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	8.4	7.9
Biochem Oxygen Demand (BOD 5	mg/L	5	7	4	7	3	27	15	8	10	23	13	10
Elec cond – EC	(uS/cm@ 25^{0}C)	820	840	820	830	890	750	630	630	700	770	680	710
Total Phosphorus	mg P /L	6.3	6.8	6.8	7	7.3	6.9	4.7	4.8	4.2	6.9	6.9	6.2
Oil and grease	mg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	< 5	< 5
Suspended Solids	mg/L	5	4	<2	14	2	43	66	58	41	40	25	16
Total Nitrogen as N	mg N /L	13	17	23	34	26	21	12	5.5	6.7	7.9	6	12
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	5.4	4.6
Thermotolerant Coliforms	cfu/100 mL	2	150	7	210	180	330	63	110	>2,400	290	96	0

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	0.2	0.1

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@ 2500	45000		22000	29000	18000	9600	19000	16000	18000	18000
Chloride (Cl)	mg/L	14000		6800	9300	5100	2300	5600	5200	5900	5800
Total Alkalinity (CaC03)	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 Kjehldahl 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@ 2500	42000		21000	26000	18000	Broken	19000	16000	18000	18000
Chloride (Cl)	mg/L					5100		5600	5200	5900	5800
Total Alkalinity (CaC03)	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 Kjehldahl 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	uS/cm@ 2500	39000			26000	17000	8400	18000	16000	17000	19000
Chloride (Cl)	mg/L					4600	2000	5100	4700	5100	5700
Total Alkalinity (CaC03)	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 Kjehldahl 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	

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May-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	11.00	Flooded	10.60	10.70	11.20	11.40	11.80	12.30	11.90	11.60
pH	units	6.50	Not	7.30	7.70	8.00	7.60	8.70	8.20	7.90	7.80
Elec cond – EC	uS/cm@ 2500	30000	serviceable	16000	19000	12000	6500	12000	10000	11000	12000
Chloride (Cl)	mg/L		See SWD 1			4600	2100	5500	4900	5500	6200
Ammonia (N [HL])	mg N /L					0.40	9.10	0.30	<0.5	0.30	0.10
Nitrate (N)	mg N /L					0.20	<0.01	<0.01	<0.05	<0.01	0.07
Calcium (Ca)	mg/L					140.00	80.00	140.00	110.00	120.00	310.00
Magnesium (Mg)	mg/L					300.00	170.00	430.00	370.00	460.00	460.00
Potassium (K)	mg/L					21.00	14.00	19.00	22.00	19.00	27.00
Sodium (Na)	mg/L					2900	1900	3500	3400	3500	4000
Iron (Fe)	mg/L					5.20	8.40	2.60	3.90	2.20	44.00
Manganese (Mn)	mg/L					0.30	0.44	0.60	0.90	0.44	0.30
Sulphate (SO4)	mg/L					2200	830	1500	1000	820	890
Total Nitrogen as N	mg/L					N/A	N/A	N/A	N/A	N/A	N/A
Total Kjehldahl Nitrogen as N	mg N /L					N/A	N/A	N/A	N/A	N/A	N/A

STP sampled: 15.05.24
SWD sampled: 15.05.24

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	