Technical Management

Savitree N.
Savitree Niamsingam
Manager
วสันต์ คุ้ยเชื้อ 7-204-9-0007

Approved by

Kanokorn Anek
Assistant General Manager
วสันต์ คุ้ยเชื้อ 7-204-9-0004

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Analysis / Test Report

Client : Michelin Siam Co., Ltd.
129 Moo 3, Nong-Lak-Bankhai Road, Nong-Lak-Lok, Bankhai, Rayong Thailand 21120
P/O :
Project Name : Water Testing
Project Location:

TESTING
No.0009
Lot ID: 24103797
Date Received : Sep 16, 2024
Date Reported : Sep 23, 2024
Report Number : 3119104-3

Page 1 of 1

Sample Number	24103797-2
Sampled Date	Sep 16, 2024 9:35 AM
Sample Description	Wastewater
Location	Effluent (Holding pond 5,000 m3)
Date Analysis Commenced	Sep 17, 2024
Condition of Sample	Contained in two BOD bottles, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing						
Iron	mg/L	0.003	0.005	0.49	No Standard	Bangkok
					Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	
Water Testing						
Conductivity at 25 Degree C *	micromhos/cm	0.5	1329	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Rayong
Dissolved Oxygen *	mg/L	0.1	5.7	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong

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

Sampling By : Sansoen Khuyokeul วสันต์ คุ้ยเชื้อ, Smart Khumplee วสันต์ คุ้ยเชื้อ 7-204-9-0094

Remark :
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Approved by

Savitree N.
Savitree Niamsingam
Manager

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Analysis / Test Report

Client : Michelin Siam Co., Ltd.
129 Moo 3, Nong-Lu-Lok-Bankhal Road, Nong-Lu-Lok, Bankhal, Rayong Thailand 21120
P/O :
Project Name : Water Testing
Project Location:

TESTING
No.0042
Lot ID: 24105577
Date Received : Oct.15, 2024
Date Reported : Oct.22, 2024
Report Number : 3142811-1

Page 1 of 2

Sample Number	24105577-2
Sample Date	Oct.15, 2024 10:05 AM
Sample Description	Wastewater
Location	Effluent (Holding pond 5,000 m3)
Date Analysis Commenced	Oct.15, 2024
Condition of Sample	Contained in two BOD bottles, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	5	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	5	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C	-	-	-	7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (9)	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-CI (F)	Rayong
Temperature *	Degree C	-	-	33.0	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	888	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong

Technical Management

Photchanas S.

Photchanas Seeda
Scientist (4)
วศินธนาพร 3-323-0028

Approved by

Dej Changchon

Senior Manager
วศินธนาพร 3-323-0001

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Analysis / Test Report

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129 Moo 3, Nong-Lu-Lok-Bankhal Road, Nong-Lu-Lok, Bankhal, Rayong Thailand 21120
P/O :
Project Name : Water Testing
Project Location:

TESTING
No.0042
Lot ID: 24105577
Date Received : Oct.15, 2024
Date Reported : Oct.22, 2024
Report Number : 3142811-1

Page 2 of 2

Sample Number	24105577-2
Sample Date	Oct.15, 2024 10:05 AM
Sample Description	Wastewater
Location	Effluent (Holding pond 5,000 m3)
Date Analysis Commenced	Oct.15, 2024
Condition of Sample	Contained in two BOD bottles, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	14	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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

Sampling By : Nakawat Albomprammarat วศินธนาพร 3-323-0006 , Patrapol Sawangjalarn วศินธนาพร 3-204-0002

Remark :

- LOD : Limit of Detection
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Technical Management

Photchanas S.

Photchanas Seeda
Scientist (4)
วศินธนาพร 3-323-0028

Approved by

Dej Changchon

Senior Manager
วศินธนาพร 3-323-0001

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2023/11/04/01

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Analysis / Test Report

Client : Michelin Siam Co., Ltd.
129 Moo 3, Nong-Lak-Bankhai Road, Nong-Lak, Bankhai, Rayong Thailand 21120
P/O :
Project Name : Water Testing
Project Location :

TESTING
No.0008
Lot ID: 24105577
Date Received : Oct 15, 2024
Date Reported : Oct 22, 2024
Report Number : 3142811-2

Page 1 of 1

Sample Number	24105577-2
Sampled Date	Oct 15, 2024 10:05 AM
Sample Description	Wastewater
Location	Effluent (Holding pond 5,000 m3)
Date Analysis Commenced	Oct 16, 2024
Condition of Sample	Contained in two BOD bottles, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Copper	mg/L	0.0003	0.0005	0.10	≤2.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok
Zinc	mg/L	0.003	0.005	1.43	≤5.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Nattawat Abthompramarat vst0243-a-0006 , Pattarapol Sawangjatanam vst0244-a-0002

Remark :

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

Technical Management

Savitree N.

Savitree Nisangiam
Manager
vst0244-a-0007

Approved by

Kanokorn Anuk

Kanokorn Anuk
Assistant General Manager
vst0244-a-0004

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Analysis / Test Report

Client : Michelin Siam Co., Ltd.
129 Moo 3, Nong-Lak-Bankhai Road, Nong-Lak, Bankhai, Rayong Thailand 21120
P/O :
Project Name : Water Testing
Project Location :

TESTING
No.0009
Lot ID: 24105577

Date Received : Oct 15, 2024
Date Reported : Oct 22, 2024
Report Number : 3142811-3

Page 1 of 1

Sample Number	24105577-2
Sampled Date	Oct 15, 2024 10:05 AM
Sample Description	Wastewater
Location	Effluent (Holding pond 5,000 m3)
Date Analysis Commenced	Oct 16, 2024
Condition of Sample	Contained in two BOD bottles, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.70	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok
Water Testing							
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	1279	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Rayong
Dissolved Oxygen *	mg/L	-	0.1	5.9	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Nattawat Abthompramarat , Pattarapol Sawangjatanam

Remark :

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

Approved by

Savitree N.

Savitree Nisangiam
Manager

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Analysis / Test Report

Client : Michelin Siam Co., Ltd.
129 Moo 3, Nong-La-Lok-Bankhai Road, Nong-La-Lok, Bankhai, Rayong Thailand 21120
P/O : 4510558328
Project Name : Water Testing
Project Location :

TESTING
No.0042
Lot ID: 24118728
Date Received : Nov 14, 2024
Date Reported : Nov 21, 2024
Report Number : 3173102-1

Page 1 of 2

Sample Number	24118728-2
Sampled Date	Nov 14, 2024 9:55 AM
Sample Description	Wastewater
Location	Effluent (Holding pond 5,000 m3)
Date Analysis Commenced	Nov 14, 2024
Condition of Sample	Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	7.7	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	28	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	6	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	5	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C	-	-	-	7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-C (F)	Rayong
Temperature *	Degree C	-	-	31.1	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1140	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong

Technical Management

Photchanan S.

Photchanan Seeda
Scientist (4)
วชิรณัฐ 3-323-0-0028

Approved by

Dej Changchon

Senior Manager
วชิรณัฐ 3-323-0-0001

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S:049994AL_01_01 (6-0999)



Analysis / Test Report

Client : Michelin Siam Co., Ltd.
129 Moo 3, Nong-La-Lok-Bankhai Road, Nong-La-Lok, Bankhai, Rayong Thailand 21120
P/O : 4510558328
Project Name : Water Testing
Project Location :

TESTING
No.0042
Lot ID: 24118728
Date Received : Nov 14, 2024
Date Reported : Nov 21, 2024
Report Number : 3173102-1

Page 2 of 2

Sample Number	24118728-2
Sampled Date	Nov 14, 2024 9:55 AM
Sample Description	Wastewater
Location	Effluent (Holding pond 5,000 m3)
Date Analysis Commenced	Nov 14, 2024
Condition of Sample	Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	32	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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

Sampling By : Sanisoch Khairapokul วชิรณัฐ 3-323-0-0005, Pattarakol Sawangjalam วชิรณัฐ 3-204-0-0002

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Photchanan S.

Photchanan Seeda
Scientist (4)
วชิรณัฐ 3-323-0-0028

Approved by

Dej Changchon

Senior Manager
วชิรณัฐ 3-323-0-0001

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S:049994AL_01_01 (6-0999)



Analysis / Test Report

Client : Michelin Siam Co., Ltd.
129 Moo 3, Nong-La-Lok-Bankhai Road, Nong-La-Lok, Bankhai, Rayong Thailand 21120
P/O : 451058328
Project Name : Water Testing
Project Location :

TESTING
No.0009
Lot ID: 24118728
Date Received : Nov 14, 2024
Date Reported : Nov 21, 2024
Report Number : 3173102-2

Page 1 of 1

Sample Number	24118728-2
Sampled Date	Nov 14, 2024 9:55 AM
Sample Description	Wastewater
Location	Effluent (Holding pond 5,000 m3)
Date Analysis Commenced	Nov 15, 2024
Condition of Sample	Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Copper	mg/L	0.0003	0.0005	0.07	≤2.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.94	≤5.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok

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

Sampling By : Sansoen Khuyoskul vstl004a@n-3-323-a-0005, Pattanapol Sawangsilam vstl004a@n-3-204-a-0002

Remark :
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Technical Management

Approved by

Kanokkorn Anek
Assistant General Manager
vstl004a@n-3-204-a-0004

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Analysis / Test Report

Client : Michelin Siam Co., Ltd.
129 Moo 3, Nong-La-Lok-Bankhai Road, Nong-La-Lok, Bankhai, Rayong Thailand 21120
P/O : 451058328
Project Name : Water Testing
Project Location :

TESTING
No.0009
Lot ID: 24118728
Date Received : Nov 14, 2024
Date Reported : Nov 21, 2024
Report Number : 3173102-3

Page 1 of 1

Sample Number	24118728-2
Sampled Date	Nov 14, 2024 9:55 AM
Sample Description	Wastewater
Location	Effluent (Holding pond 5,000 m3)
Date Analysis Commenced	Nov 15, 2024
Condition of Sample	Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	1.56	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok
Water Testing							
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	1560	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Rayong
Dissolved Oxygen *	mg/L	-	0.1	6.5	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong

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

Sampling By : Sansoen Khuyoskul vstl004a@n-3-323-a-0005, Pattanapol Sawangsilam

Remark :
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Approved by

Savitree N.
Savitree Nolsangiam
Manager

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Analysis / Test Report

Client : Michelin Siam Co., Ltd.
129 Moo 3, Nong-Lu-Lok-Bankhai Road, Nong-Lu-Lok, Bankhai, Rayong Thailand 21120
P/O :
Project Name : Water Testing
Project Location :
TESTING
No.0042
Lot ID: 24136810
Date Received : Dec 13, 2024
Date Reported : Dec 20, 2024
Report Number : 3198440-1

Page 1 of 2

Sample Number 24136810-2
Sample Date Dec 13, 2024 10:00 AM
Sample Description Wastewater
Location Effluent (Holding pond 5,000 m3)
Date Analysis Commenced Dec 13, 2024
Condition of Sample Contained in one amber glass bottle, two BOD bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	25	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	7	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	6	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C	-	-	-	6.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (9)	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-CI (F)	Rayong
Temperature *	Degree C	-	-	30.8	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1220	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong

Technical Management

Chontichak
Chonticha Subongkroh
Scientist (3)
we:duanayit 1-323-a-0031

Approved by

Dej Changchon
Senior Manager
watduanayit 1-323-a-0001

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Analysis / Test Report

Client : Michelin Siam Co., Ltd.
129 Moo 3, Nong-Lu-Lok-Bankhai Road, Nong-Lu-Lok, Bankhai, Rayong Thailand 21120
P/O :
Project Name : Water Testing
Project Location :
TESTING
No.0042
Lot ID: 24136810
Date Received : Dec 13, 2024
Date Reported : Dec 20, 2024
Report Number : 3198440-1

Page 2 of 2

Sample Number 24136810-2
Sample Date Dec 13, 2024 10:00 AM
Sample Description Wastewater
Location Effluent (Holding pond 5,000 m3)
Date Analysis Commenced Dec 13, 2024
Condition of Sample Contained in one amber glass bottle, two BOD bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	15	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Natavut Akhompornmarat watduanayit 1-323-a-0005, Thanassun Namakunna watduanayit 1-204-a-0101.

Remark :

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- "L" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
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Technical Management

Chontichak
Chonticha Subongkroh
Scientist (3)
watduanayit 1-323-a-0031

Approved by

Dej Changchon
Senior Manager
watduanayit 1-323-a-0001

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Analysis / Test Report

Client : Michelin Siam Co., Ltd.
129 Moo 3, Nong-Lak-Bankhai Road, Nong-Lak, Bankhai, Rayong Thailand 21120
P/O :
Project Name : Water Testing
Project Location:

TESTING
No.0009
Lot ID: 24136810
Date Received : Dec 13, 2024
Date Reported : Dec 20, 2024
Report Number : 3198440-2

Page 1 of 1

Sample Number	24136810-2
Sampled Date	Dec 13, 2024 10:00 AM
Sample Description	Wastewater
Location	Effluent (Holding pond 5,000 m3)
Date Analysis Commenced	Dec 16, 2024
Condition of Sample	Contained in one amber glass bottle, two BOD bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Copper	mg/L	0.0003	0.0005	0.04	≤2.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok
Zinc	mg/L	0.003	0.005	1.99	≤5.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Natavut Abompramarat รหัสประจำตัว 1-323-0-0005, Thanasoun Namakunna รหัสประจำตัว 1-204-0-0101

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

Technical Management

Savitree N.

Savitree Nolsangiam
Manager
โทรศัพท์ 1-204-0-0007

Approved by

Kanokorn Anek

Kanokorn Anek
Assistant General Manager
โทรศัพท์ 1-204-0-0004

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SIReportLab_Gr_m (6.38PH)



Analysis / Test Report

Client : Michelin Siam Co., Ltd.
129 Moo 3, Nong-Lak-Bankhai Road, Nong-Lak, Bankhai, Rayong Thailand 21120
P/O :
Project Name : Water Testing
Project Location:

TESTING
No.0009
Lot ID: 24136810
Date Received : Dec 13, 2024
Date Reported : Dec 20, 2024
Report Number : 3198440-3

Page 1 of 1

Sample Number	24136810-2
Sampled Date	Dec 13, 2024 10:00 AM
Sample Description	Wastewater
Location	Effluent (Holding pond 5,000 m3)
Date Analysis Commenced	Dec 14, 2024
Condition of Sample	Contained in one amber glass bottle, two BOD bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.72	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok
Water Testing							
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	1521	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Rayong
Dissolved Oxygen *	mg/L	-	0.1	5.8	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Natavut Abompramarat , Thanasoun Namakunna

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

Approved by

Savitree N.

Savitree Nolsangiam
Manager

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.
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SIReportLab_Gr_m (6.38PH)

ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : ปลายท่อ POND 1 (บริเวณปลายท่อน้ำทิ้ง EFFLUENT)
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : NOVEMBER 8, 2024
SAMPLING TIME : 10:46 HOUR
SAMPLING METHOD : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY : MR CHAI BUASOD
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : NOVEMBER 9, 2024
ANALYTICAL DATE : NOVEMBER 9-19, 2024
ISSUE DATE : DECEMBER 20, 2024
REPORT NO. : 2024-U114935
WORK NO. : 2023-009916
ANALYSIS NO. : T24BA352-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT	LIMIT OF QUANTITATION (LOQ)
			ปลายท่อ POND 1 (บริเวณปลายท่อน้ำทิ้ง EFFLUENT) T24BA352-0001			
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	6.7 (32.8°C)	5.5-9.0	-	-
TEMPERATURE ^c	°C	LABORATORY AND FIELD METHODS (SM: PART 2550 B)	32.8	≤ 40	-	-
BIOCHEMICAL OXYGEN DEMAND ^c	mg/L	5-DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	< 2.0	≤ 20	-	2.0
CHEMICAL OXYGEN DEMAND ^c	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: PART 5220 D)	< 25.0	≤ 120	-	25.0
TOTAL SUSPENDED SOLIDS ^c	mg/L	DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	< 5.0	≤ 50	-	5.0
PHOSPHATE ^c	mg/L PO ₄ ³⁻	ASCORBIC ACID METHOD (SM: PART 4500-P E)	0.21	-	0.03	-
SULPHATE ^c	mg/L SO ₄ ²⁻	TURBIDIMETRIC METHOD (SM: PART 4500-SO ₄ ²⁻ E)	1.6	-	0.3	-
TOTAL DISSOLVED SOLIDS ^{a, b}	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	732	≤ 3,000	-	25
OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	< 3	≤ 5	-	3
PHENOLS ^a	mg/L	DISTILLATION, DIRECT PHOTOMETRIC METHOD (SM: 5530 B AND 5530 D)	ND	≤ 1	0.015	0.100
METALS						
TRIVALENT CHROMIUM ^c	mg/L Cr ³⁺	DIGESTION, DIRECT AIR-ACETYLENE FLAME; FILTRATION, COLOURIMETRIC METHOD; CALCULATION (SM: PART 3030 E, PART 3111 B AND PART 3500-Cr B)	ND	≤ 0.75	0.010	-
HEXAVALENT CHROMIUM ^c	mg/L Cr ⁶⁺	FILTRATION, COLOURIMETRIC METHOD (SM: 3500-Cr B)	ND	≤ 0.25	0.006	-
MANGANESE ^c	mg/L Mn	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	< LOQ	≤ 5.0	0.005	0.050
ZINC ^c	mg/L Zn	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	0.188	≤ 5.0	0.003	0.050
IRON ^c	mg/L Fe	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	0.451	-	0.005	0.100



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT	LIMIT OF QUANTITATION (LOQ)
			ปลาน้ำ POND 1 (บริเวณปลายน้ำ) น้ำทิ้ง EFFLUENT) T24BA352-0001			
MICROBIOLOGY						
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B, C AND E)	49	-	1.8	-
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, 24th EDITION, 2023.

REGULATORY STANDARD : INDUSTRIAL EFFLUENT STANDARDS, NOTIFICATION OF THE MINISTRY OF INDUSTRY, B.E. 2560,
PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 134, PART 153 D, DATED JUNE 7, 2017.

ND : NOT DETECTED.

< LOQ : < LIMIT OF QUANTITATION (MANGANESE ≥ 0.005 AND < 0.050 mg/L).

^A : SAMPLING AT 13:30 HOUR ON NOVEMBER 22, 2024, ANALYSIS NO. T24BB652-0001 (ANALYTICAL DATE : NOVEMBER 23-28, 2024).

THE REASON FOR ISSUING THE NEW REPORT IS TO SUBSTITUTE RESULT OF TOTAL DISSOLVED SOLIDS.

SUBSTITUTED REPORT FOR REPORT NO. 2024-U108651, ISSUE DATE NOVEMBER 20, 2024.

Bhuchonk p.

(MR BHUCHONK PANICHLERTUMPI)
LABORATORY SUPERVISOR

ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : EFFLUENT POND
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : NOVEMBER 22, 2024
SAMPLING TIME : 13:30 HOUR
SAMPLING METHOD ^c : GRAB
SAMPLING BY ^c : MR KITIPONG SONCHAIYAPHUM
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM
RECEIVED DATE : NOVEMBER 23, 2024
ANALYTICAL DATE : NOVEMBER 23-28, 2024
ISSUE DATE : DECEMBER 19, 2024
REPORT NO. : 2024-U119173
WORK NO. : 2024-011109
ANALYSIS NO. : T24BD013-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	LIMIT OF QUANTITATION (LOQ)
			EFFLUENT POND T24BD013-0001		
TOTAL DISSOLVED SOLIDS ^b	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	732	≤1,300	25
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

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

REGULATORY STANDARD : STANDARD FROM ENVIRONMENTAL IMPACT ASSESSMENT REPORT OF WIRE INDUSTRIES
PROJECT (2ND EXTENSION) OF SIAM INDUSTRIAL WIRE CO., LTD. (MARCH 21, 2022)

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR



ภาคผนวก ข-21

อุปกรณ์ดับเพลิงภายในพื้นที่โครงการ

[illegible]

จัดซื้อในต่างประเทศของบริษัท