

RESULTS 2021-2022

EPA ID No. 1

Pollutant	Unit	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22
pH units	units	8	8.2	8.5	8.1	8	8.2	8.2	9.2	9.4	7.8	8.4	8
Biochem Oxygen Demand (BOD 5)	mg/L	3	6	9	5	12	5	13	9	7	21	19	20
Elec cond – EC	(uS/cm @ 25°C)	840	930	850	860	22	880	910	7.7	860	900	900	900
Total Phosphorus	mg P /L	7	6.9	7.3	8.2	8.3	9	8.3	4.3	2.3	6.6	6.1	6.9
Oil and grease	mg/L	11	< 5	< 5	< 5	< 5	< 5	9	52	< 5	< 5	< 5	< 5
Suspended Solids	mg/L	32	8	18	34	4	6	63	870	28	15	36	49
Total Nitrogen as N	mg N /L	19	16	22	21	23	19	15	< 5	5.5	8.2	16	14
Sodium Adsorption Ratio SAR	N/A	5.6	4.9	4.9	4.2	4.9	4.4	5.1	6.3	6.6	5.2	4.7	4.5
Thermotolerant Coliforms	cfu/100 mL	100	< 10	< 10	< 10	15	92	90	10	620	83	190	200

EPA ID No. 5

Item	Unit	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22
Flow	kl/day	0.5	0.03	0.1	1	0.1	0	0	0.2	0	1	0	0.1

Aug-21	EPA 10	EPA 8	EPA 9	EPA 11			
ANALYSIS_COMPONENT	UNITS	STP1	STP2	STP3	STP4	SWD1	SWD2
Watertable depth	m	11.6	Flooded	11.7	11.6	12	12.2
pH	units	7		7.5	7.9	7	7.9
Elec cond – EC	(uS/cm @ 25°C)	43000		22000	28000	10000	19000
Chloride (Cl)	mg/L	16000		8600	10000	6200	2600
Total Alkalinity (CaCO3)	mg CaCO3/L	210		140	210	230	150
Ammonia (N [HL])	mg N /L	0.5		0.3	0.3	0.2	< 0.1
Nitrate (N)	mg N /L	0.03		2.3	0.88	0.35	0.41
Calcium (Ca)	mg/L					150	140
Magnesium (Mg)	mg/L					540	470
Potassium (K)	mg/L					16	16
Sodium (Na)	mg/L					4600	4200
Iron (Fe)	mg/L					2.6	1.6
Manganese (Mn)	mg/L					< 0.1	< 0.1
Sulphur (SO4)	mg/L					2900	2900
Total Nitrogen as N	mg/L	43		3.7	2.1	1.5	N/A
Total Kjehldahl Nitrogen as N	mg N /L	43		1.4	1.2	1.1	N/A
Sampled: ????							
Sample was analysed by NATA Certified laboratory: accreditation number ????							
NOTE:		STP1	SW corner near refinery (EPA ID No 10)				
		STP2	N of pondage, 50 m outside fence				
		STP3	N of pondage inside fence (EPA ID No 8)				
		STP4	W of pondage (EPA ID No 9)				
		SWD1	West of waste depot towards eastern side of sewage ponds (EPA ID No 11)				
		SWD2	Immediately behind waste depot				

Tested: August 2021 / November 2021
February 2022 / May 2022

Nov-21	EPA 10	EPA 8	EPA 9	EPA 11			
ANALYSIS_COMPONENT	UNITS	STP1	STP2	STP3	STP4	SWD1	SWD2
Watertable depth	m	11.5	Flooded	11.4	11.5	11.9	12.1
pH	units	7.1		7.3	7.7	7.7	7.0
Elec cond – EC	(uS/cm @ 25°C)	41000		24000	29000	19000	10000
Chloride (Cl)	mg/L					6100	2800
Total Alkalinity (CaCO3)	mg CaCO3/L					140	220
Ammonia (N [HL])	mg N /L					0.4	< 0.1
Nitrate (N)	mg N /L					0	0
Calcium (Ca)	mg/L					150	46
Magnesium (Mg)	mg/L					520	160
Potassium (K)	mg/L					17	11
Sodium (Na)	mg/L					3800	2000
Iron (Fe)	mg/L					< 5	0.9
Manganese (Mn)	mg/L					< 1	<0.1
Sulphur (SO4)	mg/L					2700	1500
Total Nitrogen as N	mg/L					N/A	N/A

Total Kjeldahl Nitrogen as N	mg N /L					N/A	N/A
Sampled: 16/11/21							
Sample was analysed by NATA Certified laboratory: accreditation number 992							
NOTE:	STP1	SW corner near refinery (EPA ID No 10)					
	STP2	N of pondage, 50 m outside fence					
	STP3	N of pondage inside fence (EPA ID No 8)					
	STP4	W of pondage (EPA ID No 9)					
	SWD1	West of waste depot towards eastern side of sewage ponds (EPA ID No 11)					
	SWD2	Immediately behind waste depot					

Feb-22	EPA 10	EPA 8	EPA 9	EPA 11			
ANALYSIS_COMPONENT	UNITS	STP1	STP2	STP3	STP4	SWD1	SWD2
Watertable depth	m	11.7	Flooded	11.6	11.5	12.2	12
pH	units	7.4		7.5	7.6	7.9	7.4
Elec cond – EC	uS/cm @ 250C	42000		23000	28000	19000	10000
Chloride (Cl)	mg/L					5900	2500
Total Alkalinity (CaCO3)	mg CaCO3/L					260	270
Ammonia (N [HL])	mg N /L					0.5	<0.1
Nitrate (N)	mg N /L					0.23	0.47
Calcium (Ca)	mg/L					140	46
Magnesium (Mg)	mg/L					480	170
Potassium (K)	mg/L					17	11
Sodium (Na)	mg/L					3600	2100
Iron (Fe)	mg/L					1.6	1.4
Manganese (Mn)	mg/L					0.3	<0.1
Sulphur (SO4)	mg/L					2800	1400
Total Nitrogen as N	mg/L					N/A	N/A
Total Kjeldahl Nitrogen as N	mg N /L					N/A	N/A
Sampled: 14.02.22							
Sample was analysed by NATA Certified laboratory: accreditation number 992							
NOTE:	STP1	SW corner near refinery (EPA ID No 10)					
	STP2	N of pondage, 50 m outside fence					
	STP3	N of pondage inside fence (EPA ID No 8)					
	STP4	W of pondage (EPA ID No 9)					
	SWD1	West of waste depot towards eastern side of sewage ponds (EPA ID No 11)					
	SWD2	Immediately behind waste depot					

May-22	EPA 10	EPA 8	EPA 9	EPA 11			
ANALYSIS_COMPONENT	UNITS	STP1	STP2	STP3	STP4	SWD1	SWD2
Watertable depth	m	No measurement and sample could be	Flooded	11.6	11.6	11.9	12
pH	units			7.3	7.3	7.9	7.4
Elec cond – EC	uS/cm @ 250C			22000	2800	18000	11000
Chloride (Cl)	mg/L					6000	2700
Total Alkalinity (CaCO3)	mg CaCO3/L					130	220
Ammonia (N [HL])	mg N /L					0.9	0.2
Nitrate (N)	mg N /L					0	0
Calcium (Ca)	mg/L					150	44
Magnesium (Mg)	mg/L					410	160
Potassium (K)	mg/L					19	10
Sodium (Na)	mg/L					3200	2000
Iron (Fe)	mg/L					9	4.1
Manganese (Mn)	mg/L					0.1	<0.1
Sulphur (SO4)	mg/L					2200	1300
Total Nitrogen as N	mg/L					N/A	N/A
Total Kjeldahl Nitrogen as N	mg N /L					N/A	N/A
Sampled: 18/05/22							
Sample was analysed by NATA Certified laboratory: accreditation number 992							
NOTE:	STP1	SW corner near refinery (EPA ID No 10)					
	STP2	N of pondage, 50 m outside fence					
	STP3	N of pondage inside fence (EPA ID No 8)					
	STP4	W of pondage (EPA ID No 9)					
	SWD1	West of waste depot towards eastern side of sewage ponds (EPA ID No 11)					
	SWD2	Immediately behind waste depot					