



Monitoring Frequency - Monthly during discharge													
POLLUTANT	Unit of Measure	Result 24/12/2012	Result 29/01/2013	Result 28/02/2013	Result 28/3/13	Result 30/4/13	Result 31/5/13	Result 14/7/13	Result 31/7/13	Result 30/8/13	Result 17/9/13	Result 30/10/13	Result 21/11/13
pH (limit for discharge 6.5 to 8.5)	pH Unit	7.3	7.6	7.2	7.2	7.2	7.1	7.2	7	7	6.9	7	7.1
Conductivity (Non Compensated)	µS/cm	11800	3110	7850	7510	8930	8750	2200	6460	8720	1890	9390	12500
Total Dissolved Solids @180°C	mg/L	9180	2570	12400	5340	6320	5840	1500	3860	4450	1120	6660	9440
Alkalinity as CaCO3	mg/L	148	173	285	347	360	377	188	391	415	124	382	407
Sulfate as SO4 - Turbidimetric	mg/L	11	54	7	13	31	35	62	50	49	49	50	50
Chloride	mg/L	5480	874	2630	2340	3080	3100	549	1670	2570	487	3230	4360
Calcium	mg/L	508	144	352	348	457	441	107	309	409	94	474	580
Magnesium	mg/L	531	106	279	271	338	338	66	204	274	56	362	473
Sodium	mg/L	1660	307	964	861	1080	1050	208	673	902	171	1100	1430
Potassium	mg/L	31	29	36	39	38	42	21	32	33	19	33	35
Aluminium	mg/L	0.03	0.21	0.1	0.06	0.06	0.03	3.22	0.07	0.03	1.92	0.73	0.42
Arsenic	mg/L	0.002	0.005	0.004	0.003	0.002	0.001	0.004	0.002	<0.001	0.006	0.003	0.004
Barium	mg/L	1.58	0.451	1.26	1.11	1.3	1.20	0.298	0.937	1.2	0.268	1.43	1.78
Cobalt	mg/L	<0.001	0.006	0.002	0.001	<0.001	0.001	0.004	0.002	0.001	0.002	0.003	0.005
Copper	mg/L	0.002	0.006	0.002	0.004	0.002	0.027	0.010	0.003	0.001	0.009	0.002	0.002
Manganese	mg/L	0.176	1.48	0.808	0.231	0.108	0.159	0.415	0.216	0.13	0.252	0.194	0.445
Lead	mg/L	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.004	<0.001	<0.001	0.004	0.003	<0.001
Zinc	mg/L	0.008	0.089	0.009	0.009	0.02	0.018	0.055	0.014	<0.005	0.031	0.014	0.009
Iron	mg/L	1.19	0.91	2.15	0.67	0.25	0.26	3.26	0.51	0.14	1.89	1.98	3.12
Fluoride	mg/L	0.3	0.6	0.5	0.6	0.5	0.3	0.9	0.5	0.4	0.4	0.3	0.3
Ammonia as N	mg/L	0.22	2.56	2.27	2.66	1	3.33	1.77	7.81	1.71	0.21	3.24	8.93
Nitrate as N	mg/L	0.06	0.39	<0.01	0.14	0.84	1.82	0.95	4.57	10.3	1.88	1.94	0.33
Phosphorus as P (total)	mg/L	0.24	0.41	0.12	0.01	0.04	0.02	0.36	0.02	<0.01	0.18	0.09	0.08
Total Organic Carbon	mg/L	20	60	23	16	19	22	36	19	10	31	20	23
Biochemical Oxygen Demand	mg/L	<2	47	6	3	<2	<2	22	<2	8	4	7	14
Total Phenols	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05
C6 - C9 Fraction	µg/L	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Total Petroleum Hydrocarbons	µg/L	<100	120	<100	<100	100	<100	<100	<100	<100	440	160	390
Toluene-D8	%	97.4	76.7	120	122	120	103	100	127	117	113	88.7	91.6
Total Suspended Solids Limit for discharge <50mg/L	mg/L	<5	59	30	9	7	8	92	14	6	60	91	906

Comments No sample obtained in January 2014 due to extremely low water level. Unable to obtain safe access through mud. Risk assessment assessed as unsafe. Retest of Electrical Conductivity result 3110, pH result 6.8 and Total Suspended Solids Result 25 was carried out on 12 May 2014. July TSS 31 retest done on 20/8 TSS 23 and pond not discharging. Retest done on 16/4/15 TSS down to 30 Pond still not discharging. June 2016 Results marked * were sampled on 28/6/16 and others on 24/6/16 (insufficient volume obtained) pond was discharging for this period. * in 21/9/16 Column indicates results from sample collected on 26/9 due to these compounds not being tested for on 21/9/16. 28/2/17 Pond dry and unable to get a sample. Pond Dry 27/12/17, TSS 6/2/19 17mg/L

Result 18/12/13	Result 29/1/14	Result 26/2/14	Result 27/3/14	Result 28/4/14	Result 28/5/14	Result 25/06/2014	Result 29/7/14	Result 25/8/14	Result 23/9/14	Result 30/10/14	Result 26/11/14	Result 30/12/14	Result 29/1/15	Result 27/2/15	Result 26/3/15	Result 28/4/15	Result 27/5/15	Result 30/6/2015
6.8	no sample	7.4	7.2	7	6.9	6.8	7.2	Not Discharging	Not Discharging	Not Discharging	Not Discharging	Not Discharging	Not Discharging	Not Discharging	Not Discharging	Not Discharging	Not Discharging	Not Discharging
11740	no sample	3620	740	3420	3900	3850	1340											
7920	no sample	1580	538	1850	2290	2400	804											
649	no sample	191	112	330	380	360	219											
44	no sample	108	60	23	23	12	21											
3860	no sample	902	124	845	926	864	276											
675	no sample	172	38	160	191	189	75											
428	no sample	110	19	94	112	115	37											
1100	no sample	406	62	328	418	388	128											
33	no sample	38	35	40	32	27	12											
1.48	no sample	0.35	4.30	0.07	2.21	0.1	1.86											
0.008	no sample	<0.001	0.005	0.002	0.002	0.002	<0.001											
1.43	no sample	0.401	0.100	0.435	0.468	0.507	0.171											
0.011	no sample	0.003	0.004	0.003	0.002	0.002	0.002											
0.004	no sample	0.003	0.014	<0.001	0.002	0.002	<0.001											
1.41	no sample	0.968	0.175	0.311	0.465	0.779	0.303											
0.005	no sample	<0.001	0.007	<0.001	0.003	<0.001	0.002											
0.032	no sample	0.009	0.057	0.014	0.017	0.009	0.018											
17	no sample	1.24	4.44	1.49	2.79	1.51	1.88											
0.2	no sample	0.6	0.7	0.7	0.5	0.5	1.3											
27.4	no sample	0.62	0.24	6.61	3.92	2.88	0.7											
<0.01	no sample	0.13	0.78	<0.01	0.01	0.04	0.24											
0.08	no sample	0.12	0.41	0.16	0.21	0.08	0.07											
24	no sample	27	39	10	24	23	12											
8	no sample	4	<2	4	7	4	<2											
<0.05	no sample	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05											
<20	no sample	<20	<20	<20	<20	<20	<20											
<100	no sample	230	<100	120	150	200	<100											
124	no sample	87.8	98.4	88	102	108	117											
119	no sample	29	128	65	81	13	31											

Result 29/7/15	Result 31/8/15	Result 30/9/15	Result 29/10/15	Result 5/11/2015	Result 30/12/2015	Result 28/01/2016	Result 29/02/2016	Result 31/3/16	Result 28/04/2016	Result 31/05/2016	24 and 28/06/2016	Result 20/07/2016	Result 31/08/2016	Result 21/09/2016	Result 31/10/2016	Result 29/11/2016	Result 29/12/2016
Not Discharging	Not Discharging	Not Discharging	Not Discharging	Not Discharging	Not Discharging	Not Discharging	Not Discharging	Not Discharging	Not Discharging	Not Discharging	8	8.2	Not Discharging	7.9	7.8	Not Discharging	Not Discharging
											2170*	1210		1450*	1780		
											860	753		652	1040		
											403*	196		308	363		
											90	77		95	81		
											448	190		156*	318		
											106*	55		77*	92		
											64*	32		39*	54		
											203*	106		126*	158		
											53*	36		62*	56		
											0.59	4.72		2.13	0.27		
											<0.01	<0.01		0.01	0.004		
											0.265*	0.2		0.129*	0.173		
											<0.01	<0.01		<0.01	0.006		
											0.01	0.01		0.01	0.004		
											0.34	0.27		0.6	0.756		
											<0.01	<0.01		<0.01	0.001		
											0.04	0.05		0.07	0.015		
											1.03	6.42		2.9	0.52		
											0	0.6		0.5	0.6		
											6.34	3.93		8.15	5.72		
											0.53*	0.1		0.004*	0.85		
											0.74	0.38		0.55	0.22		
											41	41		52*	37		
											10	5		4	3		
											<2	<2		<2	<0.05		
<20*	<20	<20	<20														
160	<100	<100	<100														
89.2*	103	112	126														
82	251	129	9														
Discharging	Discharging	Discharging	Discharging														

Result 31/1/2017	Result 28/02/2017	Result 9/3/17	Result 30/3/17	Result 27/4/17	Result 31/5/17	Result 27/6/17	Result 27/7/16	Result 30/8/17	Result 27/9/17	Result 31/10/17	Result 29/11/17	Result 11/12/17	Result 27/12/17	Result 30/01/2018	Result 26/2/2018	Result 27/3/18	Result 30/4/18	Result 30/5/2018
Not Discharging	Not Discharging	Dry	Not Discharging	Not Discharging	Not Discharging	Not Discharging	Not Discharging	Not Discharging	Not Discharging	Not Discharging	Not Discharging	8.1	Not Discharging	Not Discharging	Not Discharging	Not Discharging	Not Discharging	Not Discharging
												990						
												727						
												150						
												259						
												69						
												113						
												25						
												49						
												29						
												1						
												0.005						
												0.107						
												0.002						
												0.006						
												0.421						
												0.002						
												0.008						
												1.47						
												0.5						
												0.65						
												0.5						
												0.57						
												23						
												4						
												<0.05						
												<100						
												<2						
												28						
												Discharging						

							non-routine results					
Result 28/11/19	Result 23/12/19	Result 29/01/20	Result 27/02/20	Result 31/03/20	Result 23/4/20	Result 29/04/20	Result 30/04/20	Result 30/04/20	Results 20/5/20	Results 20/5/20	Results 28/5/20	Results 30/06/20
Not Discharging	Not Discharging	Not Discharging	Not Discharging	Not Discharging	Not Discharging	Not Discharging	7.6	Discharging	7.6	Discharging	Not Discharging	Not Discharging
							599		791			
							535		614			
							169		160			
							44		168			
							47		59			
							34		80			
							16		18			
							35		39			
							48		49			
							6.43		3.88			
							0.006		0.005			
							0.14		0.144			
							0.006		0.005			
							0.01		0.006			
							0.405		0.525			
							0.01		0.007			
							0.049		0.029			
							8.52		4.73			
							0.4		0.5			
1.38	0.26											
0.94	2.25											
1.3	1.02											
26	22											
14	<2											
<0.05	<0.05											
<50	<50											
93.5	113											
52	102											

Result 29/07/20	Result 5/8/20	Result 5/8/20	Result 12/8/20	Result 12/8/20	Result 31/8/2020	Result 29/9/2020
Not Discharging	7.6	Discharging	7.6	Discharging	Not Discharging	Not Discharging
	865		923			
	742		736			
	169		186			
	87		151			
	90		97			
	57		63			
	21		21			
	48		46			
	76		68			
	3.71		3.26			
	0.007		0.006			
	0.113		0.112			
	0.004		0.004			
	0.008		0.008			
	0.298		0.377			
	0.01		0.009			
	0.044		0.044			
	4.7		4.34			
	0.4		0.4			
	2.3		2.51			
	1.67		1.49			
	1.59		1.33			
	43		42			
	23		3			
	<0.05		<0.05			
	110		160			
97.7	116					
3	10					