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 1st 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 <sup>nd</sup> 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 1st 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 1st 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 1st 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 1st 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 1st 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 1st 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 1st 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 1st 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 MPLocation of piezometer MP dated 1st 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 1st 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 1st 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 "Donnellys Elect" labelled as EPA point 45 on map Titled Env MP location of Piezometer MP dated 1st 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 1st 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 1st 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 1st 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 1st 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 1st 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 1st 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 1st 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 1st 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 1st 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 <sup>st</sup> May 2007. see Fig 2. 250832A1/10.

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	10/9/2024	10/12/2024	6/3/2025	11/6/2025	
Obtained		20/9/2024	23/12/2024	19/3/2025	24/6/2025
Published		17/10/2024	13/1/2025	1/4/2025	14/7/2025
Pollutant	Unit of measure	Result	Result	Result	Result
Chloride	mg/L	87	73	58	57
Nitrate	mg/L	< 0.005	< 0.05	< 0.005	< 0.005
Total Kjeldahl Nitrogen	mg/L	0.6	1.6	2.1	0.5
рH	-	7.9	7.9	8.6	7.9
Conductivity	μS/cm	900	820	780	740
SAR	-	2.3	2.3	1.9	2.0
Phosphorus (Reactive)	mg/L	0.03	0.15	0.26	0.03
Nitrogen (Total)	mg/L	0.7	1.6	2.1	0.5
Suspended Solids	mg/L	77	64	17	22
Calcium	mg/L	43	44	55	44
Potassium	mg/L	5	4	7.8	6.1
Magnesium	mg/L	38	30	30	31
Sodium	mg/L	88	82	70	73
Phosphorus (Total)	mg/L	0.2	0.4	0.3	0.08
Nitrogen (Ammonia)	mg/L	0.043	0.19	1.1	0.28

<sup>#</sup> Collected during pond overflow event.

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	10/9/2024	10/12/2024	6/3/2025	11/6/2025	
Obtained	Obtained		23/12/2024	19/3/2025	24/6/2025
Published		17/10/2024	13/1/2025	1/4/2025	14/7/2025
Pollutant	Unit of measure	Result	Result	Result	Result
Chloride	mg/L	46	56	42	33
Nitrate	mg/L	0.38	< 0.05	< 0.005	0.45
Total Kjeldahl Nitrogen	mg/L	3.1	4.4	6.5	3.9
рН	•	8.2	7.4	7.9	7.5
Conductivity	μS/cm	430	460	420	350
SAR	-	0.83	0.80	0.76	0.69
Phosphorus (Reactive)	mg/L	3.0	4.3	7.4	3.0
Nitrogen (Total)	mg/L	3.5	4.4	6.5	4.4
Suspended Solids	mg/L	<5	57	29	43
Calcium	mg/L	14	8.8	7.5	9.9
Potassium	mg/L	63	80	81	82
Magnesium	mg/L	8.3	6.4	5.3	6.9
Sodium	mg/L	16	13	11	12
Phosphorus (Total)	mg/L	3.4	7.2	6.9	5.1
Nitrogen (Ammonia)	mg/L	0.056	0.045	1.9	1.3

<sup>#</sup> Collected during pond overflow event.

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	10/9/2024	10/12/2024	6/3/2025	11/6/2025	
Obtained	Obtained			19/3/2025	24/6/2025
Published		17/10/2024	13/1/2025	1/4/2025	14/7/2025
Pollutant	Unit of measure	Result	Result	Result	Result
Chloride	mg/L	190	180	98	99
Nitrate	mg/L	0.18	0.008	< 0.005	0.096
Total Kjeldahl Nitrogen	mg/L	1.9	2.2	3.8	1.5
pН	•	8.2	8.2	8.5	7.9
Conductivity	μS/cm	1300	1300	970	1100
SAR	•	2.9	3.2	2.9	2.5
Phosphorus (Reactive)	mg/L	0.57	0.84	1.8	0.51
Nitrogen (Total)	mg/L	2.1	2.2	3.8	1.7
Suspended Solids	mg/L	10	38	51	15
Calcium	mg/L	60	52	39	59
Potassium	mg/L	18	17	23	17
Magnesium	mg/L	58	49	31	43
Sodium	mg/L	130	140	100	100
Phosphorus (Total)	mg/L	0.86	1.8	2.3	0.56
Nitrogen (Ammonia)	mg/L	0.26	0.11	0.13	0.38

<sup>#</sup> Collected during pond overflow event.

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	10/9/2024	10/12/2024	6/3/2025	11/6/2025	
Obtained	20/9/2024	23/12/2024	19/3/2025	24/6/2025	
Published		17/10/2024	13/1/2025	1/4/2025	14/7/2025
Pollutant	Unit of measure	Result	Result	Result	Result
Chloride	mg/L	26	17	29	10
Nitrate	mg/L	< 0.005	< 0.005	0.006	0.01
Total Kjeldahl Nitrogen	mg/L	0.5	0.9	0.8	0.9
pН	-	8.2	7.6	7.9	7.6
Conductivity	μS/cm	240	150	280	93
SAR	-	1.4	1.2	1.8	1.1
Phosphorus (Reactive)	mg/L	0.009	0.081	0.03	0.03
Nitrogen (Total)	mg/L	0.5	0.9	0.8	0.9
Suspended Solids	mg/L	<5	12	<5	7
Calcium	mg/L	10	5.9	11	4
Potassium	mg/L	3	5	4	2
Magnesium	mg/L	7.5	4	7.8	3
Sodium	mg/L	24	15	32	13
Phosphorus (Total)	mg/L	< 0.05	0.2	0.06	0.07
Nitrogen (Ammonia)	mg/L	<0.005	0.14	0.082	0.04

<sup>#</sup> Collected during pond overflow event.

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	10/9/2024	10/12/2024	6/3/2025	11/6/2025	
Obtained	20/9/2024	23/12/2024	19/3/2025	24/6/2025	
Published		17/10/2024	13/1/2025	1/4/2025	14/7/2025
Pollutant	Unit of measure	Result	Result	Result	Result
Chloride	mg/L	18	16	16	11
Nitrate	mg/L	< 0.005	0.02	0.008	0.071
Total Kjeldahl Nitrogen	mg/L	0.5	0.6	1	0.7
pН	•	8.6	8.7	9.0	7.8
Conductivity	μS/cm	330	310	280	210
SAR	-	0.63	0.68	0.75	0.70
Phosphorus (Reactive)	mg/L	0.02	0.11	0.17	0.03
Nitrogen (Total)	mg/L	0.5	0.6	1	0.8
Suspended Solids	mg/L	<5	<5	<5	<5
Calcium	mg/L	21	19	18	15
Potassium	mg/L	3	3	5	3
Magnesium	mg/L	18	18	13	12
Sodium	mg/L	17	17	17	15
Phosphorus (Total)	mg/L	< 0.05	0.1	0.1	0.07
Nitrogen (Ammonia)	mg/L	< 0.005	0.090	0.092	0.04

<sup>#</sup> Collected during pond overflow event.

Surface water monitoring point (S7) at Beardy Waters causeway on the Haul Rd (2<sup>nd</sup> 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	10/9/2024	10/12/2024	6/3/2025	11/6/2025	
Obtained		20/9/2024	23/12/2024	19/3/2025	24/6/2025
Published		17/10/2024	13/1/2025	1/4/2025	14/7/2025
Pollutant	Unit of measure	Result	Result	Result	Result
Chloride	mg/L	12	13	11	12
Nitrate	mg/L	< 0.005	< 0.005	0.01	< 0.005
Total Kjeldahl Nitrogen	mg/L	0.4	0.5	1.3	0.4
pН	-	8.7	8.6	8.1	8.2
Conductivity	μS/cm	360	370	290	360
SAR	•	0.50	0.57	0.50	0.57
Phosphorus (Reactive)	mg/L	0.01	0.03	0.10	0.03
Nitrogen (Total)	mg/L	0.4	0.5	1.3	0.4
Suspended Solids	mg/L	<5	<5	<5	<5
Calcium	mg/L	23	21	22	26
Potassium	mg/L	2	3	5	3
Magnesium	mg/L	23	26	15	25
Sodium	mg/L	14	17	13	17
Phosphorus (Total)	mg/L	< 0.05	< 0.05	0.2	< 0.05
Nitrogen (Ammonia)	mg/L	0.006	0.090	0.21	0.058

<sup>#</sup> Collected during pond overflow event.

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		10/9/2024	10/12/2024	6/3/2025	11/6/2025
Obtained		20/9/2024	23/12/2024	19/3/2025	24/6/2025
Published		17/10/2024	13/1/2025	1/4/2025	14/7/2025
Pollutant	Unit of measure	Result	Result	Result	Result
Chloride	mg/L	15	15	17	11
Nitrate	mg/L	0.04	0.04	0.11	0.04
Total Kjeldahl Nitrogen	mg/L	0.4	0.6	1.1	0.6
рН	•	8.6	8.5	8.3	8.0
Conductivity	μS/cm	340	300	290	230
SAR	•	0.59	0.70	0.74	0.68
Phosphorus (Reactive)	mg/L	0.02	0.04	0.095	0.03
Nitrogen (Total)	mg/L	0.5	0.7	1.2	0.7
Suspended Solids	mg/L	<5	5	<5	<5
Calcium	mg/L	21	15	19	15
Potassium	mg/L	2	3	5	3
Magnesium	mg/L	20	18	13	13
Sodium	mg/L	16	17	17	15
Phosphorus (Total)	mg/L	< 0.05	0.1	0.2	0.07
Nitrogen (Ammonia)	mg/L	0.020	0.087	0.13	0.064

<sup>#</sup> Collected during pond overflow event.

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		10/9/2024	10/12/2024	6/3/2025	11/6/2025
Obtained		20/9/2024	23/12/2024	19/3/2025	24/6/2025
Published		17/10/2024	13/1/2025	1/4/2025	14/7/2025
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (Ammonia)	mg/L	15	2.6	6.5	16
Chloride	mg/L	250	270	640	430
Nitrate	mg/L	< 0.005	< 0.005	< 0.005	<0.01
Phosphorus (Reactive)	mg/L	10	6.8	21	19
рН	-	8.5	8.3	8.1	7.9
Conductivity	μS/cm	2100	2200	4200	3400
SAR	-	2.8	3.1	5.7	4.5
Phosphorus (Total)	mg/L	21	14	29	39
Nitrogen (Total)	mg/L	32	15	44	47
TKN	mg/L	32	15	44	47
Suspended Solids	mg/L	310	63	280	250
Calcium	mg/L	37	34	52	61
Potassium	mg/L	300	340	650	580
Magnesium	mg/L	53	51	77	71
Sodium	mg/L	110	120	280	220

<sup>#</sup> Collected during pond overflow event.

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		10/9/2024	10/12/2024	6/3/2025	11/6/2025
Obtained		20/9/2024	23/12/2024	19/3/2025	24/6/2025
Published		17/10/2024	13/1/2025	1/4/2025	14/7/2025
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (Ammonia)	mg/L	< 0.005	11	1.2	0.64
Chloride	mg/L	460	650	130	190
Nitrate	mg/L	< 0.005	< 0.005	0.065	< 0.005
Phosphorus (Reactive)	mg/L	1.8	2.8	7.9	16
рН	-	9.5	8.1	8.0	8.0
Conductivity	μS/cm	2300	3700	940	1500
SAR	-	5.0	5.1	2.3	2.7
Phosphorus (Total)	mg/L	6.1	4.9	7.3	22
Nitrogen (Total)	mg/L	9.4	96	6.5	20
TKN	mg/L	9.4	96	6.4	20
Suspended Solids	mg/L	98	120	70	98
Calcium	mg/L	25	20	15	40
Potassium	mg/L	360	300	150	270
Magnesium	mg/L	35	28	14	29
Sodium	mg/L	170	150	51	91

<sup>#</sup> Collected during pond overflow event.

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		10/9/2024	10/9/2024	6/3/2025	6/3/2025
Obtained		20/9/2024	20/9/2024	19/3/2025	19/3/2025
Published		17/10/2024	17/10/2024	1/4/2025	1/4/2025
Pollutant	Unit of	Screened	Unscreened	Screened	Unscreened
Tonatant	measure	Result	Result	Result	Result
Moisture	%	29.2	23.7	38.4	22.1
Nitrate	mg/kg	<1.00	<1.00	11.5	6.00
Nitrogen (Total)	mg/kg	18600	21200	18610	13500
рН	-	7.43	6.98	7.99	7.59
Calcium	mg/kg	20600	19400	18948	14498
Phosphorus (Total)	mg/kg	7957	7610	6947	4810
Organic Carbon	%	18.5	22.9	21.8	19.3
Potassium	mg/kg	15300	15600	17015	12103
Magnesium	mg/kg	6210	5770	5420	4829
Sodium	mg/kg	3920	3900	3405	2691
Conductivity	μS/cm	6.63	7.74	7.53	7.12
SAR	-	17.2	12.0	31.8	21.1
Sulphur	mg/kg	3890	4610	2751	2220
Chloride	mg/kg	12277	12296	12300	8400
Zinc	mg/kg	258	261	237	182

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		12/09/2023	25/03/2024	10/9/2024	6/3/2025
Obtained		15/09/2023	8/04/2024	20/9/2024	19/3/2025
Published		8/11/2023	30/4/2024	17/10/2024	1/4/2025
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (Ammonia)	mg/L	0.038	0.005	1.0	1.4
Chloride	mg/L	330	410	430	97
Nitrate	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Phosphorus (Reactive)	mg/L	5.1	0.04	0.33	5.2
pН	-	8.9	9.0	7.9	8.0
Conductivity	μS/cm	1500	2000	2000	750
SAR	-	3.1	5.3	4.0	2.0
Phosphorus (Total)	mg/L	5.1	0.88	1.4	6.1
Nitrogen (Total)	mg/L	7.0	8.0	11	10
TKN	mg/L	7.0	8.0	11	10
Suspended Solids	mg/L	94	160	71	120
Calcium	mg/L	25	29	40	20
Potassium	mg/L	190	240	200	86
Magnesium	mg/L	28	34	46	16
Sodium	mg/L	95	180	160	51

<sup>#</sup> Collected during pond overflow event.

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	Annual Return 2024 - 2025	
		Reference	0-30cm	60-90cm
рН	-	4A1	6.05	7.24
Nitrogen (Total)	mg/kg	Dumas (Leco)	991	214
Nitrogen (Nitrate)	mg/kg	7B1	8.89	6.43
Phosphorous (Colwell)	mg/kg	9B1	92.7	21.0
Organic Carbon	%	6A1	0.90	0.21
Conductivity	μS/cm	3A1	0.07	0.10
Chloride	mg/kg	5A1	7.16	11.6
Cation Exchange Capacity	cmol(+)/kg	15D3	7.50	9.40
Exchangeable Sodium	cmol(+)/kg	15D3	0.10	0.47
Exchangeable Potassium	cmol(+)/kg	15D3	0.74	1.36
Exchangeable Calcium	cmol(+)/kg	15D3	4.75	4.82
Exchangeable Magnesium	cmol(+)/kg	15D3	1.89	2.72
Exchangeable Sodium Percentage	%	15D3	1.39	5.04
Phosphorus Sorption Capacity	mg/kg	9I1 and 9J1	189	345
Aggregate Stability (Emerson)	EAT	-	5	3a

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	Annual Return 2024 - 2025	
		Reference	0-30cm	60-90cm
рН	-	4A1	6.31	6.76
Nitrogen (Total)	mg/kg	Dumas (Leco)	787	350
Nitrogen (Nitrate)	mg/kg	7B1	1.10	3.22
Phosphorous (Colwell)	mg/kg	9B1	95.6	7.26
Organic Carbon	%	6A1	0.75	0.27
Conductivity	μS/cm	3A1	0.09	0.15
Chloride	mg/kg	5A1	25.8	101
Cation Exchange Capacity	cmol(+)/kg	15D3	7.31	18.6
Exchangeable Sodium	cmol(+)/kg	15D3	0.28	0.70
Exchangeable Potassium	cmol(+)/kg	15D3	1.02	0.24
Exchangeable Calcium	cmol(+)/kg	15D3	4.28	11.8
Exchangeable Magnesium	cmol(+)/kg	15D3	1.71	5.83
Exchangeable Sodium Percentage	%	15D3	3.86	3.78
Phosphorus Sorption Capacity	mg/kg	9I1 and 9J1	216	617
Aggregate Stability (Emerson)	EAT	-	3b	5

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	Annual Return 2024 - 2025	
		Reference	0-30cm	60-90cm
рН	-	4A1	6.60	6.67
Nitrogen (Total)	mg/kg	Dumas (Leco)	739	385
Nitrogen (Nitrate)	mg/kg	7B1	1.21	22.2
Phosphorous (Colwell)	mg/kg	9B1	44.1	7.59
Organic Carbon	%	6A1	0.73	0.26
Conductivity	μS/cm	3A1	0.16	0.27
Chloride	mg/kg	5A1	89.2	201
Cation Exchange Capacity	cmol(+)/kg	15D3	7.45	15.0
Exchangeable Sodium	cmol(+)/kg	15D3	0.49	0.95
Exchangeable Potassium	cmol(+)/kg	15D3	1.57	1.22
Exchangeable Calcium	cmol(+)/kg	15D3	3.77	8.25
Exchangeable Magnesium	cmol(+)/kg	15D3	1.60	4.57
Exchangeable Sodium Percentage	%	15D3	6.59	6.32
Phosphorus Sorption Capacity	mg/kg	9I1 and 9J1	129	585
Aggregate Stability (Emerson)	EAT	-	3b	5

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	Annual Return 2024 - 2025	
		Reference	0-30cm	60-90cm
рН	-	4A1	6.62	6.81
Nitrogen (Total)	mg/kg	Dumas (Leco)	1214	408
Nitrogen (Nitrate)	mg/kg	7B1	18.0	42.8
Phosphorous (Colwell)	mg/kg	9B1	185	8.16
Organic Carbon	%	6A1	1.19	0.23
Conductivity	μS/cm	3A1	0.13	0.22
Chloride	mg/kg	5A1	15.5	96.9
Cation Exchange Capacity	cmol(+)/kg	15D3	8.70	18.6
Exchangeable Sodium	cmol(+)/kg	15D3	0.29	0.84
Exchangeable Potassium	cmol(+)/kg	15D3	1.46	0.61
Exchangeable Calcium	cmol(+)/kg	15D3	4.88	11.8
Exchangeable Magnesium	cmol(+)/kg	15D3	2.06	5.27
Exchangeable Sodium Percentage	%	15D3	3.31	4.54
Phosphorus Sorption Capacity	mg/kg	9I1 and 9J1	255	642
Aggregate Stability (Emerson)	EAT	-	5	6

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	Annual Return 2024 - 2025	
		Reference	0-30cm	60-90cm
рН	-	4A1	6.65	7.65
Nitrogen (Total)	mg/kg	Dumas (Leco)	1079	503
Nitrogen (Nitrate)	mg/kg	7B1	1.44	1.25
Phosphorous (Colwell)	mg/kg	9B1	48.1	8.80
Organic Carbon	%	6A1	1.07	0.64
Conductivity	μS/cm	3A1	0.12	0.64
Chloride	mg/kg	5A1	64.6	718
Cation Exchange Capacity	cmol(+)/kg	15D3	13.5	22.5
Exchangeable Sodium	cmol(+)/kg	15D3	0.56	5.22
Exchangeable Potassium	cmol(+)/kg	15D3	1.24	0.23
Exchangeable Calcium	cmol(+)/kg	15D3	8.44	11.6
Exchangeable Magnesium	cmol(+)/kg	15D3	3.23	5.43
Exchangeable Sodium Percentage	%	15D3	4.16	23.2
Phosphorus Sorption Capacity	mg/kg	9l1 and 9J1	172	235
Aggregate Stability (Emerson)	EAT	-	3b	2

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

Parameter	Unit	Rayment & Higginson	Annual Return 2024 - 2025	
		Reference	0-30cm	60-90cm
рН	-	4A1	7.02	6.96
Nitrogen (Total)	mg/kg	Dumas (Leco)	660	360
Nitrogen (Nitrate)	mg/kg	7B1	7.87	11.6
Phosphorous (Colwell)	mg/kg	9B1	60.9	10.7
Organic Carbon	%	6A1	0.55	<0.20
Conductivity	μS/cm	3A1	0.13	0.20
Chloride	mg/kg	5A1	15.7	103
Cation Exchange Capacity	cmol(+)/kg	15D3	8.96	13.2
Exchangeable Sodium	cmol(+)/kg	15D3	0.27	0.63
Exchangeable Potassium	cmol(+)/kg	15D3	1.98	1.64
Exchangeable Calcium	cmol(+)/kg	15D3	4.52	7.62
Exchangeable Magnesium	cmol(+)/kg	15D3	2.18	3.33
Exchangeable Sodium Percentage	%	15D3	3.00	4.73
Phosphorus Sorption Capacity	mg/kg	9l1 and 9J1	315	456
Aggregate Stability (Emerson)	EAT	-	3b	5

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

Parameter	Unit	Rayment & Higginson	Annual Return 2024 - 2025	
		Reference	0-30cm	60-90cm
рН	-	4A1	6.35	6.84
Nitrogen (Total)	mg/kg	Dumas (Leco)	992	409
Nitrogen (Nitrate)	mg/kg	7B1	2.07	2.94
Phosphorous (Colwell)	mg/kg	9B1	100	11.6
Organic Carbon	%	6A1	1.38	0.68
Conductivity	μS/cm	3A1	0.13	0.19
Chloride	mg/kg	5A1	169	143
Cation Exchange Capacity	cmol(+)/kg	15D3	10.3	12.4
Exchangeable Sodium	cmol(+)/kg	15D3	0.39	0.88
Exchangeable Potassium	cmol(+)/kg	15D3	1.82	0.91
Exchangeable Calcium	cmol(+)/kg	15D3	5.37	7.06
Exchangeable Magnesium	cmol(+)/kg	15D3	2.66	3.53
Exchangeable Sodium Percentage	%	15D3	3.81	7.11
Phosphorus Sorption Capacity	mg/kg	9I1 and 9J1	260	247
Aggregate Stability (Emerson)	EAT	-	3a	3a

# SOIL ANALYSIS RESULTS (EPA POINT 58 - CROUCHES)

Parameter	Unit	Rayment & Higginson	Annual Return 2024 - 2025	
		Reference	0-30cm	60-90cm
рН	-	4A1	6.38	6.58
Nitrogen (Total)	mg/kg	Dumas (Leco)	1322	341
Nitrogen (Nitrate)	mg/kg	7B1	5.78	2.51
Phosphorous (Colwell)	mg/kg	9B1	116	9.10
Organic Carbon	%	6A1	1.56	0.28
Conductivity	μS/cm	3A1	0.12	0.18
Chloride	mg/kg	5A1	32.2	104
Cation Exchange Capacity	cmol(+)/kg	15D3	9.49	17.4
Exchangeable Sodium	cmol(+)/kg	15D3	0.29	0.53
Exchangeable Potassium	cmol(+)/kg	15D3	0.99	0.28
Exchangeable Calcium	cmol(+)/kg	15D3	6.12	11.9
Exchangeable Magnesium	cmol(+)/kg	15D3	2.08	4.71
Exchangeable Sodium Percentage	%	15D3	3.05	3.07
Phosphorus Sorption Capacity	mg/kg	9I1 and 9J1	203	655
Aggregate Stability (Emerson)	EAT	-	5	5

SOIL ANALYSIS RESULTS (EPA POINT 59 - SHOW)

Parameter	Unit	Rayment & Higginson	Annual Return 2024 - 2025	
		Reference	0-30cm	60-90cm
рН	-	4A1	5.97	6.38
Nitrogen (Total)	mg/kg	Dumas (Leco)	994	262
Nitrogen (Nitrate)	mg/kg	7B1	10	38.7
Phosphorous (Colwell)	mg/kg	9B1	167	11.1
Organic Carbon	%	6A1	0.97	<0.20
Conductivity	μS/cm	3A1	0.07	0.13
Chloride	mg/kg	5A1	13.6	5.35
Cation Exchange Capacity	cmol(+)/kg	15D3	6.94	10.3
Exchangeable Sodium	cmol(+)/kg	15D3	0.07	0.35
Exchangeable Potassium	cmol(+)/kg	15D3	0.32	0.23
Exchangeable Calcium	cmol(+)/kg	15D3	5.13	6.86
Exchangeable Magnesium	cmol(+)/kg	15D3	1.40	2.82
Exchangeable Sodium Percentage	%	15D3	0.97	3.43
Phosphorus Sorption Capacity	mg/kg	9I1 and 9J1	202	295
Aggregate Stability (Emerson)	EAT	-	5	5

# SOIL ANALYSIS RESULTS (EPA POINT 60 - OLD 2)

Parameter	Unit	Rayment & Higginson	Annual Return 2024 - 2025	
		Reference	0-30cm	60-90cm
рН	-	4A1	7.14	6.25
Nitrogen (Total)	mg/kg	Dumas (Leco)	1534	359
Nitrogen (Nitrate)	mg/kg	7B1	1.83	23.4
Phosphorous (Colwell)	mg/kg	9B1	265	13.1
Organic Carbon	%	6A1	1.87	0.27
Conductivity	μS/cm	3A1	0.20	0.25
Chloride	mg/kg	5A1	99.7	183
Cation Exchange Capacity	cmol(+)/kg	15D3	10.8	15.3
Exchangeable Sodium	cmol(+)/kg	15D3	0.43	0.74
Exchangeable Potassium	cmol(+)/kg	15D3	1.65	0.56
Exchangeable Calcium	cmol(+)/kg	15D3	6.05	8.95
Exchangeable Magnesium	cmol(+)/kg	15D3	2.68	5.05
Exchangeable Sodium Percentage	%	15D3	4.01	4.85
Phosphorus Sorption Capacity	mg/kg	9I1 and 9J1	332	530
Aggregate Stability (Emerson)	EAT	-	5	6

# SOIL ANALYSIS RESULTS (EPA POINT 61 – OLD 3)

Parameter	Unit	Rayment & Higginson	Annual Return 2024 - 2025	
		Reference	0-30cm	60-90cm
рН	-	4A1	5.44	6.84
Nitrogen (Total)	mg/kg	Dumas (Leco)	703	260
Nitrogen (Nitrate)	mg/kg	7B1	8.08	8.12
Phosphorous (Colwell)	mg/kg	9B1	40.9	9.74
Organic Carbon	%	6A1	1.02	0.29
Conductivity	μS/cm	3A1	0.05	0.10
Chloride	mg/kg	5A1	12.3	29.8
Cation Exchange Capacity	cmol(+)/kg	15D3	5.36	18.0
Exchangeable Sodium	cmol(+)/kg	15D3	0.17	0.51
Exchangeable Potassium	cmol(+)/kg	15D3	0.27	0.27
Exchangeable Calcium	cmol(+)/kg	15D3	3.77	11.1
Exchangeable Magnesium	cmol(+)/kg	15D3	1.13	6.08
Exchangeable Sodium Percentage	%	15D3	3.20	2.85
Phosphorus Sorption Capacity	mg/kg	9I1 and 9J1	138	522
Aggregate Stability (Emerson)	EAT	-	5	5

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		24/10/2023	24/4/2024	17/10/2024	16/4/2025
Obtained		2/11/2023	7/5/2024	29/10/2024	6/5/2025
Published		4/12/2023	18/6/2024	6/11/2024	14/5/2025
	Unit of				
Pollutant	measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L	0.031	< 0.005	0.018	0.014
Nitrogen (nitrate)	mg/L	60	57	59	63
Phosphorus (Reactive)	mg/L	0.063	0.076	0.071	0.090
pН	-	7.7	7.5	7.6	7.8
Conductivity	μS/cm	1400	1400	1400	1300
Phosphorus (total)	mg/L	0.2	0.1	0.09	0.1
Nitrogen (total)	mg/L	71	66	61	88
Suspended Solids	mg/L	120	10	14	15

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		24/10/2023	24/4/2024	17/10/2024	16/4/2025
Obtained		2/11/2023	7/5/2024	29/10/2024	6/5/2025
Published		4/12/2023	18/6/2024	6/11/2024	14/5/2025
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L				
Nitrogen (nitrate)	mg/L				
Phosphorus (Reactive)	mg/L				
рН	-	DRY	DRY	DRY	DRY
Conductivity	μS/cm				
Phosphorus (total)	mg/L				
Nitrogen (total)	mg/L				
Suspended Solids	mg/L				

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		24/10/2023	24/4/2024	17/10/2024	16/4/2025
Obtained		2/11/2023	7/5/2024	29/10/2024	6/5/2025
Published		4/12/2023	18/6/2024	6/11/2024	14/5/2025
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L	< 0.005	0.007	0.011	0.012
Nitrogen (nitrate)	mg/L	1.0	1.0	1.1	0.71
Phosphorus (Reactive)	mg/L	0.094	0.11	0.09	0.13
рН	-	7.6	7.5	7.5	7.5
Conductivity	μS/cm	4400	4400	4300	4100
Phosphorus (total)	mg/L	0.1	0.1	0.1	0.1
Nitrogen (total)	mg/L	2.3	2	1.7	2.3
Suspended Solids	mg/L	20	16	13	43

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		24/10/2023	24/4/2024	17/10/2024	16/4/2025
Obtained		2/11/2023	7/5/2024	29/10/2024	6/5/2025
Published		4/12/2023	18/6/2024	6/11/2024	14/5/2025
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L	0.13	0.074	0.075	0.12
Nitrogen (nitrate)	mg/L	7.1	6.1	9.2	16
Phosphorus (Reactive)	mg/L	0.006	< 0.005	0.01	0.05
рН	-	6.8	6.9	7.1	7.1
Conductivity	μS/cm	2200	2200	1800	1600
Phosphorus (total)	mg/L	0.2	0.2	0.1	0.2
Nitrogen (total)	mg/L	9.7	7.2	9.3	22
Suspended Solids	mg/L	66	58	34	170

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		24/10/2023	24/4/2024	17/10/2024	16/4/2025
Obtained		2/11/2023	7/5/2024	29/10/2024	6/5/2025
Published		4/12/2023	18/6/2024	6/11/2024	14/5/2025
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L	0.010	0.007	0.060	0.013
Nitrogen (nitrate)	mg/L	30	33	39	37
Phosphorus (Reactive)	mg/L	0.04	0.053	0.27	0.060
рН	-	7.4	7.2	7.3	7.3
Conductivity	μS/cm	1700	1700	1800	1800
Phosphorus (total)	mg/L	0.1	0.1	0.05	0.07
Nitrogen (total)	mg/L	37	37	42	51
Suspended Solids	mg/L	87	48	12	19

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		24/10/2023	24/4/2024	17/10/2024	16/4/2025
Obtained		2/11/2023	7/5/2024	29/10/2024	6/5/2025
Published		4/12/2023	18/6/2024	6/11/2024	14/5/2025
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L	0.022	0.022	0.027	0.079
Nitrogen (nitrate)	mg/L	4.0	3.7	6.0	0.81
Phosphorus (Reactive)	mg/L	0.04	0.05	0.03	0.12
рН	-	7.5	7.3	7.5	7.6
Conductivity	μS/cm	2400	2400	2700	1400
Phosphorus (total)	mg/L	0.09	0.1	0.05	0.2
Nitrogen (total)	mg/L	5.3	4.2	6.4	4.8
Suspended Solids	mg/L	54	42	16	140

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		24/10/2023	24/4/2024	17/10/2024	16/4/2025
Obtained		2/11/2023	7/5/2024	29/10/2024	6/5/2025
Published		4/12/2023	18/6/2024	6/11/2024	14/5/2025
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L	0.025	0.013	0.037	0.38
Nitrogen (nitrate)	mg/L	18	10	15	11
Phosphorus (Reactive)	mg/L	0.02	0.03	0.02	0.04
рН	-	6.9	6.9	6.9	7.0
Conductivity	μS/cm	2600	2700	2600	2500
Phosphorus (total)	mg/L	0.06	0.1	0.07	0.2
Nitrogen (total)	mg/L	20	11	0.02	15
Suspended Solids	mg/L	52	98	94	320

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 (CREEK)

Parameter	Unit	Annual Return 2024 - 2025		
		0-30 cm	60-90 cm	
рН	-	5.10	6.39	
Nitrogen (Total)	mg/kg	657	363	
Nitrogen (Nitrate)	mg/kg	7.30	11.0	
Phosphorous (Colwell)	mg/kg	59.7	10.4	
Organic Carbon	%	1.23	0.23	
Conductivity	μS/cm	0.04	0.07	
Chloride	mg/kg	8.76	13.1	
Cation Exchange Capacity	cmol(+)/kg	5.40	13.0	
Exchangeable Sodium	cmol(+)/kg	0.09	0.26	
Exchangeable Potassium	cmol(+)/kg	0.25	0.18	
Exchangeable Calcium	cmol(+)/kg	3.87	9.43	
Exchangeable Magnesium	cmol(+)/kg	1.18	3.10	
Exchangeable Sodium Percent	%	1.67	1.97	
Phosphorus Sorption Capacity	PSC mg/kg	220	514	
Aggregate Stability (Emerson)	-	5	5	

# SOIL ANALYSIS RESULTS (PERKINS 1)

Parameter	Unit	Annual Return 2024 - 2025		
		0-30 cm	60-90 cm	
рН	-	5.38	6.30	
Nitrogen (Total)	mg/kg	1354	280	
Nitrogen (Nitrate)	mg/kg	8.42	3.12	
Phosphorous (Colwell)	mg/kg	80.6	28.4	
Organic Carbon	rganic Carbon %		0.25	
Conductivity	μS/cm	0.05	0.04	
Chloride	mg/kg	11.1	5.72	
Cation Exchange Capacity	cmol(+)/kg	6.46	12.4	
Exchangeable Sodium	cmol(+)/kg	0.04	0.26	
Exchangeable Potassium	cmol(+)/kg	0.38	0.25	
Exchangeable Calcium	cmol(+)/kg	4.63	8.23	
Exchangeable Magnesium	cmol(+)/kg	1.39	3.67	
Exchangeable Sodium Percent	%	0.67	2.12	
Phosphorus Sorption Capacity	PSC mg/kg	141	279	
Aggregate Stability (Emerson)	-	5	5	

# SOIL ANALYSIS RESULTS (BOTT SWAMP)

Parameter	Unit	Annual Return 2024 - 2025		
		0-30 cm	60-90 cm	
рН	-	6.01	6.72	
Nitrogen (Total)	mg/kg	1375	438	
Nitrogen (Nitrate)	mg/kg	6.43	22.9	
Phosphorous (Colwell)	mg/kg	88.9	7.22	
Organic Carbon	%	1.26	0.41	
Conductivity	μS/cm	0.09	0.11	
Chloride	mg/kg	20.9	28.0	
Cation Exchange Capacity	cmol(+)/kg	10.3	14.7	
Exchangeable Sodium	cmol(+)/kg	0.27	1.17	
Exchangeable Potassium	cmol(+)/kg	0.68	0.21	
Exchangeable Calcium	cmol(+)/kg	6.53	9.08	
Exchangeable Magnesium	cmol(+)/kg	2.81	4.18	
Exchangeable Sodium Percent	%	2.64	8.01	
Phosphorus Sorption Capacity	PSC mg/kg	273	490	
Aggregate Stability (Emerson)	-	5	3b	

# SOIL ANALYSIS RESULTS (BOTT TIP)

Parameter	Unit	Annual Return 2024 - 2025		
		0-30 cm	60-90 cm	
рН	-	5.25	7.25	
Nitrogen (Total)	mg/kg	1074	352	
Nitrogen (Nitrate)	mg/kg	10.4	13.3	
Phosphorous (Colwell)	mg/kg	132	11.4	
Organic Carbon	%	0.89	0.20	
Conductivity	μS/cm	0.06	0.13	
Chloride	mg/kg	10.7	5.40	
Cation Exchange Capacity	cmol(+)/kg	7.17	18.1	
Exchangeable Sodium	cmol(+)/kg	0.18	3.22	
Exchangeable Potassium	cmol(+)/kg	0.37	0.17	
Exchangeable Calcium	cmol(+)/kg	4.76	6.95	
Exchangeable Magnesium	cmol(+)/kg	1.84	7.78	
Exchangeable Sodium Percent	%	2.56	17.7	
Phosphorus Sorption Capacity	PSC mg/kg	306	349	
Aggregate Stability (Emerson)	-	5	1	

# SOIL ANALYSIS RESULTS (DONN NTH)

Parameter	Unit	Annual Return 2024 - 2025		
		0-30 cm	60-90 cm	
рН	-	5.23	6.45	
Nitrogen (Total)	mg/kg	977	365	
Nitrogen (Nitrate)	mg/kg	22.3	24.4	
Phosphorous (Colwell)	mg/kg	88.7	11.3	
Organic Carbon	%	0.82	0.20	
Conductivity	μS/cm	0.08	0.08	
Chloride	mg/kg	9.50	9.98	
Cation Exchange Capacity	cmol(+)/kg	6.23	10.2	
Exchangeable Sodium	cmol(+)/kg	0.06	0.28	
Exchangeable Potassium	cmol(+)/kg	0.35	0.15	
Exchangeable Calcium	cmol(+)/kg	4.46	6.63	
Exchangeable Magnesium	cmol(+)/kg	1.34	3.09	
Exchangeable Sodium Percent	%	0.98	2.80	
Phosphorus Sorption Capacity	PSC mg/kg	294	310	
Aggregate Stability (Emerson)	-	5	5	

# SOIL ANALYSIS RESULTS (DONN STH)

Parameter	Unit	Annual Return 2024 - 2025		
		0-30 cm	60-90 cm	
рН	-	6.17	6.17	
Nitrogen (Total)	mg/kg	1823	631	
Nitrogen (Nitrate)	mg/kg	62.1	43.8	
Phosphorous (Colwell)	mg/kg	111	8.87	
Organic Carbon	%	1.72	0.54	
Conductivity	μS/cm	0.19	0.14	
Chloride	mg/kg	11.4	8.03	
Cation Exchange Capacity	cmol(+)/kg	13.0	17.5	
Exchangeable Sodium	cmol(+)/kg	0.08	0.38	
Exchangeable Potassium	cmol(+)/kg	0.98	0.36	
Exchangeable Calcium	cmol(+)/kg	8.65	11.1	
Exchangeable Magnesium	cmol(+)/kg	3.23	5.63	
Exchangeable Sodium Percent	%	0.64	2.17	
Phosphorus Sorption Capacity	PSC mg/kg	260	651	
Aggregate Stability (Emerson)	-	5	5	

## SOIL ANALYSIS RESULTS (MORRIES)

Parameter	Unit	Annual Return 2024 - 2025		
		0-30 cm	60-90 cm	
рН	-	5.59	6.48	
Nitrogen (Total)	mg/kg	1123	219	
Nitrogen (Nitrate)	mg/kg	6.29	1.59	
Phosphorous (Colwell)	mg/kg	61.8	9.21	
Organic Carbon	%	1.15	0.31	
Conductivity	μS/cm	0.05	0.06	
Chloride	mg/kg	5.40	59.7	
Cation Exchange Capacity	cmol(+)/kg	5.21	13.7	
Exchangeable Sodium	cmol(+)/kg	0.07	0.49	
Exchangeable Potassium	cmol(+)/kg	0.53	0.26	
Exchangeable Calcium	cmol(+)/kg	3.45	8.61	
Exchangeable Magnesium	cmol(+)/kg	1.13	4.34	
Exchangeable Sodium Percent	%	1.37	3.58	
Phosphorus Sorption Capacity	PSC mg/kg	192	480	
Aggregate Stability (Emerson)	-	5	5	

# Soil Analysis Results (No 36)

Parameter	Unit	Annual Return 2024 - 2025		
		0-30 cm	60-90 cm	
рН	-	4.83	6.70	
Nitrogen (Total)	mg/kg	757	268	
Nitrogen (Nitrate)	mg/kg	4.92	1.58	
Phosphorous (Colwell)	mg/kg	65.9	15.2	
Organic Carbon	%	0.76	0.30	
Conductivity	μS/cm	0.04	0.08	
Chloride	mg/kg 22		6.99	
Cation Exchange Capacity	cmol(+)/kg	4.62	19.2	
Exchangeable Sodium	cmol(+)/kg	0.09	0.69	
Exchangeable Potassium	cmol(+)/kg	0.28	0.25	
Exchangeable Calcium	cmol(+)/kg	3.17	12.1	
Exchangeable Magnesium	cmol(+)/kg	1.03	6.13	
Exchangeable Sodium Percent	%	2.01	3.58	
Phosphorus Sorption Capacity	PSC mg/kg	201	627	
Aggregate Stability (Emerson)	-	5	5	

# SOIL ANALYSIS RESULTS (REILLYS)

Parameter	Unit	Annual Return 2024 - 2025		
		0-30 cm	60-90 cm	
рН	-	7.32	7.25	
Nitrogen (Total)	mg/kg	1764	443	
Nitrogen (Nitrate)	mg/kg	1.36	2.00	
Phosphorous (Colwell)	mg/kg	35.5	5.11	
Organic Carbon	%	1.87	0.50	
Conductivity	μS/cm	0.10	0.14	
Chloride	mg/kg	5.08	48.8	
Cation Exchange Capacity	cmol(+)/kg	19.7	24.6	
Exchangeable Sodium	cmol(+)/kg	0.48	1.67	
Exchangeable Potassium	cmol(+)/kg	0.27	0.15	
Exchangeable Calcium	cmol(+)/kg	13.5	14.5	
Exchangeable Magnesium	cmol(+)/kg	5.38	8.29	
Exchangeable Sodium Percent	%	2.45	6.78	
Phosphorus Sorption Capacity	PSC mg/kg	209	274	
Aggregate Stability (Emerson)	-	5	5	

# SOIL ANALYSIS RESULTS (TOP GRANTS)

Parameter	Unit	Annual Return 2024 - 2025		
		0-30 cm	60-90 cm	
рН	-	5.87	7.64	
Nitrogen (Total)	mg/kg	1505	248	
Nitrogen (Nitrate)	mg/kg	26.30	1.15	
Phosphorous (Colwell)	mg/kg	69.6	7.32	
Organic Carbon	%	1.42	0.27	
Conductivity	μS/cm	0.10	0.14	
Chloride	oride mg/kg		6.11	
Cation Exchange Capacity	cmol(+)/kg	21.0	31.7	
Exchangeable Sodium	cmol(+)/kg	0.72	2.44	
Exchangeable Potassium	cmol(+)/kg	0.73	0.20	
Exchangeable Calcium	cmol(+)/kg	12.2	18.2	
Exchangeable Magnesium	cmol(+)/kg	7.34	10.8	
Exchangeable Sodium Percent	%	3.41	7.71	
Phosphorus Sorption Capacity	PSC mg/kg	401	402	
Aggregate Stability (Emerson)	-	5	5	

## SOIL ANALYSIS RESULTS (TOP TIP)

Parameter	Unit	Annual Return 2024 - 2025		
		0-30 cm	60-90 cm	
рН	-	5.55	6.20	
Nitrogen (Total)	mg/kg	1543	437	
Nitrogen (Nitrate)	mg/kg	6.88	1.45	
Phosphorous (Colwell)	mg/kg	355	23.2	
Organic Carbon	%	1.12	0.63	
Conductivity	μS/cm	0.11	0.09	
Chloride	mg/kg	19.7	28.4	
Cation Exchange Capacity	cmol(+)/kg 7.73		14.2	
Exchangeable Sodium	cmol(+)/kg	0.25	0.40	
Exchangeable Potassium	cmol(+)/kg	1.07	0.69	
Exchangeable Calcium	cmol(+)/kg	4.83	9.10	
Exchangeable Magnesium	cmol(+)/kg	1.55	4.01	
Exchangeable Sodium Percent	%	3.22	2.80	
Phosphorus Sorption Capacity	PSC mg/kg	506	619	
Aggregate Stability (Emerson)	-	5	5	

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		24/10/2023	24/4/2024	17/10/2024	16/4/2025
Obtained		2/11/2023	7/5/2024	29/10/2024	6/5/2025
Published		4/12/2023	18/6/2024	6/11/2024	14/5/2025
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L	0.008	0.015	0.006	0.015
Nitrogen (nitrate)	mg/L	0.94	1.3	1.0	0.93
Phosphorus (Reactive)	mg/L	0.073	0.070	0.070	0.082
рН	-	7.3	7.1	7.1	7.1
Conductivity	μS/cm	700	670	680	650
Phosphorus (total)	mg/L	0.1	0.1	0.09	0.1
Nitrogen (total)	mg/L	1.2	1.2	0.9	1.2
Suspended Solids	mg/L	92	50	48	68

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		24/10/2023	24/4/2024	17/10/2024	16/4/2025
Obtained		2/11/2023	7/5/2024	29/10/2024	6/5/2025
Published		4/12/2023	18/6/2024	6/11/2024	14/5/2025
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L	0.012	0.007	0.072	0.074
Nitrogen (nitrate)	mg/L	3.2	3.3	3.9	4.1
Phosphorus (Reactive)	mg/L	0.03	0.03	0.009	0.04
pН	-	7.3	7.3	7.2	7.3
Conductivity	μS/cm	410	410	420	410
Phosphorus (total)	mg/L	0.08	< 0.05	0.1	0.08
Nitrogen (total)	mg/L	3.9	3.9	4.2	5.9
Suspended Solids	mg/L	37	<5	150	24

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 Obtained Published		24/10/2023 2/11/2023	24/4/2024 7/5/2024 18/6/2024	17/10/2024 29/10/2024 6/11/2024	16/4/2025 6/5/2025 14/5/2025
		Pollutant			
Nitrogen (ammonia)	mg/L	< 0.005	0.01	0.021	0.005
Nitrogen (nitrate)	mg/L	7.3	7.2	8.0	7.8
Phosphorus (Reactive)	mg/L	0.03	0.03	0.02	0.04
рН	-	7.6	7.5	7.6	7.6
Conductivity	μS/cm	1200	1200	1200	1100
Phosphorus (total)	mg/L	0.06	0.08	< 0.05	0.06
Nitrogen (total)	mg/L	8.6	8.2	8.7	11
Suspended Solids	mg/L	28	51	18	38

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 Obtained		24/10/2023	24/4/2024	17/10/2024	16/4/2025
		2/11/2023	7/5/2024	29/10/2024	6/5/2025
Published	Published		18/6/2024	6/11/2024	14/5/2025
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L				
Nitrogen (nitrate)	mg/L				
Phosphorus (Reactive)	mg/L				
рН	-	DRY	DRY	DRY	DRY
Conductivity	μS/cm				
Phosphorus (total)	mg/L				
Nitrogen (total)	mg/L				
Suspended Solids	mg/L				

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 Obtained		24/10/2023 2/11/2023	24/4/2024 7/5/2024	17/10/2024 29/10/2024	16/4/2025 6/5/2025
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L	0.034	<0.005	0.028	0.008
Nitrogen (nitrate)	mg/L	0.16	0.02	0.02	0.11
Phosphorus (Reactive)	mg/L	0.02	0.02	0.02	0.03
рН	-	7.6	7.4	7.4	7.5
Conductivity	μS/cm	640	610	620	600
Phosphorus (total)	mg/L	0.05	< 0.05	0.02	< 0.05
Nitrogen (total)	mg/L	0.4	<0.1	<0.1	0.2
Suspended Solids	mg/L	34	42	12	14

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 Obtained Published		24/10/2023 2/11/2023 4/12/2023	24/4/2024 7/5/2024 18/6/2024	17/10/2024 29/10/2024 6/11/2024	16/4/2025 6/5/2025 14/5/2025						
						Pollutant	Unit of measure	Result	Result	Result	Result
						Nitrogen (ammonia)	mg/L	0.033	0.036	0.077	0.16
Nitrogen (nitrate)	mg/L	9.4	6.3	6.9	7.5						
Phosphorus (Reactive)	mg/L	0.04	0.053	0.03	0.081						
рН	-	6.8	6.9	6.9	7.0						
Conductivity	μS/cm	690	660	710	690						
Phosphorus (total)	mg/L	0.06	0.08	0.08	0.09						
Nitrogen (total)	mg/L	11	7.1	7.5	11						
Suspended Solids	mg/L	54	12	44	<5						

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 Obtained		24/10/2023 2/11/2023	24/4/2024 7/5/2024	17/10/2024 29/10/2024	16/4/2025 6/5/2025
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (ammonia)	mg/L	< 0.005	< 0.005	0.022	0.021
Nitrogen (nitrate)	mg/L	0.03	0.03	0.04	0.04
Phosphorus (Reactive)	mg/L	0.04	0.04	0.03	0.067
рН	•	7.3	7.3	7.3	7.4
Conductivity	μS/cm	870	730	740	660
Phosphorus (total)	mg/L	0.2	0.1	0.08	0.53
Nitrogen (total)	mg/L	0.1	<0.1	<0.1	0.2
Suspended Solids	mg/L	220	240	120	2300

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 Obtained Published		24/10/2023 2/11/2023 4/12/2023	24/4/2024 7/5/2024 18/6/2024	10/9/2024 20/9/2024 17/10/2024	6/3/2025 19/3/2025 1/4/2025						
						Pollutant	Unit of measure	Result	Result	Result	Result
						Nitrogen (ammonia)	mg/L	0.041	0.021	0.024	0.014
Nitrogen (nitrate)	mg/L	8.3	7.8	7.0	5.3						
Phosphorus (Reactive)	mg/L	0.055	0.03	0.02	0.03						
рН	-	7	7.1	7.2	7.1						
Conductivity	μS/cm	1500	1400	1500	1400						
Phosphorus (total)	mg/L	0.08	0.08	0.06	< 0.05						
Nitrogen (total)	mg/L	10	8.7	7.2	7.7						
Suspended Solids	mg/L	33	53	28	11						

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 Obtained		10/9/2024	10/12/2024	6/3/2025	11/6/2025
		20/9/2024	23/12/2024	19/3/2025	24/6/2025
Published		17/10/2024	13/1/2025	1/4/2025	14/7/2025
Pollutant	Unit of measure	Result	Result	Result	Result
Nitrogen (Ammonia)	mg/L	55	0.10	23	37
Chloride	mg/L	590	420	530	440
Nitrate	mg/L	<0.1	0.01	0.60	< 0.050
Phosphorus (Reactive)	mg/L	29	2.9	27	33
рН	-	8.0	8.8	8.1	7.9
Conductivity	μS/cm	3700	2000	3700	3600
SAR	-	4.2	5.3	4.7	4.3
Phosphorus (Total)	mg/L	49	28	35	46
Nitrogen (Total)	mg/L	68	31	57	68
TKN	mg/L	66	31	55	68
Suspended Solids	mg/L	190	230	180	220
Calcium	mg/L	68	52	66	84
Potassium	mg/L	510	520	500	530
Magnesium	mg/L	75	69	74	77
Sodium	mg/L	210	250	240	230

<sup>#</sup> Collected during pond overflow event.