

Table 1 provides a summary of the EPA monitoring points for the Rangers Valley Feedlot. This table has been reproduced from Section 2 of Environmental Protection Licence No. 3864. Click on the EPA number to view the monitoring results collected (if available).

Table 1: Summary of EPA Monitoring Points

EPA No.	Type of monitoring point	Type of discharge point	Description of location
EPA Monitoring Point 2	Surface water quality monitoring		Surface water monitoring point (S2) at Cam Creek causeway on Deepwater Road at "Nant Park" labelled as EPA Point 2 on map titled Environmental Monitoring Points - Location of Surface Water Monitoring points dated 1 st May 2007. See Fig 1 - 250832A1/10.
EPA Monitoring Point 3	Surface water quality monitoring		Surface water monitoring point (S3) at grassed waterway in Old 2 paddock labelled as EPA Point 3 on map titled Environmental Monitoring Points - Location of Surface Water MP dated 1st May 2007. See Fig 1 - 250832A1/10.
EPA Monitoring Point 4	Surface water quality monitoring		Surface water monitoring point (S4) at Cam Creek bridge on Rangers Valley Road labelled as EPA Point 4 on map titled Environmental Monitoring Points -Location of Surface Water MP dated 1st May 2007. See Fig 1 - 250832A1/10.
EPA Monitoring Point 5	Surface water quality monitoring		Surface water monitoring point (S5) at Severn River Bridge on the Yarraford Road labelled as EPA Point 5 on map titled Environmental Monitoring Points - Location of Surface Water MP dated 1st May 2007. See Fig 1 - 250832A1/10.
EPA Monitoring Point 6	Surface water quality monitoring		Surface water monitoring point (S6) at Severn River Bridge on the Emmaville Road labelled as EPA Point 6 on map titled Environmental Monitoring Points - Location of Surface Water MP dated 1st May 2007. See Fig 1 - 250832A1/10.
EPA Monitoring Point 7	Surface water quality monitoring		Surface water monitoring point (S7) at Beardy Waters causeway on the Haul Rd (2 nd causeway) -

EPA No.	Type of monitoring point	Type of discharge point	Description of location
			upstream of confluence with Severn River, labelled as EPA Point 7 on map titled Env MP -Location of Surface Water MP dated 1st May 2007. (Fig 1).
EPA Monitoring Point 8	Surface water quality monitoring		Surface water monitoring point (S8) at Severn River causeway on the Haul Road (first causeway) labelled as EPA Point 8 on map titled Environmental Monitoring Points - Location of Surface Water MP dated 1st May 2007. See Fig 1 - 250832A1/10.
10	Effluent quality and volume monitoring. Wet weather discharge. Discharge quality monitoring. Discharge to utilisation area.	Effluent quality and volume monitoring. Wet weather discharge. Discharge quality monitoring. Discharge to utilisation area.	Terminal pond and spillway servicing Pivot 3A and 3B including pump labelled as EPA Point 10 on map titled Env MPs-Location of Effluent MP dated 1st May 2007. See Fig 2 250832A1/10.
EPA Monitoring Point 11	Effluent quality and volume monitoring. Wet weather discharge. Discharge quality monitoring. Discharge to utilisation area.	Effluent quality and volume monitoring. Wet weather discharge. Discharge quality monitoring. Discharge to utilisation area.	Final effluent holding pond (on eastern side of the feedlot, known as E2) including spillway and irrigation pumps labelled as EPA Point 11 on map titled Env MPs-Location of Effluent MP dated 1st May 2007. See Fig 2. 250832A1/10.
13	Wet weather discharge. Discharge quality monitoring.	Wet weather discharge. Discharge quality monitoring	Spillway for effluent holding pond known as W2 (on western side of feedlot) labelled as EPA Point 13 on map titled Env MPs-Location of Effluent MP dated 1st May 2007. See Fig 2 250832A1/10.
14	Effluent quality and volume monitoring. Wet weather discharge. Discharge quality monitoring. Discharge to utilisation area.	Effluent quality and volume monitoring. Wet weather discharge. Discharge quality monitoring. Discharge to utilisation area.	Terminal pond and spillway servicing Pivot 1 and located in the paddock Bottom Swamp including pump labelled as EPA Point 14 on map titled Env MPs-Location of Effluent MP dated 1st May 2007. see Fig 2 250832A1/10.
EPA Monitoring Point 20	Effluent quality and volume monitoring. Wet weather discharge.	Effluent quality and volume monitoring. Wet weather discharge.	Effluent holding pond (on western side of feedlot, known as W4) including spillway and irrigation pump labelled as EPA Point 20 on map titled Env MPs-

EPA No.	Type of monitoring point	Type of discharge point	Description of location
	Discharge quality monitoring. Discharge to utilisation area.	Discharge quality monitoring. Discharge to utilisation area.	Location of Effluent MP dated 1st May 2007. see Fig 2 250832A1/10.
22	Effluent quality and volume monitoring. Wet weather discharge. Discharge quality monitoring. Discharge to utilisation area.	Effluent quality and volume monitoring. Wet weather discharge. Discharge quality monitoring. Discharge to utilisation area.	Terminal pond and spillway servicing Rye East and Rye West known as W5 including pump labelled as EPA Point 22 on map titled Env MPs-Location of Effluent MP dated 1 st May 2007. see Fig 2 250832A1/10.
EPA Monitoring Point 24	Manure quality monitoring. Mass monitoring.		Manure stockpile and composting area containing screened and unscreened manure and labelled as EPA Point 24 on map titled Env MPs-Location of Effluent MP dated 1 st May 2007. see Fig 2 250832A1/10.
EPA Monitoring Point 26	Discharge quality monitoring.		Dam located in the bottom corner of "Washpool Road" (13) paddock labelled as EPA Point 26 on map titled Env MPs-Location of Effluent MP dated 1 st May 2007. see Fig 2 250832A1/10.
EPA Monitoring Point 27	Soil quality monitoring. Mass monitoring.		Effluent utilisation area known as Pivot 1 labelled as EPA Point 27 on map titled "Rangers Valley Cattle Station Site Plan" dated 30.07.03.
EPA Monitoring Point 28	Soil quality monitoring. Mass monitoring.		Effluent utilisation area known as Pivot 3A labelled as EPA Point 28 on map titled "Rangers Valley Cattle Station Site Plan" dated 30.07.03.
EPA Monitoring Point 29	Soil quality monitoring. Mass monitoring.		Effluent utilisation area known as Pivot 3B labelled as EPA Point 29 on map titled "Rangers Valley Cattle Station Site Plan" dated 30.07.03.
EPA Monitoring Point 30	Soil quality monitoring. Mass monitoring.		Effluent utilisation area known as Rye East labelled as EPA Point 30 on map titled "Rangers Valley Cattle Station Site Plan" dated 30.07.03.
EPA Monitoring Point 31	Soil quality monitoring. Mass monitoring.		Effluent utilisation area known as Rye West labelled as EPA Point 31 on map titled "Rangers Valley Cattle Station Site Plan" dated 30.07.03.

EPA No.	Type of monitoring point	Type of discharge point	Description of location
EPA Monitoring Point 34	Groundwater quality monitoring.		Groundwater monitoring bore (34 located in corner paddock) labelled as EPA Point 34 on map titled Env MP-Location of piezometer MP dated 1 st May 2007. see Fig 3
EPA Monitoring Point 35	Groundwater quality monitoring.		Groundwater monitoring bore (35 located in the laneway north of Rye East paddock) labelled as EPA Point 35 on map titled Env MP-Location of piezometer MP dated 1 st May 2007. see Fig 3
EPA Monitoring Point 36	Groundwater quality monitoring.		Groundwater monitoring bore (36 located between ponds W3 and W4) labelled as EPA Point 36 on map titled Env MP-Location of piezometer MP dated 1 st May 2007. see Fig 3
EPA Monitoring Point 38	Groundwater quality monitoring.		Groundwater monitoring bore (38 located on eastern point of effluent pond E2) labelled as EPA Point 38 on map titled Env MP-Location of piezometer MP dated 1 st May 2007. see Fig 3
EPA Monitoring Point 40	Groundwater quality monitoring.		Groundwater monitoring bore (40 located on adjoining fence line between Pivot 3A/3B) on map titled Env MP-Location of piezometer MP dated 1 st May 2007. see Fig 3
EPA Monitoring Point 41	Groundwater quality monitoring.		Groundwater monitoring bore (41 below EPA point 14 in paddock Bottom Swamp) labelled as EPA Point 41 on map titled Env MP-Location of piezometer MP dated 1 st May 2007. see Fig 3
EPA Monitoring Point 42	Groundwater quality monitoring.		Groundwater monitoring bore (42 located in laneway between Pivot 1 and effluent pond E2) labelled as EPA Point 42 on map titled Env MP-Location of piezometer MP dated 1 st May 2007. see Fig 3
EPA Monitoring Point 43	Soil quality monitoring. Mass monitoring		Utilisation area identified as the 'solid utilisation areas as identified on drawing No 19045-05 as quoted in the consent conditions' on map titled "Map 1 - Rangers Valley Cattle Station" submitted with a letter to the EPA on 25 October 2006.
EPA Monitoring Point 44	Groundwater quality monitoring.		Groundwater monitoring bore (44 located in the north eastern grassed area of the paddock known as Old

EPA No.	Type of monitoring point	Type of discharge point	Description of location
			2) labelled as EPA point 44 on map titled Env MP-Location of Peizometer MP dated 1 st May 2007. see Fig 3. 250832A1/10.
EPA Monitoring Point 45	Groundwater quality monitoring.		Groundwater monitoring bore (45 located on eastern boundary of the paddock known as "Donnelly's Elect" labelled as EPA point 45 on map Titled Env MP location of Piezometer MP dated 1 st May 2007. see Fig 3
EPA Monitoring Point 46	Groundwater quality monitoring.		Groundwater monitoring bore (46 located in paddock known as "Oaks Road") labelled as EPA point 46 on map Titled Env MP-location of Piezometer MP dated 1 st May 2007. see Fig 3
EPA Monitoring Point 47	Groundwater quality monitoring.		Groundwater monitoring bore (47 located in paddock known as Horse" labelled as EPA point 47 on map Titled Env MP-location of Piezometer MP dated 1 st May 2007. see Fig 3
48	Effluent quality and volume monitoring. Wet weather discharge. Discharge quality monitoring. Discharge to utilisation area.	Effluent quality and volume monitoring. Wet weather discharge. Discharge quality monitoring. Discharge to utilisation area.	Terminal Pond One and spillway servicing Pivot 2c located in the paddock known as Spillway including pump labelled as EPA Point 48 on map Titled Environmental Monitoring Points-location of Effluent MP dated 1 st May 2007. see Fig 2
49	Effluent quality and volume monitoring. Wet weather discharge. Discharge quality monitoring. Discharge to utilisation area.	Effluent quality and volume monitoring. Wet weather discharge. Discharge quality monitoring. Discharge to utilisation area.	Terminal Pond Two and spillway servicing Pivot 2B and located in paddock known as Pivot 2B including pump labelled as EPA Point 49 on map Titled Env MP-location of Effluent MP dated 1 st May 2007. see Fig 2
50	Effluent quality and volume monitoring. Wet weather discharge. Discharge quality monitoring. Discharge to utilisation area.	Effluent quality and volume monitoring. Wet weather discharge. Discharge quality monitoring.	Terminal Pond 3 and spillway servicing Pivot 2B and 2C located in the paddock known as "wally's" including pump labelled as EPA Point 50 on map Titled Env MP-location of Effluent MP dated 1 st May 2007. Fig 2

EPA No.	Type of monitoring point	Type of discharge point	Description of location
		Discharge to utilisation area.	
EPA Monitoring Point 51	Soil quality monitoring. Mass monitoring		Effluent utilisation area known as Pivot 2B labelled as EPA Pont 51 on map titled "Rangers Valley Cattle Station" Site Plan date 30.07.03
EPA Monitoring Point 52	Soil quality monitoring. Mass monitoring		Effluent utilisation known as Pivot 2C labelled as EPA Point 52 on map titled "Rangers Valley Cattle Station Site Plan date 30.07.03
EPA Monitoring Point 53	Groundwater quality monitoring.		Groundwater monitoring bore (53 located west of Terminal Pond 1 in the paddock known as spillway) labelled as EPA point 53 on map Titled Env MP-location of Piezometer MP dated 1 st May 2007. see Fig 3
EPA Monitoring Point 54	Groundwater quality monitoring.		Groundwater monitoring bore (54 located north of Terminal Pond Two in the paddock known as Pivot 2b) labelled as EPA point 54 on map Titled Env MP location of Piezometer MP dated 1 st May 2007. see Fig 3
EPA Monitoring Point 55	Groundwater quality monitoring.		Groundwater monitoring bore (55 located south of Terminal Pond Three in the paddock known as Wallys) labelled as EPA point 55 on map Titled Env MP-location of Piezometer MP dated 1 st May 2007. see Fig 3
EPA Monitoring Point 56	Groundwater quality monitoring.		Groundwater monitoring bore (56 located south of the northern holding pond N1 in the paddock known as Irrigation 1) labelled as EPA point 56 on map titled Env MP dated 1 st May 2007. see Fig 3. 250832A1/10
EPA Monitoring Point 57	Effluent Quality and Volume monitoring. Discharge to utilisation area.		Effluent holding pond (known as N1) irrigation pump labelled as EPA point 57 on map titled Env MP-Location of Effluent MP dated 1 st May 2007. see Fig 2. 250832A1/10.

EPA MONITORING POINT 2

Surface water monitoring point (S2) at Cam Creek causeway on Deepwater Road at "Nant Park" labelled as EPA Point 2 on map titled Environmental Monitoring Points - Location of Surface Water Monitoring points dated 1st May 2007. See Fig 1 - 250832A1/10.

SURFACE WATER ANALYSIS RESULTS (EPA POINT 2)

Sampled		29/06/2023	12/09/2023	25/03/2024	17/6/2024
Obtained		4/07/2023	15/09/2023	8/04/2024	26/6/2024
Published		21/07/2023	8/11/2023	30/4/2024	1/7/2024
Pollutant	Unit of measure	Result	Result	Result	Result
Chloride	mg/L	92	95	52	78
Nitrate	mg/L	<0.005	<0.005	<0.005	0.01
Total Kjeldahl Nitrogen	mg/L	0.5	0.6	0.8	0.4
pH	-	7.8	8.0	7.9	7.9
Conductivity	µS/cm	870	910	650	810
SAR	-	2.5	2.3	2.3	2.3
Phosphorus (Reactive)	mg/L	0.03	0.02	0.04	0.01
Nitrogen (Total)	mg/L	0.5	0.6	0.8	0.4
Suspended Solids	mg/L	65	40	14	<5
Calcium	mg/L	40	43	23	41
Potassium	mg/L	5	4	5	5
Magnesium	mg/L	30	34	18	29
Sodium	mg/L	88	83	62	100
Phosphorus (Total)	mg/L	0.07	0.09	0.1	<0.05
Nitrogen (Ammonia)	mg/L	<0.005	<0.005	0.019	0.030

Collected during pond overflow event.

EPA MONITORING POINT 3

Surface water monitoring point (S3) at grassed waterway in Old 2 paddock labelled as EPA Point 3 on map titled Environmental Monitoring Points
 -Location of Surface Water MP dated 1st May 2007. See Fig 1 - 250832A1/10.

SURFACE WATER ANALYSIS RESULTS (EPA POINT 3)

Sampled		29/06/2023	12/09/2023	25/03/2024	17/6/2024
Obtained		4/07/2023	15/09/2023	8/04/2024	26/6/2024
Published		21/07/2023	8/11/2023	30/4/2024	1/7/2024
Pollutant	Unit of measure	Result	Result	Result	Result
Chloride	mg/L				44
Nitrate	mg/L				1.5
Total Kjeldahl Nitrogen	mg/L				3.0
pH	-				7.7
Conductivity	µS/cm				400
SAR	-				0.98
Phosphorus (Reactive)	mg/L	DRY	DRY	DRY	3.5
Nitrogen (Total)	mg/L				4.5
Suspended Solids	mg/L				14
Calcium	mg/L				12
Potassium	mg/L				58
Magnesium	mg/L				6.5
Sodium	mg/L				17
Phosphorus (Total)	mg/L				4.1
Nitrogen (Ammonia)	mg/L				0.62

Collected during pond overflow event.

EPA MONITORING POINT 4

Surface water monitoring point (S4) at Cam Creek bridge on Rangers Valley Road labelled as EPA Point 4 on map titled Environmental Monitoring Points -Location of Surface Water MP dated 1st May 2007. See Fig 1 - 250832A1/10.

SURFACE WATER ANALYSIS RESULTS (EPA POINT 4)

Sampled		29/06/2023	12/09/2023	25/03/2024	17/6/2024
Obtained		4/07/2023	15/09/2023	8/04/2024	26/6/2024
Published		21/07/2023	8/11/2023	30/4/2024	1/7/2024
Pollutant	Unit of measure	Result	Result	Result	Result
Chloride	mg/L	210	330	270	190
Nitrate	mg/L	0.39	0.46	0.15	0.27
Total Kjeldahl Nitrogen	mg/L	2.0	1.7	2.7	1.7
pH	-	8.1	8.1	8.2	7.9
Conductivity	µS/cm	1300	1600	1700	1300
SAR	-	3.0	2.7	4.3	3.4
Phosphorus (Reactive)	mg/L	0.18	0.43	1.2	0.39
Nitrogen (Total)	mg/L	2.4	2.2	2.9	2.0
Suspended Solids	mg/L	34	27	18	<5
Calcium	mg/L	59	78	57	61
Potassium	mg/L	16	11	29	16
Magnesium	mg/L	42	56	53	48
Sodium	mg/L	120	130	190	160
Phosphorus (Total)	mg/L	0.3	0.56	1.4	0.4
Nitrogen (Ammonia)	mg/L	0.55	0.48	0.27	0.27

Collected during pond overflow event.

EPA MONITORING POINT 5

Surface water monitoring point (S5) at Severn River Bridge on the Yarraford Road labelled as EPA Point 5 on map titled Environmental Monitoring Points -Location of Surface Water MP dated 1st May 2007. See Fig 1 - 250832A1/10.

SURFACE WATER ANALYSIS RESULTS (EPA POINT 5)

Sampled		29/06/2023	12/09/2023	25/03/2024	17/6/2024
Obtained		4/07/2023	15/09/2023	8/04/2024	26/6/2024
Published		21/07/2023	8/11/2023	30/4/2024	1/7/2024
Pollutant	Unit of measure	Result	Result	Result	Result
Chloride	mg/L	30	42	22	26
Nitrate	mg/L	<0.005	0.007	<0.005	0.01
Total Kjeldahl Nitrogen	mg/L	0.3	0.4	0.7	0.5
pH	-	8.0	8.1	7.8	8.0
Conductivity	µS/cm	260	360	280	240
SAR	-	1.4	1.5	2.3	1.8
Phosphorus (Reactive)	mg/L	<0.005	<0.005	0.02	0.01
Nitrogen (Total)	mg/L	0.3	0.4	0.7	0.5
Suspended Solids	mg/L	<5	<5	10	<5
Calcium	mg/L	10	14	5.6	9.9
Potassium	mg/L	2	2	4	3
Magnesium	mg/L	7.2	10	5	6.7
Sodium	mg/L	25	31	31	30
Phosphorus (Total)	mg/L	<0.05	<0.05	0.1	<0.05
Nitrogen (Ammonia)	mg/L	0.01	0.018	<0.005	0.016

Collected during pond overflow event.

EPA MONITORING POINT 6

Surface water monitoring point (S6) at Severn River Bridge on the Emmaville Road labelled as EPA Point 6 on map titled Environmental Monitoring Points -Location of Surface Water MP dated 1st May 2007. See Fig 1 - 250832A1/10.

SURFACE WATER ANALYSIS RESULTS (EPA POINT 6)

Sampled		29/06/2023	12/09/2023	25/03/2024	17/6/2024
Obtained		4/07/2023	15/09/2023	8/04/2024	26/6/2024
Published		21/07/2023	8/11/2023	30/4/2024	1/7/2024
Pollutant	Unit of measure	Result	Result	Result	Result
Chloride	mg/L	27	25	21	23
Nitrate	mg/L	<0.005	0.04	<0.005	0.005
Total Kjeldahl Nitrogen	mg/L	0.4	0.3	0.7	0.4
pH	-	8.6	8.7	8.6	8.2
Conductivity	µS/cm	490	500	300	420
SAR	-	0.92	0.66	1.4	0.90
Phosphorus (Reactive)	mg/L	<0.005	0.55	0.074	<0.005
Nitrogen (Total)	mg/L	0.4	0.4	0.7	0.4
Suspended Solids	mg/L	13	<5	<5	<5
Calcium	mg/L	28	24	8.9	24
Potassium	mg/L	3	3	4	3
Magnesium	mg/L	29	33	7.6	25
Sodium	mg/L	30	21	24	26
Phosphorus (Total)	mg/L	<0.05	<0.05	0.2	<0.05
Nitrogen (Ammonia)	mg/L	<0.005	0.20	0.006	0.012

Collected during pond overflow event.

EPA MONITORING POINT 7

Surface water monitoring point (S7) at Beardy Waters causeway on the Haul Rd (2nd causeway) - upstream of confluence with Severn River, labelled as EPA Point 7 on map titled Env MP -Location of Surface Water MP dated 1st May 2007. See Fig 1.

SURFACE WATER ANALYSIS RESULTS (EPA POINT 7)

Sampled		29/06/2023	12/09/2023	25/03/2024	17/6/2024
Obtained		4/07/2023	15/09/2023	8/04/2024	26/6/2024
Published		21/07/2023	8/11/2023	30/4/2024	1/7/2024
Pollutant	Unit of measure	Result	Result	Result	Result
Chloride	mg/L	23	20	11	16
Nitrate	mg/L	<0.005	<0.005	<0.005	0.03
Total Kjeldahl Nitrogen	mg/L	0.3	0.3	0.5	0.3
pH	-	8.6	8.7	8.5	8.2
Conductivity	µS/cm	520	510	320	410
SAR	-	0.63	0.55	0.69	0.75
Phosphorus (Reactive)	mg/L	<0.005	0.007	0.065	<0.005
Nitrogen (Total)	mg/L	0.3	0.3	0.5	0.3
Suspended Solids	mg/L	<5	5	<5	<5
Calcium	mg/L	31	25	11	24
Potassium	mg/L	2	3	4	2
Magnesium	mg/L	35	35	12	25
Sodium	mg/L	22	19	14	22
Phosphorus (Total)	mg/L	<0.05	<0.05	0.08	<0.05
Nitrogen (Ammonia)	mg/L	<0.005	<0.005	<0.005	0.006

Collected during pond overflow event.

EPA MONITORING POINT 8

Surface water monitoring point (S8) at Severn River causeway on the Haul Road (first causeway) labelled as EPA Point 8 on map titled Environmental Monitoring Points - Location of Surface Water MP dated 1st May 2007. See Fig 1 - 250832A1/10.

SURFACE WATER ANALYSIS RESULTS (EPA POINT 8)

Sampled		29/06/2023	12/09/2023	25/03/2024	17/6/2024
Obtained		4/07/2023	15/09/2023	8/04/2024	26/6/2024
Published		21/07/2023	8/11/2023	30/4/2024	1/7/2024
Pollutant	Unit of measure	Result	Result	Result	Result
Chloride	mg/L	25	22	16	19
Nitrate	mg/L	<0.005	0.03	0.13	0.055
Total Kjeldahl Nitrogen	mg/L	0.3	0.3	0.7	0.3
pH	-	8.6	8.8	8.2	8.4
Conductivity	µS/cm	510	500	300	400
SAR	-	0.84	0.58	0.99	0.85
Phosphorus (Reactive)	mg/L	<0.005	0.005	0.068	0.005
Nitrogen (Total)	mg/L	0.3	0.4	0.9	0.4
Suspended Solids	mg/L	<5	<5	5	<5
Calcium	mg/L	29	25	8.9	23
Potassium	mg/L	2	3	4	3
Magnesium	mg/L	33	34	9.7	24
Sodium	mg/L	28	19	18	24
Phosphorus (Total)	mg/L	<0.05	<0.05	0.1	<0.05
Nitrogen (Ammonia)	mg/L	<0.005	<0.005	0.036	0.009

Collected during pond overflow event.

EPA MONITORING POINT 11

Final effluent holding pond (on eastern side of the feedlot, known as E2) including spillway and irrigation pumps labelled as EPA Point 11 on map titled Env MPs-Location of Effluent MP dated 1st May 2007. See Fig 2 - 250832A1/10.

EFFLUENT ANALYSIS RESULTS (EPA POINT 11)

Sampled		29/06/2023	12/09/2023	25/03/2024	17/6/2024
Obtained		4/07/2023	15/09/2023	8/04/2024	26/6/2024
Published		21/07/2023	8/11/2023	30/4/2024	1/7/2024
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (Ammonia)	mg/L	26	13	620	0.95
Chloride	mg/L	640	800	<0.050	470
Nitrate	mg/L	<0.050	<0.50	21	<0.050
Phosphorus (Reactive)	mg/L	18	26	15	7.6
pH	-	8.1	8.2	9.0	9.1
Conductivity	µS/cm	4300	4600	4000	2900
SAR	-	4.8	4.7	7.3	5.2
Phosphorus (Total)	mg/L	66	78	18	20
Nitrogen (Total)	mg/L	65	88	21	26
TKN	mg/L	65	88	21	26
Suspended Solids	mg/L	650	900	34	340
Calcium	mg/L	66	55	16	25
Potassium	mg/L	590	660	760	450
Magnesium	mg/L	70	74	59	55
Sodium	mg/L	240	230	280	210

Collected during pond overflow event.

EPA MONITORING POINT 20

Effluent holding pond (on western side of feedlot, known as W4) including spillway and irrigation pump labelled as EPA Point 20 on map titled Env MPs-Location of Effluent MP dated 1st May 2007. See Fig 2 - 250832A1/10.

EFFLUENT ANALYSIS RESULTS (EPA POINT 20)

Sampled		29/06/2023	12/09/2023	25/03/2024	17/6/2024
Obtained		4/07/2023	15/09/2023	8/04/2024	26/6/2024
Published		21/07/2023	8/11/2023	30/4/2024	1/7/2024
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (Ammonia)	mg/L	0.092	40	430	0.072
Chloride	mg/L	360	530	<0.005	410
Nitrate	mg/L	<0.005	<0.02	8.5	0.006
Phosphorus (Reactive)	mg/L	9.6	13	6.5	5.7
pH	-	8.8	8.1	9.0	8.9
Conductivity	µS/cm	1900	3400	2200	2100
SAR	-	4.0	3.4	7.1	5.0
Phosphorus (Total)	mg/L	15	6.9	7.8	8.3
Nitrogen (Total)	mg/L	7.6	86	8.5	11
TKN	mg/L	7.6	86	8.5	11
Suspended Solids	mg/L	220	210	63	140
Calcium	mg/L	24	19	15	27
Potassium	mg/L	260	300.	360	310
Magnesium	mg/L	30	29	23	32
Sodium	mg/L	260	130	190	160

Collected during pond overflow event.

EPA MONITORING POINT 24

Manure stockpile and composting area containing screened and unscreened manure and labelled as EPA Point 24 on map titled Env MPs- Location of Effluent MP dated 1st May 2007. See Fig 2 250832A1/10.

MANURE ANALYSIS RESULTS (EPA POINT 24)

Sampled		12/09/2023	12/09/2023	25/03/2024	25/03/2024
Obtained		15/09/2023	15/09/2023	8/04/2024	8/04/2024
Published		8/11/2023	8/11/2023	30/4/2024	30/4/2024
Pollutant	Unit of measure	Screened Result	Unscreened Result	Screened Result	Unscreened Result
Moisture	%	26.4	22.2	33.4	43.8
Nitrate	mg/kg	<1.00	1.33	2.93	7.08
Nitrogen (Total)	mg/kg	26667	31194	23135	23058
pH	-	7.20	7.11	7.31	6.75
Calcium	mg/kg	314	289	265	660
Phosphorus (Total)	mg/kg	11136	11127	10455	10271
Organic Carbon	%	26.8	35.8	26.8	29.4
Potassium	mg/kg	12505	12807	16607	12384
Magnesium	mg/kg	531	572	1125	2279
Sodium	mg/kg	3376	2196	4712	4720
Conductivity	µS/cm	13.3	9.62	12.3	15.7
SAR	-	20.3	12.9	20.4	14.3
Sulphur	mg/kg	7800	8216	4784	4616
Chloride	mg/kg	1414	1107	31800	19800
Zinc	mg/kg	281	262	320	305

EPA MONITORING POINT 26

Dam located in the bottom corner of "Washpool Road" (13) paddock labelled as EPA Point 26 on map titled Env MPs-Location of Effluent MP dated 1st May 2007. See Fig 2 - 250832A1/10.

EFFLUENT ANALYSIS RESULTS (EPA POINT 26)

Sampled		20/09/2022	20/03/2023	12/09/2023	25/03/2024
Obtained		30/09/2022	22/03/2023	15/09/2023	8/04/2024
Published		4/10/2022	3/04/2023	8/11/2023	30/4/2024
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (Ammonia)	mg/L	0.42	0.40	0.038	410
Chloride	mg/L	170	260	330	<0.005
Nitrate	mg/L	0.03	<0.005	<0.005	8.0
Phosphorus (Reactive)	mg/L	7.7	8.8	5.1	0.04
pH	-	7.9	8.0	8.9	9.0
Conductivity	µS/cm	980	1300	1500	2000
SAR	-	2.5	3.0	3.1	5.3
Phosphorus (Total)	mg/L	7.6	10	5.1	0.88
Nitrogen (Total)	mg/L	4.4	6.0	7.0	8.0
TKN	mg/L	4.3	6.0	7.0	8.0
Suspended Solids	mg/L	14	52	94	160
Calcium	mg/L	16	20	25	29
Potassium	mg/L	72	190	190	240
Magnesium	mg/L	15	23	28	34
Sodium	mg/L	60	85	95	180

Collected during pond overflow event.

EPA MONITORING POINT 27

Effluent utilisation area known as Pivot 1 labelled as EPA Point 27 on map titled "Rangers Valley Cattle Station Site Plan" dated 30.07.03.

SOIL ANALYSIS RESULTS (EPA POINT 27 - PIVOT 1)

Parameter	Unit	Rayment & Higginson Reference	Annual Return 2023 - 2024	
			0-30cm	60-90cm
pH	-	4A1	6.04	7.04
Nitrogen (Total)	mg/kg	Dumas (Leco)	944	1568
Nitrogen (Nitrate)	mg/kg	7B1	3.61	<1.00
Phosphorous (Colwell)	mg/kg	9B1	176	34.9
Organic Carbon	%	6A1	1.23	0.54
Conductivity	µS/cm	3A1	0.09	0.05
Chloride	mg/kg	5A1	20.6	12.9
Cation Exchange Capacity	cmol(+)/kg	15D3	8.22	6.22
Exchangeable Sodium	cmol(+)/kg	15D3	0.17	0.16
Exchangeable Potassium	cmol(+)/kg	15D3	0.60	0.87
Exchangeable Calcium	cmol(+)/kg	15D3	5.32	3.13
Exchangeable Magnesium	cmol(+)/kg	15D3	2.11	2.04
Exchangeable Sodium Percentage	%	15D3	2.12	2.57
Phosphorus Sorption Capacity	mg/kg	9I1 and 9J1	437	353
Aggregate Stability (Emerson)	EAT	-	7	3a

EPA MONITORING POINT 28

Effluent utilisation area known as Pivot 3A labelled as EPA Point 28 on map titled "Rangers Valley Cattle Station Site Plan" dated 30.07.03.

SOIL ANALYSIS RESULTS (EPA POINT 28 - PIVOT 3A)

Parameter	Unit	Rayment & Higginson Reference	Annual Return 2023 - 2024	
			0-30cm	60-90cm
pH	-	4A1	6.64	7.04
Nitrogen (Total)	mg/kg	Dumas (Leco)	1191	481
Nitrogen (Nitrate)	mg/kg	7B1	2.65	3.76
Phosphorous (Colwell)	mg/kg	9B1	78.8	11.2
Organic Carbon	%	6A1	0.98	0.48
Conductivity	µS/cm	3A1	0.11	0.20
Chloride	mg/kg	5A1	56.6	110
Cation Exchange Capacity	cmol(+)/kg	15D3	5.37	15
Exchangeable Sodium	cmol(+)/kg	15D3	0.20	0.87
Exchangeable Potassium	cmol(+)/kg	15D3	1.08	0.88
Exchangeable Calcium	cmol(+)/kg	15D3	2.75	8.60
Exchangeable Magnesium	cmol(+)/kg	15D3	1.33	4.64
Exchangeable Sodium Percentage	%	15D3	3.80	5.82
Phosphorus Sorption Capacity	mg/kg	9I1 and 9J1	299	525
Aggregate Stability (Emerson)	EAT	-	5	5

EPA MONITORING POINT 29

Effluent utilisation area known as Pivot 3B labelled as EPA Point 29 on map titled "Rangers Valley Cattle Station Site Plan" dated 30.07.03.

SOIL ANALYSIS RESULTS (EPA POINT 29 - PIVOT 3B)

Parameter	Unit	Rayment & Higginson Reference	Annual Return 2023 - 2024	
			0-30cm	60-90cm
pH	-	4A1	7.16	6.97
Nitrogen (Total)	mg/kg	Dumas (Leco)	975	390
Nitrogen (Nitrate)	mg/kg	7B1	4.09	6.08
Phosphorous (Colwell)	mg/kg	9B1	81.8	11.6
Organic Carbon	%	6A1	1.06	0.44
Conductivity	µS/cm	3A1	0.18	0.25
Chloride	mg/kg	5A1	85.3	124
Cation Exchange Capacity	cmol(+)/kg	15D3	7.94	11.1
Exchangeable Sodium	cmol(+)/kg	15D3	0.33	0.97
Exchangeable Potassium	cmol(+)/kg	15D3	1.45	1.02
Exchangeable Calcium	cmol(+)/kg	15D3	4.59	5.46
Exchangeable Magnesium	cmol(+)/kg	15D3	1.55	3.62
Exchangeable Sodium Percentage	%	15D3	4.16	8.75
Phosphorus Sorption Capacity	mg/kg	9I1 and 9J1	311	334
Aggregate Stability (Emerson)	EAT	-	5	3a

EPA MONITORING POINT 30

Effluent utilisation area known as Rye East labelled as EPA Point 30 on map titled "Rangers Valley Cattle Station Site Plan" dated 30.07.03.

SOIL ANALYSIS RESULTS (EPA POINT 30 - RYE EAST)

Parameter	Unit	Rayment & Higginson Reference	Annual Return 2023 - 2024	
			0-30cm	60-90cm
pH	-	4A1	6.12	6.74
Nitrogen (Total)	mg/kg	Dumas (Leco)	1687	408
Nitrogen (Nitrate)	mg/kg	7B1	4.90	2.35
Phosphorous (Colwell)	mg/kg	9B1	156	17.6
Organic Carbon	%	6A1	1.35	0.57
Conductivity	µS/cm	3A1	0.13	0.13
Chloride	mg/kg	5A1	31	85.4
Cation Exchange Capacity	cmol(+)/kg	15D3	7.84	12.9
Exchangeable Sodium	cmol(+)/kg	15D3	0.12	0.76
Exchangeable Potassium	cmol(+)/kg	15D3	1.03	0.47
Exchangeable Calcium	cmol(+)/kg	15D3	4.84	7.84
Exchangeable Magnesium	cmol(+)/kg	15D3	1.83	3.78
Exchangeable Sodium Percentage	%	15D3	1.57	5.91
Phosphorus Sorption Capacity	mg/kg	9I1 and 9J1	345	250
Aggregate Stability (Emerson)	EAT	-	5	5

EPA MONITORING POINT 31

Effluent utilisation area known as Rye West labelled as EPA Point 31 on map titled "Rangers Valley Cattle Station Site Plan" dated 30.07.03.

SOIL ANALYSIS RESULTS (EPA POINT 31 - RYE WEST)

Parameter	Unit	Rayment & Higginson Reference	Annual Return 2023 - 2024	
			0-30cm	60-90cm
pH	-	4A1	5.84	6.81
Nitrogen (Total)	mg/kg	Dumas (Leco)	967	330
Nitrogen (Nitrate)	mg/kg	7B1	1.15	<1.00
Phosphorous (Colwell)	mg/kg	9B1	58.7	9.06
Organic Carbon	%	6A1	1.07	0.43
Conductivity	µS/cm	3A1	0.05	0.20
Chloride	mg/kg	5A1	13.4	268
Cation Exchange Capacity	cmol(+)/kg	15D3	5.39	15.1
Exchangeable Sodium	cmol(+)/kg	15D3	0.15	1.90
Exchangeable Potassium	cmol(+)/kg	15D3	0.48	0.21
Exchangeable Calcium	cmol(+)/kg	15D3	3.35	8.33
Exchangeable Magnesium	cmol(+)/kg	15D3	1.39	4.66
Exchangeable Sodium Percentage	%	15D3	2.69	12.6
Phosphorus Sorption Capacity	mg/kg	9I1 and 9J1	288	484
Aggregate Stability (Emerson)	EAT	-	5	3b

EPA MONITORING POINT 51

SOIL ANALYSIS RESULTS (EPA POINT 51 - PIVOT 2B)

Parameter	Unit	Rayment & Higginson Reference	Annual Return 2023 - 2024	
			0-30cm	60-90cm
pH	-	4A1	6.84	6.75
Nitrogen (Total)	mg/kg	Dumas (Leco)	1573	599
Nitrogen (Nitrate)	mg/kg	7B1	3.2	1.80
Phosphorous (Colwell)	mg/kg	9B1	146	25.4
Organic Carbon	%	6A1	1.14	0.48
Conductivity	µS/cm	3A1	0.17	0.13
Chloride	mg/kg	5A1	83.6	88.7
Cation Exchange Capacity	cmol(+)/kg	15D3	7.42	7.71
Exchangeable Sodium	cmol(+)/kg	15D3	0.23	0.30
Exchangeable Potassium	cmol(+)/kg	15D3	1.63	1.95
Exchangeable Calcium	cmol(+)/kg	15D3	3.70	3.65
Exchangeable Magnesium	cmol(+)/kg	15D3	1.85	1.80
Exchangeable Sodium Percentage	%	15D3	3.07	3.86
Phosphorus Sorption Capacity	mg/kg	9I1 and 9J1	382	378
Aggregate Stability (Emerson)	EAT	-	5	5

EPA MONITORING POINT 52

SOIL ANALYSIS RESULTS (EPA POINT 52 - PIVOT 2C)

Parameter	Unit	Rayment & Higginson Reference	Annual Return 2023 - 2024	
			0-30cm	60-90cm
pH	-	4A1	5.88	6.71
Nitrogen (Total)	mg/kg	Dumas (Leco)	1427	601
Nitrogen (Nitrate)	mg/kg	7B1	2.03	1.04
Phosphorous (Colwell)	mg/kg	9B1	113	17.2
Organic Carbon	%	6A1	1.22	0.80
Conductivity	μS/cm	3A1	0.11	0.12
Chloride	mg/kg	5A1	56.6	66.8
Cation Exchange Capacity	cmol(+)/kg	15D3	6.71	13.1
Exchangeable Sodium	cmol(+)/kg	15D3	0.18	0.68
Exchangeable Potassium	cmol(+)/kg	15D3	1.28	0.76
Exchangeable Calcium	cmol(+)/kg	15D3	3.48	7.81
Exchangeable Magnesium	cmol(+)/kg	15D3	1.75	3.86
Exchangeable Sodium Percentage	%	15D3	2.75	5.20
Phosphorus Sorption Capacity	mg/kg	9I1 and 9J1	363	504
Aggregate Stability (Emerson)	EAT	-	3b	5

EPA MONITORING POINT 58

SOIL ANALYSIS RESULTS (EPA POINT 58 - CROUCHES)

Parameter	Unit	Rayment & Higginson Reference	Annual Return 2023 - 2024	
			0-30cm	60-90cm
pH	-	4A1	6.38	6.57
Nitrogen (Total)	mg/kg	Dumas (Leco)	1090	419
Nitrogen (Nitrate)	mg/kg	7B1	<1.00	1.41
Phosphorous (Colwell)	mg/kg	9B1	171	12.7
Organic Carbon	%	6A1	1.07	0.40
Conductivity	µS/cm	3A1	0.09	0.13
Chloride	mg/kg	5A1	67.3	86.9
Cation Exchange Capacity	cmol(+)/kg	15D3	6.92	12.9
Exchangeable Sodium	cmol(+)/kg	15D3	0.22	0.38
Exchangeable Potassium	cmol(+)/kg	15D3	0.94	0.36
Exchangeable Calcium	cmol(+)/kg	15D3	4.21	8.21
Exchangeable Magnesium	cmol(+)/kg	15D3	1.53	3.93
Exchangeable Sodium Percentage	%	15D3	3.21	2.98
Phosphorus Sorption Capacity	mg/kg	9I1 and 9J1	387	567
Aggregate Stability (Emerson)	EAT	-	3b	5

EPA MONITORING POINT 59

SOIL ANALYSIS RESULTS (EPA POINT 59 - SHOW)

Parameter	Unit	Rayment & Higginson Reference	Annual Return 2023 - 2024	
			0-30cm	60-90cm
pH	-	4A1		
Nitrogen (Total)	mg/kg	Dumas (Leco)		
Nitrogen (Nitrate)	mg/kg	7B1		
Phosphorous (Colwell)	mg/kg	9B1		
Organic Carbon	%	6A1		
Conductivity	μS/cm	3A1		
Chloride	mg/kg	5A1		
Cation Exchange Capacity	cmol(+)/kg	15D3		
Exchangeable Sodium	cmol(+)/kg	15D3		
Exchangeable Potassium	cmol(+)/kg	15D3		
Exchangeable Calcium	cmol(+)/kg	15D3		
Exchangeable Magnesium	cmol(+)/kg	15D3		
Exchangeable Sodium Percentage	%	15D3		
Phosphorus Sorption Capacity	mg/kg	9I1 and 9J1		
Aggregate Stability (Emerson)	EAT	-		

EPA MONITORING POINT 60

SOIL ANALYSIS RESULTS (EPA POINT 60 – OLD 2)

Parameter	Unit	Rayment & Higginson Reference	Annual Return 2023 - 2024	
			0-30cm	60-90cm
pH	-	4A1	7.20	6.74
Nitrogen (Total)	mg/kg	Dumas (Leco)	2486	313
Nitrogen (Nitrate)	mg/kg	7B1	10.2	5.31
Phosphorous (Colwell)	mg/kg	9B1	448	36.6
Organic Carbon	%	6A1	2.82	0.91
Conductivity	µS/cm	3A1	0.30	0.20
Chloride	mg/kg	5A1	107	229
Cation Exchange Capacity	cmol(+)/kg	15D3	14.9	15.7
Exchangeable Sodium	cmol(+)/kg	15D3	0.43	0.67
Exchangeable Potassium	cmol(+)/kg	15D3	1.84	0.61
Exchangeable Calcium	cmol(+)/kg	15D3	9.17	9.59
Exchangeable Magnesium	cmol(+)/kg	15D3	3.46	4.85
Exchangeable Sodium Percentage	%	15D3	2.89	4.26
Phosphorus Sorption Capacity	mg/kg	9I1 and 9J1	531	605
Aggregate Stability (Emerson)	EAT	-	5	5

EPA MONITORING POINT 61

SOIL ANALYSIS RESULTS (EPA POINT 61 – OLD 3)

Parameter	Unit	Rayment & Higginson Reference	Annual Return 2023 - 2024	
			0-30cm	60-90cm
pH	-	4A1	5.83	6.50
Nitrogen (Total)	mg/kg	Dumas (Leco)	558	950
Nitrogen (Nitrate)	mg/kg	7B1	2.24	1.71
Phosphorous (Colwell)	mg/kg	9B1	112	5.23
Organic Carbon	%	6A1	0.63	0.35
Conductivity	µS/cm	3A1	0.09	0.08
Chloride	mg/kg	5A1	51.6	57.6
Cation Exchange Capacity	cmol(+)/kg	15D3	5.86	8.82
Exchangeable Sodium	cmol(+)/kg	15D3	0.22	0.29
Exchangeable Potassium	cmol(+)/kg	15D3	0.62	0.14
Exchangeable Calcium	cmol(+)/kg	15D3	3.57	5.68
Exchangeable Magnesium	cmol(+)/kg	15D3	1.43	2.68
Exchangeable Sodium Percentage	%	15D3	3.82	3.30
Phosphorus Sorption Capacity	mg/kg	9I1 and 9J1	353	333
Aggregate Stability (Emerson)	EAT	-	5	5

EPA MONITORING POINT 34

Groundwater monitoring bore (34 located in corner paddock) labelled as EPA Point 34 on map titled Env MP-Location of piezometer MP dated 1st May 2007. See Fig 3.

GROUNDWATER ANALYSIS RESULTS (EPA POINT 34)

Sampled		13/10/2022	10/5/2023	24/10/2023	24/4/2024
Obtained		2/11/2022	22/6/2023	2/11/2023	7/5/2024
Published		4/12/2022	14/7/2023	4/12/2023	18/6/2024
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L	0.071	0.011	0.031	<0.005
Nitrogen (nitrate)	mg/L	46	46	60	57
Phosphorus (Reactive)	mg/L	0.110	0.081	0.063	0.076
pH	-	7.7	7.6	7.7	7.5
Conductivity	µS/cm	1600	1400	1400	1400
Phosphorus (total)	mg/L	0	0	0.2	0.1
Nitrogen (total)	mg/L	48	56	71	66
Suspended Solids	mg/L	53	33	120	10

EPA MONITORING POINT 35

Groundwater monitoring bore (35 located in the laneway north of Rye East paddock) labelled as EPA Point 35 on map titled Env MP-Location of piezometer MP dated 1st May 2007. See Fig 3.

GROUNDWATER ANALYSIS RESULTS (EPA POINT 35)

Sampled		13/10/2022	10/5/2023	24/10/2023	24/4/2024
Obtained		2/11/2022	22/6/2023	2/11/2023	7/5/2024
Published		4/12/2022	14/7/2023	4/12/2023	18/6/2024
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L	0.022			
Nitrogen (nitrate)	mg/L	0.45			
Phosphorus (Reactive)	mg/L	0.006			
pH	-	6.4	DRY	DRY	DRY
Conductivity	µS/cm	2000			
Phosphorus (total)	mg/L	0			
Nitrogen (total)	mg/L	0.6			
Suspended Solids	mg/L	62			

EPA MONITORING POINT 36

Groundwater monitoring bore (36 located between ponds W3 and W4) labelled as EPA Point 36 on map titled Env MP-Location of piezometer MP dated 1st May 2007. See Fig 3.

GROUNDWATER ANALYSIS RESULTS (EPA POINT 36)

Sampled		13/10/2022	10/5/2023	24/10/2023	24/4/2024
Obtained		2/11/2022	22/6/2023	2/11/2023	7/5/2024
Published		4/12/2022	14/7/2023	4/12/2023	18/6/2024
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L	0.01	0.006	<0.005	0.007
Nitrogen (nitrate)	mg/L	1.2	0.77	1.0	1.0
Phosphorus (Reactive)	mg/L	0.11	0.1	0.094	0.11
pH	-	7.5	7.4	7.6	7.5
Conductivity	µS/cm	4500	4500	4400	4400
Phosphorus (total)	mg/L	0	0	0.1	0.1
Nitrogen (total)	mg/L	1.8	2.2	2.3	2.3
Suspended Solids	mg/L	<5	23	20	20

EPA MONITORING POINT 38

Groundwater monitoring bore (located on eastern point of effluent pond E2) labelled as EPA Point 38 on map titled Env MP-Location of piezometer MP dated 1st May 2007. See Fig 3.

GROUNDWATER ANALYSIS RESULTS (EPA POINT 38)

Sampled		13/10/2022	10/5/2023	24/10/2023	24/4/2024
Obtained		2/11/2022	22/6/2023	2/11/2023	7/5/2024
Published		4/12/2022	14/7/2023	4/12/2023	18/6/2024
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L	0.28	0.34	0.13	0.074
Nitrogen (nitrate)	mg/L	3	12	7.1	6.1
Phosphorus (Reactive)	mg/L	<0.005	<0.005	0.006	<0.005
pH	-	6.7	6.8	6.8	6.9
Conductivity	µS/cm	780	2000	2200	2200
Phosphorus (total)	mg/L	0	0	0.2	0.2
Nitrogen (total)	mg/L	3.7	17	9.7	7.2
Suspended Solids	mg/L	150	92	66	58

EPA MONITORING POINT 40

Groundwater monitoring bore (40 located on adjoining fence line between Pivot 3A/3B) on map titled Env MP-Location of piezometer MP dated 1st May 2007. See Fig 3.

GROUNDWATER ANALYSIS RESULTS (EPA POINT 40)

Sampled		13/10/2022	10/5/2023	24/10/2023	24/4/2024
Obtained		2/11/2022	22/6/2023	2/11/2023	7/5/2024
Published		4/12/2022	14/7/2023	4/12/2023	18/6/2024
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L	0.009	0.01	0.010	0.007
Nitrogen (nitrate)	mg/L	32	22	30	33
Phosphorus (Reactive)	mg/L	0.056	0.051	0.04	0.053
pH	-	7.3	7.3	7.4	7.2
Conductivity	µS/cm	1500	1600	1700	1700
Phosphorus (total)	mg/L	0	0	0.1	0.1
Nitrogen (total)	mg/L	39	29	37	37
Suspended Solids	mg/L	22	61	87	48

EPA MONITORING POINT 41

Groundwater monitoring bore (41 below EPA point 14 in paddock Bottom Swamp) labelled as EPA Point 41 on map titled Env MP Location of piezometer MP dated 1st May 2007. See Fig 3.

GROUNDWATER ANALYSIS RESULTS (EPA POINT 41)

Sampled		13/10/2022	10/5/2023	24/10/2023	24/4/2024
Obtained		2/11/2022	22/6/2023	2/11/2023	7/5/2024
Published		4/12/2022	14/7/2023	4/12/2023	18/6/2024
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L	0.22	0.069	0.022	0.022
Nitrogen (nitrate)	mg/L	0.4	0.92	4.0	3.7
Phosphorus (Reactive)	mg/L	0.02	0.02	0.04	0.05
pH	-	7.5	7.4	7.5	7.3
Conductivity	µS/cm	2900	2300	2400	2400
Phosphorus (total)	mg/L	0	0	0.09	0.1
Nitrogen (total)	mg/L	1.6	2	5.3	4.2
Suspended Solids	mg/L	22	12	54	42

EPA MONITORING POINT 42

Groundwater monitoring bore (42 located in laneway between Pivot 1 and effluent pond E2) labelled as EPA Point 42 on map titled Env MP- Location of piezometer MP dated 1st May 2007. See Fig 3.

GROUNDWATER ANALYSIS RESULTS (EPA POINT 42)

Sampled		13/10/2022	10/5/2023	24/10/2023	24/4/2024
Obtained		2/11/2022	22/6/2023	2/11/2023	7/5/2024
Published		4/12/2022	14/7/2023	4/12/2023	18/6/2024
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L	0.035	0.012	0.025	0.013
Nitrogen (nitrate)	mg/L	47	13	18	10
Phosphorus (Reactive)	mg/L	0.03	0.02	0.02	0.03
pH	-	6.9	6.9	6.9	6.9
Conductivity	µS/cm	2500	2700	2600	2700
Phosphorus (total)	mg/L	0	0	0.06	0.1
Nitrogen (total)	mg/L	49	17	20	11
Suspended Solids	mg/L	32	18	52	98

EPA MONITORING POINT 43

The following tables are a summary of the analysis results of the soil quality in the utilisation areas identified as the 'solid utilisation areas as identified on drawing No 19045-05 as quoted in the consent conditions' on map titled "Map 1 - Rangers Valley Cattle Station" submitted with a letter to the EPA on 25 October 2006 (EPA Point 43).

Monitoring has been undertaken at Special Frequency 7, in accordance with the frequency required in accordance with Section M2 of Environmental Protection Licence No. 3864.

SOIL ANALYSIS RESULTS (BEARDY)

Parameter	Unit	Annual Return 2023 - 2024	
		0-30 cm	60-90 cm
pH	-	5.93	5.98
Nitrogen (Total)	mg/kg	3857	736
Nitrogen (Nitrate)	mg/kg	1.13	2.67
Phosphorous (Colwell)	mg/kg	164	15.30
Organic Carbon	%	3.35	0.51
Conductivity	µS/cm	0.12	0.06
Chloride	mg/kg	26.8	32.2
Cation Exchange Capacity	cmol(+)/kg	10.50	12.40
Exchangeable Sodium	cmol(+)/kg	0.09	0.31
Exchangeable Potassium	cmol(+)/kg	1.34	0.39
Exchangeable Calcium	cmol(+)/kg	6.76	7.52
Exchangeable Magnesium	cmol(+)/kg	2.33	4.16
Exchangeable Sodium Percent	%	0.90	2.51
Phosphorus Sorption Capacity	PSC mg/kg	388	331
Aggregate Stability (Emerson)	-	7	5

SOIL ANALYSIS RESULTS (BOTT GRANTS)

Parameter	Unit	Annual Return 2023 - 2024	
		0-30 cm	60-90 cm
pH	-	5.78	6.58
Nitrogen (Total)	mg/kg	2313	265
Nitrogen (Nitrate)	mg/kg	4.29	<1.00
Phosphorous (Colwell)	mg/kg	134	26.5
Organic Carbon	%	1.95	0.26
Conductivity	μS/cm	0.09	0.04
Chloride	mg/kg	15.7	66.80
Cation Exchange Capacity	cmol(+)/kg	7.84	6.42
Exchangeable Sodium	cmol(+)/kg	0.05	0.06
Exchangeable Potassium	cmol(+)/kg	0.8	0.48
Exchangeable Calcium	cmol(+)/kg	5.42	4.15
Exchangeable Magnesium	cmol(+)/kg	1.56	1.71
Exchangeable Sodium Percent	%	0.59	0.92
Phosphorus Sorption Capacity	PSC mg/kg	335	243
Aggregate Stability (Emerson)	-	7	3b

SOIL ANALYSIS RESULTS (CROUCHES)

Parameter	Unit	Annual Return 2023 - 2024	
		0-30 cm	60-90 cm
pH	-	6.38	6.57
Nitrogen (Total)	mg/kg	1090	419
Nitrogen (Nitrate)	mg/kg	<1.00	1.41
Phosphorous (Colwell)	mg/kg	171	12.7
Organic Carbon	%	1.07	0.40
Conductivity	μS/cm	0.09	0.13
Chloride	mg/kg	67.3	86.90
Cation Exchange Capacity	cmol(+)/kg	6.92	12.9
Exchangeable Sodium	cmol(+)/kg	0.22	0.38
Exchangeable Potassium	cmol(+)/kg	0.94	0.36
Exchangeable Calcium	cmol(+)/kg	4.21	8.21
Exchangeable Magnesium	cmol(+)/kg	1.53	3.93
Exchangeable Sodium Percent	%	3.21	2.98
Phosphorus Sorption Capacity	PSC mg/kg	387	567
Aggregate Stability (Emerson)	-	3b	5

SOIL ANALYSIS RESULTS (OAKS RD)

Parameter	Unit	Annual Return 2023 - 2024	
		0-30 cm	60-90 cm
pH	-	7.02	7.60
Nitrogen (Total)	mg/kg	1082	311
Nitrogen (Nitrate)	mg/kg	4.67	<1.00
Phosphorous (Colwell)	mg/kg	48.9	5.61
Organic Carbon	%	1.18	0.66
Conductivity	μS/cm	0.23	0.44
Chloride	mg/kg	18.9	165
Cation Exchange Capacity	cmol(+)/kg	14.8	21
Exchangeable Sodium	cmol(+)/kg	3.08	8.49
Exchangeable Potassium	cmol(+)/kg	0.99	0.26
Exchangeable Calcium	cmol(+)/kg	4.99	3.97
Exchangeable Magnesium	cmol(+)/kg	5.77	8.3
Exchangeable Sodium Percent	%	20.70	40.30
Phosphorus Sorption Capacity	PSC mg/kg	334	347
Aggregate Stability (Emerson)	-	2	1

SOIL ANALYSIS RESULTS (OLD 4)

Parameter	Unit	Annual Return 2023 - 2024	
		0-30 cm	60-90 cm
pH	-	5.61	6.02
Nitrogen (Total)	mg/kg	262	961
Nitrogen (Nitrate)	mg/kg	2.68	<1.00
Phosphorous (Colwell)	mg/kg	35.9	7.88
Organic Carbon	%	0.97	0.54
Conductivity	μS/cm	0.08	0.04
Chloride	mg/kg	23.4	20.80
Cation Exchange Capacity	cmol(+)/kg	4.61	7.92
Exchangeable Sodium	cmol(+)/kg	0.04	0.13
Exchangeable Potassium	cmol(+)/kg	0.43	0.18
Exchangeable Calcium	cmol(+)/kg	3.51	5.41
Exchangeable Magnesium	cmol(+)/kg	0.61	2.18
Exchangeable Sodium Percent	%	0.96	1.63
Phosphorus Sorption Capacity	PSC mg/kg	297	367
Aggregate Stability (Emerson)	-	5	5

SOIL ANALYSIS RESULTS (PINES)

Parameter	Unit	Annual Return 2023 - 2024	
		0-30 cm	60-90 cm
pH	-	6.15	8.04
Nitrogen (Total)	mg/kg	396	1810
Nitrogen (Nitrate)	mg/kg	2.28	<1.00
Phosphorous (Colwell)	mg/kg	109	12
Organic Carbon	%	1.75	0.51
Conductivity	μS/cm	0.1	0.49
Chloride	mg/kg	36.7	212
Cation Exchange Capacity	cmol(+)/kg	8.89	21.2
Exchangeable Sodium	cmol(+)/kg	0.5	6.68
Exchangeable Potassium	cmol(+)/kg	0.51	0.26
Exchangeable Calcium	cmol(+)/kg	5.7	6.69
Exchangeable Magnesium	cmol(+)/kg	2.17	7.52
Exchangeable Sodium Percent	%	5.62	31.60
Phosphorus Sorption Capacity	PSC mg/kg	376	344
Aggregate Stability (Emerson)	-	3b	1

SOIL ANALYSIS RESULTS (PIVOT 2A)

Parameter	Unit	Annual Return 2023 - 2024	
		0-30 cm	60-90 cm
pH	-	5.71	6.47
Nitrogen (Total)	mg/kg	1089	859
Nitrogen (Nitrate)	mg/kg	2.11	1.35
Phosphorous (Colwell)	mg/kg	26.5	5.98
Organic Carbon	%	0.89	0.82
Conductivity	μS/cm	0.05	0.08
Chloride	mg/kg	19.3	21.2
Cation Exchange Capacity	cmol(+)/kg	7.13	14.8
Exchangeable Sodium	cmol(+)/kg	0.11	0.34
Exchangeable Potassium	cmol(+)/kg	0.22	0.21
Exchangeable Calcium	cmol(+)/kg	5.26	9.65
Exchangeable Magnesium	cmol(+)/kg	1.52	4.60
Exchangeable Sodium Percent	%	1.53	2.28
Phosphorus Sorption Capacity	PSC mg/kg	374	711
Aggregate Stability (Emerson)	-	5	5

SOIL ANALYSIS RESULTS (RIVER)

Parameter	Unit	Annual Return 2023 - 2024	
		0-30 cm	60-90 cm
pH	-	6.13	7.02
Nitrogen (Total)	mg/kg	1382	643
Nitrogen (Nitrate)	mg/kg	6.2	1.29
Phosphorous (Colwell)	mg/kg	60.5	87.4
Organic Carbon	%	1.51	0.88
Conductivity	μS/cm	0.06	0.18
Chloride	mg/kg	15.1	31.1
Cation Exchange Capacity	cmol(+)/kg	11	17.8
Exchangeable Sodium	cmol(+)/kg	0.27	2.2
Exchangeable Potassium	cmol(+)/kg	0.64	0.62
Exchangeable Calcium	cmol(+)/kg	8.31	7.62
Exchangeable Magnesium	cmol(+)/kg	1.72	7.33
Exchangeable Sodium Percent	%	2.50	12.40
Phosphorus Sorption Capacity	PSC mg/kg	218	381
Aggregate Stability (Emerson)	-	5	2

SOIL ANALYSIS RESULTS (RUMMERIES)

Parameter	Unit	Annual Return 2023 - 2024	
		0-30 cm	60-90 cm
pH	-	5.97	5.71
Nitrogen (Total)	mg/kg	2542	371
Nitrogen (Nitrate)	mg/kg	5.98	<1.00
Phosphorous (Colwell)	mg/kg	156	19.4
Organic Carbon	%	2.59	0.76
Conductivity	μS/cm	0.11	0.13
Chloride	mg/kg	18.5	33
Cation Exchange Capacity	cmol(+)/kg	7.2	11.8
Exchangeable Sodium	cmol(+)/kg	0.05	1.77
Exchangeable Potassium	cmol(+)/kg	0.71	0.3
Exchangeable Calcium	cmol(+)/kg	4.67	3.62
Exchangeable Magnesium	cmol(+)/kg	1.75	6.09
Exchangeable Sodium Percent	%	0.69	15
Phosphorus Sorption Capacity	PSC mg/kg	466	432
Aggregate Stability (Emerson)	-	5	1

SOIL ANALYSIS RESULTS (SUGARLOAF)

Parameter	Unit	Annual Return 2023 - 2024	
		0-30 cm	60-90 cm
pH	-	5.38	6.17
Nitrogen (Total)	mg/kg	2042	470
Nitrogen (Nitrate)	mg/kg	1.35	<1.00
Phosphorous (Colwell)	mg/kg	140	16.9
Organic Carbon	%	1.27	0.69
Conductivity	μS/cm	0.06	0.03
Chloride	mg/kg	21	11.20
Cation Exchange Capacity	cmol(+)/kg	7	7.92
Exchangeable Sodium	cmol(+)/kg	0.07	0.14
Exchangeable Potassium	cmol(+)/kg	0.32	0.16
Exchangeable Calcium	cmol(+)/kg	5.05	5.28
Exchangeable Magnesium	cmol(+)/kg	1.28	2.33
Exchangeable Sodium Percent	%	1.04	1.78
Phosphorus Sorption Capacity	PSC mg/kg	395	329
Aggregate Stability (Emerson)	-	5	5

SOIL ANALYSIS RESULTS (TOP SWAMP)

Parameter	Unit	Annual Return 2023 - 2024	
		0-30 cm	60-90 cm
pH	-	6.4	6.36
Nitrogen (Total)	mg/kg	2353	719
Nitrogen (Nitrate)	mg/kg	3.03	<1.00
Phosphorous (Colwell)	mg/kg	179	10.5
Organic Carbon	%	2.39	0.87
Conductivity	μS/cm	0.14	0.16
Chloride	mg/kg	51.3	120.00
Cation Exchange Capacity	cmol(+)/kg	12.8	13.4
Exchangeable Sodium	cmol(+)/kg	0.14	0.86
Exchangeable Potassium	cmol(+)/kg	0.78	0.23
Exchangeable Calcium	cmol(+)/kg	8.21	7.87
Exchangeable Magnesium	cmol(+)/kg	3.63	4.46
Exchangeable Sodium Percent	%	1.09	6.38
Phosphorus Sorption Capacity	PSC mg/kg	488	478
Aggregate Stability (Emerson)	-	5	5

SOIL ANALYSIS RESULTS (WASHPOOL RD)

Parameter	Unit	Annual Return 2023 - 2024	
		0-30 cm	60-90 cm
pH	-	6.39	6.43
Nitrogen (Total)	mg/kg	2653	519
Nitrogen (Nitrate)	mg/kg	3.78	<1.00
Phosphorous (Colwell)	mg/kg	187	22
Organic Carbon	%	0.53	1.75
Conductivity	μS/cm	0.1	0.07
Chloride	mg/kg	22.8	10.10
Cation Exchange Capacity	cmol(+)/kg	8.45	11.7
Exchangeable Sodium	cmol(+)/kg	0.04	0.27
Exchangeable Potassium	cmol(+)/kg	0.74	0.32
Exchangeable Calcium	cmol(+)/kg	5.38	8.2
Exchangeable Magnesium	cmol(+)/kg	2.27	2.88
Exchangeable Sodium Percent	%	0.51	2.32
Phosphorus Sorption Capacity	PSC mg/kg	348	526
Aggregate Stability (Emerson)	-	5	5

SOIL ANALYSIS RESULTS (WASHPOOL RIVER)

Parameter	Unit	Annual Return 2023 - 2024	
		0-30 cm	60-90 cm
pH	-	6.11	6.88
Nitrogen (Total)	mg/kg	2628	339
Nitrogen (Nitrate)	mg/kg	2.55	<1.00
Phosphorous (Colwell)	mg/kg	173	11.2
Organic Carbon	%	2.46	0.43
Conductivity	μS/cm	0.09	0.12
Chloride	mg/kg	15.8	17
Cation Exchange Capacity	cmol(+)/kg	7.97	15.3
Exchangeable Sodium	cmol(+)/kg	0.05	2.43
Exchangeable Potassium	cmol(+)/kg	0.71	0.34
Exchangeable Calcium	cmol(+)/kg	5.17	5.31
Exchangeable Magnesium	cmol(+)/kg	2.03	7.23
Exchangeable Sodium Percent	%	0.63	15.80
Phosphorus Sorption Capacity	PSC mg/kg	328	406
Aggregate Stability (Emerson)	-	5	1

EPA MONITORING POINT 44

Groundwater monitoring bore (44 located in the north eastern grassed area of the paddock known as Old 2) labelled as EPA point 44 on map titled Env MP-Location of Peizometer MP dated 1st May 2007. See Fig 3 - 250832A1/10.

GROUNDWATER ANALYSIS RESULTS (EPA POINT 44)

Sampled		13/10/2022	10/5/2023	24/10/2023	24/4/2024
Obtained		2/11/2022	22/6/2023	2/11/2023	7/5/2024
Published		4/12/2022	14/7/2023	4/12/2023	18/6/2024
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L	0.044	0.074	0.008	0.015
Nitrogen (nitrate)	mg/L	0.8	0.5	0.94	1.3
Phosphorus (Reactive)	mg/L	0.087	0.099	0.073	0.070
pH	-	7.1	7.2	7.3	7.1
Conductivity	µS/cm	680	700	700	670
Phosphorus (total)	mg/L	0	0	0.1	0.1
Nitrogen (total)	mg/L	0.8	0.9	1.2	1.2
Suspended Solids	mg/L	54	64	92	50

EPA MONITORING POINT 45

Groundwater monitoring bore (45 located on eastern boundary of the paddock known as "Donnellys Elect" labelled as EPA point 45 on map titled Env MP location of Piezometer MP dated 1st May 2007. See Fig 3.

GROUNDWATER ANALYSIS RESULTS (EPA POINT 45)

Sampled		13/10/2022	10/5/2023	24/10/2023	24/4/2024
Obtained		2/11/2022	22/6/2023	2/11/2023	7/5/2024
Published		4/12/2022	14/7/2023	4/12/2023	18/6/2024
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L	0.0915	0.006	0.012	0.007
Nitrogen (nitrate)	mg/L	4	2.2	3.2	3.3
Phosphorus (Reactive)	mg/L	0.03	0.02	0.03	0.03
pH	-	7.3	7.2	7.3	7.3
Conductivity	µS/cm	380	400	410	410
Phosphorus (total)	mg/L	0	0	0.08	<0.05
Nitrogen (total)	mg/L	4.1	3.3	3.9	3.9
Suspended Solids	mg/L	17	<5	37	<5

EPA MONITORING POINT 46

Groundwater monitoring bore (46 located in paddock known as "Oaks Road") labelled as EPA point 46 on map Titled Env MP-location of Piezometer MP dated 1st May 2007. See Fig 3.

GROUNDWATER ANALYSIS RESULTS (EPA POINT 46)

Sampled		13/10/2022	10/5/2023	24/10/2023	24/4/2024
Obtained		2/11/2022	22/6/2023	2/11/2023	7/5/2024
Published		4/12/2022	14/7/2023	4/12/2023	18/6/2024
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L	0.007	<0.005	<0.005	0.01
Nitrogen (nitrate)	mg/L	8.6	8.6	7.3	7.2
Phosphorus (Reactive)	mg/L	0.03	0.02	0.03	0.03
pH	-	7.5	7.5	7.6	7.5
Conductivity	µS/cm	1300	1300	1200	1200
Phosphorus (total)	mg/L	0	0	0.06	0.08
Nitrogen (total)	mg/L	9.7	7.9	8.6	8.2
Suspended Solids	mg/L	28	6	28	51

EPA MONITORING POINT 47

Groundwater monitoring bore 47 located in paddock known as "Horse" labelled as EPA point 47 on map Titled Env MP-location of Piezometer MP dated 1st May 2007. See Fig 3.

GROUNDWATER ANALYSIS RESULTS (EPA POINT 47)

Sampled		13/10/2022	10/5/2023	24/10/2023	24/4/2024
Obtained		2/11/2022	22/6/2023	2/11/2023	7/5/2024
Published		4/12/2022	14/7/2023	4/12/2023	18/6/2024
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L	0.021			
Nitrogen (nitrate)	mg/L	0.89			
Phosphorus (Reactive)	mg/L	0.063			
pH	-	6.7	DRY	DRY	DRY
Conductivity	µS/cm	280			
Phosphorus (total)	mg/L	0			
Nitrogen (total)	mg/L	1			
Suspended Solids	mg/L	64			

EPA MONITORING POINT 53

Groundwater monitoring bore 53 located west of Terminal Pond 1 in the paddock known as spillway labelled as EPA point 53 on map Titled Env MP-location of Piezometer MP dated 1st May 2007. See Fig 3. 250832A1/10.

GROUNDWATER ANALYSIS RESULTS (EPA POINT 53)

Sampled		13/10/2022	10/5/2023	24/10/2023	24/4/2024
Obtained		2/11/2022	22/6/2023	2/11/2023	7/5/2024
Published		4/12/2022	14/7/2023	4/12/2023	18/6/2024
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L	0.027	<0.005	0.034	<0.005
Nitrogen (nitrate)	mg/L	0.04	0.01	0.16	0.02
Phosphorus (Reactive)	mg/L	0.02	0.02	0.02	0.02
pH	-	7.4	7.4	7.6	7.4
Conductivity	µS/cm	610	610	640	610
Phosphorus (total)	mg/L	0	0	0.05	<0.05
Nitrogen (total)	mg/L	0.4	0.4	0.4	<0.1
Suspended Solids	mg/L	64	16	34	42

EPA MONITORING POINT 54

Groundwater monitoring bore 54 located north of Terminal Pond Two in the paddock known as Pivot 2b labelled as EPA point 54 on map titled Env MP location of Piezometer MP dated 1st May 2007. See Fig 3. 250832A1/10.

GROUNDWATER ANALYSIS RESULTS (EPA POINT 54)

Sampled		13/10/2022	10/5/2023	24/10/2023	24/4/2024
Obtained		2/11/2022	22/6/2023	2/11/2023	7/5/2024
Published		4/12/2022	14/7/2023	4/12/2023	18/6/2024
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L	0.022	<0.005	0.033	0.036
Nitrogen (nitrate)	mg/L	4.6	4.6	9.4	6.3
Phosphorus (Reactive)	mg/L	0.054	0.05	0.04	0.053
pH	-	6.8	6.8	6.8	6.9
Conductivity	µS/cm	700	660	690	660
Phosphorus (total)	mg/L	0	0	0.06	0.08
Nitrogen (total)	mg/L	5.1	10	11	7.1
Suspended Solids	mg/L	43	13	54	12

EPA MONITORING POINT 55

Groundwater monitoring bore 55 located south of Terminal Pond Three in the paddock known as “Wallys” labelled as EPA point 55 on map titled Env MP-location of Piezometer MP dated 1st May 2007. See Fig 3. 250832A1/10.

GROUNDWATER ANALYSIS RESULTS (EPA POINT 55)

Sampled		13/10/2022	10/5/2023	24/10/2023	24/4/2024
Obtained		2/11/2022	22/6/2023	2/11/2023	7/5/2024
Published		4/12/2022	14/7/2023	4/12/2023	18/6/2024
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L	0.12	<0.005	<0.005	<0.005
Nitrogen (nitrate)	mg/L	0.082	0.082	0.03	0.03
Phosphorus (Reactive)	mg/L	0.02	0.04	0.04	0.04
pH	-	7.4	7.3	7.3	7.3
Conductivity	µS/cm	730	750	870	730
Phosphorus (total)	mg/L	0	0	0.2	0.1
Nitrogen (total)	mg/L	0.3	0.4	0.1	<0.1
Suspended Solids	mg/L	22	130	220	240

EPA MONITORING POINT 56

Groundwater monitoring bore (56 located south of the northern holding pond N1 in the paddock known as Irrigation 1) labelled as EPA point 56 on map titled Env MP dated 1st May 2007. See Fig 3. 250832A1/10.

GROUNDWATER ANALYSIS RESULTS (EPA POINT 56)

Sampled		13/10/2022	10/5/2023	24/10/2023	24/4/2024
Obtained		2/11/2022	22/6/2023	2/11/2023	7/5/2024
Published		4/12/2022	14/7/2023	4/12/2023	18/6/2024
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L	0.009	0.007	0.041	0.021
Nitrogen (nitrate)	mg/L	9	6.3	8.3	7.8
Phosphorus (Reactive)	mg/L	0.02	0.02	0.055	0.03
pH	-	7	7	7	7.1
Conductivity	µS/cm	1800	1600	1500	1400
Phosphorus (total)	mg/L	<0.05	<0.05	0.08	0.08
Nitrogen (total)	mg/L	9.5	9.8	10	8.7
Suspended Solids	mg/L	21	21	33	53

EPA MONITORING POINT 57

Effluent holding pond (known as N1) irrigation pump labelled as EPA point 57 on map titled Env MP- Location of Effluent MP dated 1st May 2007. See Fig 2 - 250832A1/10.

EFFLUENT ANALYSIS RESULTS (EPA POINT 57)

Sampled		29/06/2023	12/09/2023	25/03/2024	17/6/2024
Obtained		4/07/2023	15/09/2023	8/04/2024	26/6/2024
Published		21/07/2023	8/11/2023	30/4/2024	1/7/2024
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (Ammonia)	mg/L	69	40	550	41
Chloride	mg/L	530	530	<0.01	560
Nitrate	mg/L	<0.050	<0.02	67	<0.005
Phosphorus (Reactive)	mg/L	21	13	21	31
pH	-	8	8.1	8.0	7.9
Conductivity	µS/cm	3600	3400	3600	3700
SAR	-	3.9	3.4	6.1	4.8
Phosphorus (Total)	mg/L	60	41	41	41
Nitrogen (Total)	mg/L	100	86	67	76
TKN	mg/L	100	86	67	76
Suspended Solids	mg/L	660	210	190	240
Calcium	mg/L	79	84	485	71
Potassium	mg/L	410	370	520	470
Magnesium	mg/L	59	62	53	65
Sodium	mg/L	190	170	260	240

Collected during pond overflow event.