

RESULTS 2023-2024

EPA ID No. 1

Pollutant	Unit	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24
pH units	units	8.2	8	8	8.1	8.2	8.4	9.2	9.3	9.3	8.8		
Biochem Oxygen Demand (BOD 5)	mg/L	5	7	4	7	3	27	15	8	10	23		
Elec cond – EC	(uS/cm@ 25°C)	820	840	820	830	890	750	630	630	700	770		
Total Phosphorus	mg P /L	6.3	6.8	6.8	7	7.3	6.9	4.7	4.8	4.2	6.9		
Oil and grease	mg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		
Suspended Solids	mg/L	5	4	<2	14	2	43	66	58	41	40		
Total Nitrogen as N	mg N /L	13	17	23	34	26	21	12	5.5	6.7	7.9		
Sodium Adsorption Ratio SAR	N/A	4.6	4.4	4.9	5.4	3.6	5.1	4.4	4.5	5.1	5		
Thermotolerant Coliforms	cfu/100 mL	2	150	7	210	180	330	63	110	>2,400	290		

EPA ID No. 5

Item	Unit	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24
Flow	kl/day	0.2	0.5	2	1.5	2	0.5	1.5	0	0.2	0.2		

Aug-23	EPA 10	EPA 8	EPA 9	EPA 11	Tested: August 2023 / November 2023 / February 2024 / May 2024						
ANALYSIS_COMPONENT	UNITS	STP1	STP2	STP3	STP4	SWD1	SWD2	SWD3	SWD4	SWD5	SWD6
Watertable depth	m	11.1	Flooded	10.6	10.8	11.6	11.7	8.6			
pH	units	6.8		7.3	7.6	7.9	7.2	7.2	7.3	6.9	8.8
Elec cond – EC	uS/cm@ 250C	45000		22000	29000	18000	9600	19000	16000	18000	18000
Chloride (Cl)	mg/L	14000		6800	9300	5100	2300	5600	5200	5900	5800
Total Alkalinity (CaCO3)	mg CaCO3/L	190		120	180	160	270	130	130	68	390
Ammonia (N [HL])	mg N /L	0.5		0.5	0.3	0.4	< 0.1	0.3	0.2	0.3	< 0.1
Nitrate (N)	mg N /L	0.77		1.8	1.3	0.26	0.32	0.16	0.24	0.02	0.16
Calcium (Ca)	mg/L					140	45	130	96	130	510
Magnesium (Mg)	mg/L					430	140	400	330	410	350
Potassium (K)	mg/L					19	13	19	21	21	38
Sodium (Na)	mg/L					3400	1900	3500	3000	3300	3500
Iron (Fe)	mg/L					2.5	4.9	6.1	9.6	9.5	78
Manganese (Mn)	mg/L					0.3	< 0.1	0.4	0.4	0.3	0.5
Sulphate (SO4)	mg/L					2400	1400	1700	1200	1300	1300
Total Nitrogen as N	mg/L	2.6	–	2.8	1.6	0.9	N/A	N/A	N/A	N/A	N/A
Total Kjeldahl Nitrogen as N	mg N /L	2.5	–	0.6	0.9	0.7	N/A	N/A	N/A	N/A	N/A

Sampled: 16.08.23

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 Not serviceable replaced by SWD 1
- 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-23	EPA 10	EPA 8	EPA 9	EPA 11							
ANALYSIS_COMPONENT	UNITS	STP1	STP2	STP3	STP4	SWD1	SWD2	SWD3	SWD4	SWD5	SWD6
Watertable depth	m	11.1	Flooded	10.6	10.8	11.6	11.5	12	12.5	11.7	11.9
pH	units	6.6		7.4	7.7	7.9	No Sample	7.2	7.3	6.9	8.8
Elec cond – EC	uS/cm@ 250C	42000		21000	26000	18000	Broken	19000	16000	18000	18000
Chloride (Cl)	mg/L					5100		5600	5200	5900	5800
Total Alkalinity (CaCO3)	mg CaCO3/L					160		130	130	68	390
Ammonia (N [HL])	mg N /L					0.4		0.3	0.2	0.3	< 0.1

Nitrate (N)	mg N /L					0.26		0.16	0.24	0.02	0.16
Calcium (Ca)	mg/L					140		130	96	130	510
Magnesium (Mg)	mg/L					430		400	330	410	350
Potassium (K)	mg/L					19		19	21	21	38
Sodium (Na)	mg/L					3400		3500	3000	3300	3500
Iron (Fe)	mg/L					2.5		6.1	9.6	9.5	78
Manganese (Mn)	mg/L					0.3		0.4	0.4	0.3	0.5
Sulphate (SO4)	mg/L					2400		1700	1200	1300	1300
Total Nitrogen as N	mg/L	2.6	--	2.8	1.6	0.9		N/A	N/A	N/A	N/A
Total Kjeldahl Nitrogen as N	mg N /L	2.5	--	0.6	0.9	0.7		N/A	N/A	N/A	N/A

Sampled: 15.11.23

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 Not serviceable replaced by SWD 1

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 NEEDS REPAIR

Feb-24		EPA 10		EPA 8	EPA 9	EPA 11						
ANALYSIS_COMPONENT	UNITS	STP1	STP2	STP3	STP4	SWD1	SWD2	SWD3	SWD4	SWD5	SWD6	
Watertable depth	m	10.9	Flooded	10.6	10.8	11.2	11.5	11.9	12.5	11.9	11.8	
pH	units	6.4		sample lost	7.7	7.9	6.3	18000	8.2	8.4	8	
Elec cond – EC	µS/cm@ 250C	39000			26000	17000	8400	18000	16000	17000	19000	
Chloride (Cl)	mg/L					4600	2000	5100	4700	5100	5700	
Total Alkalinity (CaCO3)	mg CaCO3/L					200	360	690	460	390	160	
Ammonia (N [HL])	mg N /L					0.3	11	0.2	0.2	0.3	0.3	
Nitrate (N)	mg N /L					0.41	< 0.01	< 0.2	< 0.2	< 0.1	0.11	
Calcium (Ca)	mg/L					160	110	150	110	150	320	
Magnesium (Mg)	mg/L					470	180	480	380	500	420	
Potassium (K)	mg/L					21	17	23	24	25	31	
Sodium (Na)	mg/L					3300	1900	3600	3200	3600	3500	
Iron (Fe)	mg/L					12	6.5	2.3	3.7	14	52	
Manganese (Mn)	mg/L					0.3	0.5	0.6	0.7	0.7	0.3	
Sulphate (SO4)	mg/L					2200	1300	1500	1100	1200	1300	
Total Nitrogen as N	mg/L					N/A	N/A	N/A	N/A	N/A	N/A	
Total Kjeldahl Nitrogen as N	mg N /L					N/A	N/A	N/A	N/A	N/A	N/A	

STP sampled: 15.02.24

SWD sampled: 15.02.24

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 Not serviceable replaced by SWD 1

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

SWD3 North side tip - SWD North

SWD4 East side tip - SWD South Hillside Road

SWD5 South side tip - SWD South Hillside Road

SWD6 West side tip - 150 m from road - SWD West