

RESULTS 2022-2023

EPA ID No. 1

Pollutant	Unit	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
pH units	units	8.1	8.1	7.9	8.1	8.3	8.3	9.9	9.2	6.7	8.5	7.8	8.3
Biochem Oxygen Demand (BOD 5 c	mg/L	3	< 2	4	3	7	3	11	10	11	22	< 2	5
Elec cond – EC	(uS/cm @ 25°C)	900	940	900	860	810	810	810	710	1000	800	810	860
Total Phosphorus	mg P /L	7.3	7.5	7.9	7.8	7.3	7.3	2.2	2.4	4.3	6.1	7.3	7.3
Oil and grease	mg/L	9	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Suspended Solids	mg/L	2	12	7	8	14	11	180	58	95	39	2	5
Total Nitrogen as N	mg N /L	15	20	27	23	23	20	9.5	5.4	14	9	12	12
Sodium Adsorption Ratio SAR	N/A	4.8	4.3	6.3	3.8	4.2	4.2	5.8	5.5	5.2	4.7	4.7	4.9
Thermotolerant Coliforms	cfu/100 mL	12	15	32	10	16	0	4	4	730	920	59	20

EPA ID No. 5

Item	Unit	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
Flow	kl/day	0.1	0.1	0.1	2	3	0.2	0.2	0.2	0.2	1.3	0.8	0

Aug-22	EPA 10	EPA 8	EPA 9	EPA 11			
ANALYSIS_COMPONENT	UNITS	STP1	STP2	STP3	STP4	SWD1	SWD2
Watertable depth	m	11.6	Flooded	11.6	11.5	12.1	12.1
pH	units	6.9		7.7	7.8	8	7.4
Elec cond – EC	(uS/cm @ 250C)	41000		23000	28000	18000	9700
Chloride (Cl)	mg/L			8100	9700	5400	2400
Total Alkalinity (CaCO3)	mg CaCO3/L			140	130	150	240
Ammonia (N [HL])	mg N /L	0.5		0.3	0.3	0.3	< 0.1
Nitrate (N)	mg N /L	0.77		2	0.82	0.45	0.41
Calcium (Ca)	mg/L					150	46
Magnesium (Mg)	mg/L					480	160
Potassium (K)	mg/L					17	10
Sodium (Na)	mg/L					3500	2100
Iron (Fe)	mg/L					1.5	2
Manganese (Mn)	mg/L					0.1	< 0.1
Sulphur (SO4)	mg/L					2800	1500
Total Nitrogen as N	mg/L	6.9		3.7	2.1	0.9	N/A
Total Kjehldahl Nitrogen as N	mg N /L	6.1		1.4	1.2	0.5	N/A

Tested: August 2022 / November 2022 / February 2023 / May 2023

Sampled: 17/08/2022

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

Nov-22	EPA 10	EPA 8	EPA 9	EPA 11			
ANALYSIS_COMPONENT	UNITS	STP1	STP2	STP3	STP4	SWD1	SWD2
Watertable depth	m	11.5	Flooded	11.2	11.2	Flooded	Flooded
pH	units	6.8		7.4	7.8		
Elec cond – EC	uS/cm @ 250C	44000		17000	28000		
Chloride (Cl)	mg/L						
Total Alkalinity (CaCO3)	mg CaCO3/L						
Ammonia (N [HL])	mg N /L						
Nitrate (N)	mg N /L						
Calcium (Ca)	mg/L						
Magnesium (Mg)	mg/L						
Potassium (K)	mg/L						
Sodium (Na)	mg/L						
Iron (Fe)	mg/L						
Manganese (Mn)	mg/L						
Sulphur (SO4)	mg/L						
Total Nitrogen as N	mg/L						

Total Kjeldahl Nitrogen as N	mg N /L						
------------------------------	---------	--	--	--	--	--	--

Sampled: 14/11/22
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

Feb-23		EPA 10		EPA 8	EPA 9	EPA 11	
ANALYSIS_COMPONENT	UNITS	STP1	STP2	STP3	STP4	SWD1	SWD2
Watertable depth	m	11.2	Flooded	11.6	10.6	11.7	11.8
pH	units	7.8		8	8.1	8	8.2
Elec cond – EC	µS/cm @ 250C	43000		19000	28000	18000	9800
Chloride (Cl)	mg/L					2400	2400
Total Alkalinity (CaCO3)	mg CaCO3/L					140	250
Ammonia (N [HL])	mg N /L					0.1	0.2
Nitrate (N)	mg N /L					0.45	0.41
Calcium (Ca)	mg/L					100	37
Magnesium (Mg)	mg/L					440	140
Potassium (K)	mg/L					17	8.8
Sodium (Na)	mg/L					3000	1200
Iron (Fe)	mg/L					0.89	0.73
Manganese (Mn)	mg/L					0.29	0.02
Sulphur (SO4)	mg/L					2300	1200
Total Nitrogen as N	mg/L					N/A	N/A
Total Kjeldahl Nitrogen as N	mg N /L					N/A	N/A

Sampled: 14.02.23
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-23		EPA 10		EPA 8	EPA 9	EPA 11	
ANALYSIS_COMPONENT	UNITS	STP1	STP2	STP3	STP4	SWD1	SWD2
Watertable depth	m	11.2	Flooded	11	10.9	11.6	11.7
pH	units	7.2		7.5	7.8	8.0	7.5
Elec cond – EC	µS/cm @ 250C	43000		21000	28000	18000	9500
Chloride (Cl)	mg/L					5200	2300
Total Alkalinity (CaCO3)	mg CaCO3/L					140	240
Ammonia (N [HL])	mg N /L					0.4	0.1
Nitrate (N)	mg N /L					1	0
Calcium (Ca)	mg/L					140	39
Magnesium (Mg)	mg/L					470	140
Potassium (K)	mg/L					18	10
Sodium (Na)	mg/L					3200	1200
Iron (Fe)	mg/L					2	2.7
Manganese (Mn)	mg/L					0.4	0.14
Sulphur (SO4)	mg/L					2300	1200
Total Nitrogen as N	mg/L					N/A	N/A
Total Kjeldahl Nitrogen as N	mg N /L					N/A	N/A

Sampled: 17/05/23
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