ENVIRONMENTAL MONITORING REPORT
JBS RIVERINA FACILITY

Environment Protection Licence Summary	
Licence (EPL) Number:	**3547**
Licensee's Name:	**JBS Australia Pty Limited**
Premises Address:	**Riverina, Regulator Road, Yanco NSW 2703**
Reporting Year:	**JANUARY 2020 – JANUARY 2021**

EPA Monitoring Requirements –JBS Riverina

Points 1,2,3,4,5,6,7,8,9,10,11,12,13,14			
Pollutant	**Units of Measure**	**Frequency**	**Sampling Method**
Aggregate Stability	As appropriate	3 Years	Representative Sample
Available Phosphorus	mg/kg	Yearly	Representative Sample
Clay Dispersion	As appropriate	3 Years	Representative Sample
Conductivity	deciSiemens/M	Yearly	Representative Sample
Exchangeable Calcium	centimoles of positive charge per Kg of soil	Yearly	Representative Sample
Exchangeable Magnesium	centimoles of positive charge/Kg of soil	Yearly	Representative Sample
Exchangeable potassium	centimoles of positive charge/Kg of soil	Yearly	Representative Sample
Exchangeable sodium	centimoles of positive charge per Kg of soil	Yearly	Representative Sample
Nitrate	Mg/Kg	Yearly	Representative Sample
pH	pH	Yearly	Representative Sample

Point 15			
Pollutant	**Units of Measure**	**Frequency**	**Sampling Method**
Aggregate Stability	As appropriate	3 Years	Composite Sample
Available Phosphorus	mg/kg	Yearly	Composite Sample
Clay Dispersion	As appropriate	3 Years	Composite Sample
Conductivity	deciSiemens/M	Yearly	Composite Sample
Exchangeable Calcium	centimoles of positive charge per Kg of soil	Yearly	Composite Sample
Exchangeable Magnesium	centimoles of positive charge/Kg of soil	Yearly	Composite Sample

Point 16			
Pollutant	**Units of Measure**	**Frequency**	**Sampling Method**
Ammonia	Milligrams per litre	Every 6 months	Representative Sample
Conductivity	Microsiemens per centimetres	Every 6 months	Representative Sample
Nitrate	Milligrams per litre	Every 6 months	Representative Sample
Orthophosphate	Milligrams per litre	Every 6 months	Representative Sample
pH	pH	Every 6 months	Representative Sample

Point 17,18,19,20,21,22,23			
Pollutant	**Units of Measure**	**Frequency**	**Sampling Method**
Ammonia	Milligrams per litre	Every 6 months	Representative Sample
Conductivity	Microsiemens per centimetres	Every 6 months	Representative Sample
Nitrate	Milligrams per litre	Every 6 months	Representative Sample
Orthophosphate	Milligrams per litre	Every 6 months	Representative Sample
Standing Water Level	metres	Every 6 months	Inspection
pH	pH	Every 6 months	Representative Sample

Point 24,25			
Pollutant	**Units of Measure**	**Frequency**	**Sampling Method**
Ammonia	Milligrams per litre	Special Frequency 1	Representative Sample
Conductivity	Microsiemens per centimetres	Special Frequency 1	Representative Sample
Nitrate	Milligrams per litre	Special Frequency 1	Representative Sample
Orthophosphate	Milligrams per litre	Special Frequency 1	Representative Sample
Phosphorus (total)	Milligrams per litre	Special Frequency 1	Representative Sample
Total Kjeldhal Nitrogen	Milligrams per litre	Special Frequency 1	Representative Sample

For the purpose of the tables above Special Frequency 1 means the collection of samples whenever the tailwater dam is filled to over 80% of its capacity.

Point 26			
Pollutant	**Units of Measure**	**Frequency**	**Sampling Method**
Aggregate Stability	As appropriate	3 Years	Representative Sample
Available Phosphorus	mg/kg	Yearly	Representative Sample
Clay Dispersion	As appropriate	3 Years	Representative Sample
Conductivity	deciSiemens/M	Yearly	Representative Sample
Exchangeable Calcium	centimoles of positive charge per Kg of soil	Yearly	Representative Sample
Exchangeable Magnesium	centimoles of positive charge/Kg of soil	Yearly	Representative Sample
Exchangeable potassium	centimoles of positive charge/Kg of soil	Yearly	Representative Sample
Exchangeable sodium	centimoles of positive charge per Kg of soil	Yearly	Representative Sample
Nitrate	Milligrams per kilogram	Yearly	Representative Sample
Phosphorus Sorption Capacity	Milligrams per kilogram	3 years	Representative Sample
pH	pH	Yearly	Representative Sample

Data Gaps During this reporting Period

Licence Location	JBS sampling Location	Frequency	Period data is missing	Reason for missing data
No gaps to report				

JBS Riverina – Environmental Monitoring Points

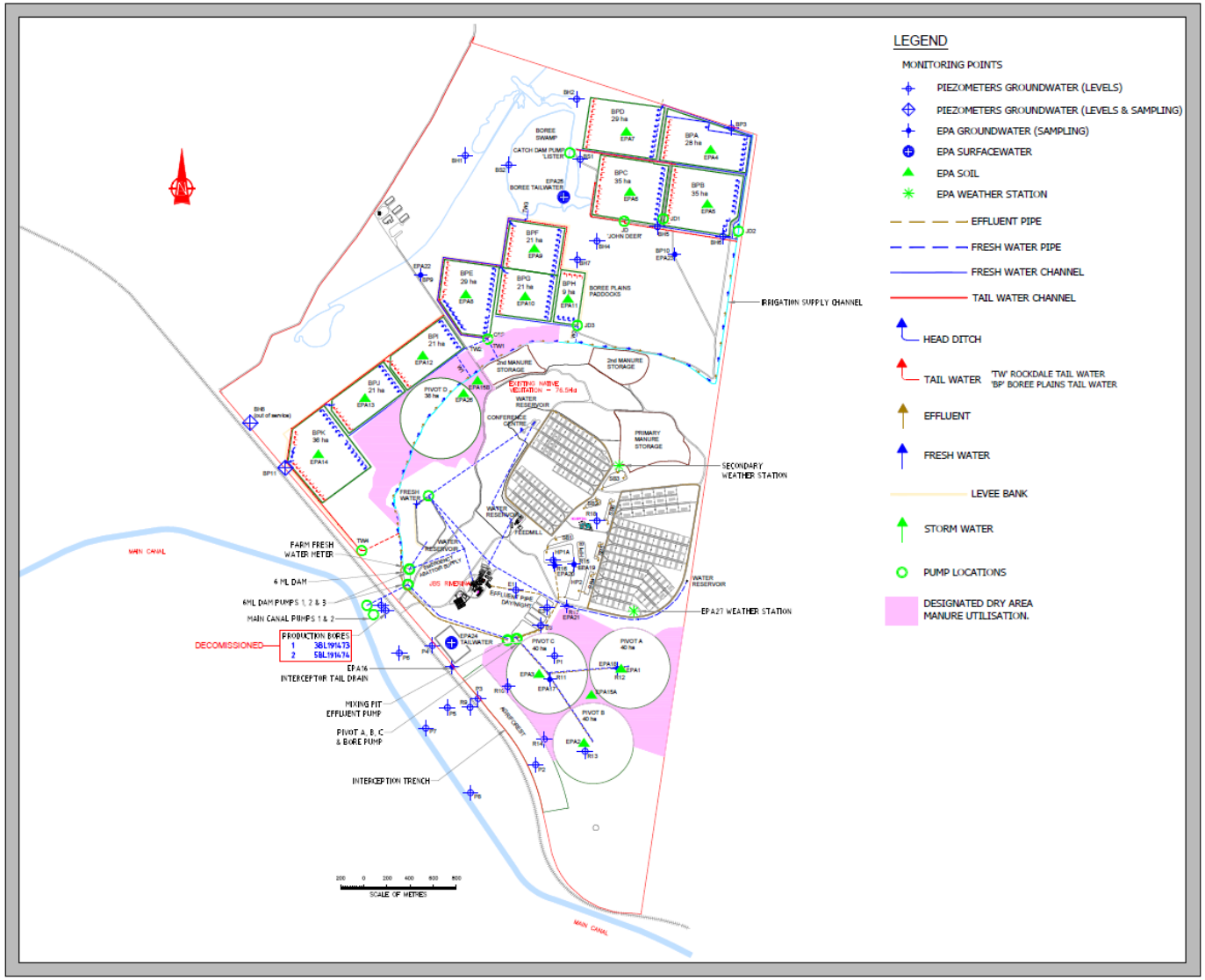

Figure 1: Riverina Monitoring Points

JBS Riverina - Monitoring Results

Type: Groundwater Monitoring

Frequency: 6 Monthly

Trending Level A: Figures 2 - 8

					Pollutants					
EPA Licence Location	**JBS Sampling Location**	**Monitoring Frequency**	**Sampling Sub-location**	**Date of Sampling**	**Ammonia (mg/l)**	**Conductivity (microSiemens/cm)**	**Nitrate (mg/l)**	**pH**	**Orthophosphate (mg/l)**	**Standing Water Level (metres)**
EPA 16	**Interceptor Tail Drain**	**6 months**	Interceptor Tail Drain	10.06.2020	1.1	2110	20	7.88	0.87	3
				09.12.2020	Dry bore					
EPA 17	**R11**	**6 months**	R11A	10.06.2020	0.24	7580	51	7.38	0.57	13.9
			R11A	09.12.2020	15	7880	47	7.39	1.5	14
			R11B	10.06.2020	Dry bore					
			R11B	09.12.2020	Dry bore					
			R11C	10.06.2020	Dry bore					
			R11C	09.12.2020	Dry bore					
EPA 18	**R12**	**6 months**	R12A	10.06.2020	0.069	13900	75	6.78	0.17	10.7
			R12A	09.12.2020	0.028	11000	120	7.10	0.21	9.3
			R12B	10.06.2020	0.024	13800	77	6.96	0.12	10.8
			R12B	09.12.2020	<0.005	11700	110	6.83	0.21	8.4
			R12C	10.06.2020	Dry bore					
			R12C	09.12.2020	Dry bore					
EPA 19	**R15**	**6 months**	R15A	10.06.2020	0.10	5990	0.31	7.41	0.028	8.9

					Pollutants					
EPA Licence Location	**JBS Sampling Location**	**Monitoring Frequency**	**Sampling Sub-location**	**Date of Sampling**	**Ammonia (mg/l)**	**Conductivity (microSiemens/cm)**	**Nitrate (mg/l)**	**pH**	**Orthophosphate (mg/l)**	**Standing Water Level (metres)**
			R15A	09.12.2020	<0.005	5820	0.13	7.35	0.036	8.7
			R15B	10.06.2020	0.21	6550	0.15	7.55	0.026	8.9
			R15B	09.12.2020	0.36	6210	0.19	7.40	0.020	8.7
			R15C	10.06.2020	Dry bore					
			R15C	09.12.2020	Dry bore					
EPA 20	**R16**	**6 months**	R16	10.06.2020	Dry bore					
			R16	09.12.2020	Dry bore					
EPA 21	**R17**	**6 months**	R17	10.06.2020	Dry bore					
			R17	09.12.2020	Dry bore					
EPA 22	**BP9**	**6 months**	BP9A	10.06.2020	0.018	31400	3.5	7.51	0.053	4.7
			BP9A	09.12.2020	<0.005	31400	4.2	7.62	0.055	4.6
			BP9B	10.06.2020	3.9	31300	2.5	7.49	0.26	4.7
			BP9B	09.12.2020	<0.005	21400	3.2	7.56	0.16	4.6
EPA 23	**BP10**	**6 months**	BP10A	10.06.2020	0.74	31900	0.38	7.38	0.19	9.9
			BP10A	09.12.2020	<0.005	30800	1.1	7.63	0.20	7.1
			BP10B	10.06.2020	Dry bore					
			BP10B	09.12.2020	Dry bore					
EPA 24	**Tailwater**	**Special Frequency 1***	Tailwater did not fill to over 80% of its capacity, no samples required							
EPA 25	**Boree Tailwater**	**Special Frequency 1***	Tailwater did not fill to over 80% of its capacity, no samples required							

*** Special Frequency 1 Monitoring – collection of samples whenever the Tailwater dam is filled to over 80% of its capacity**

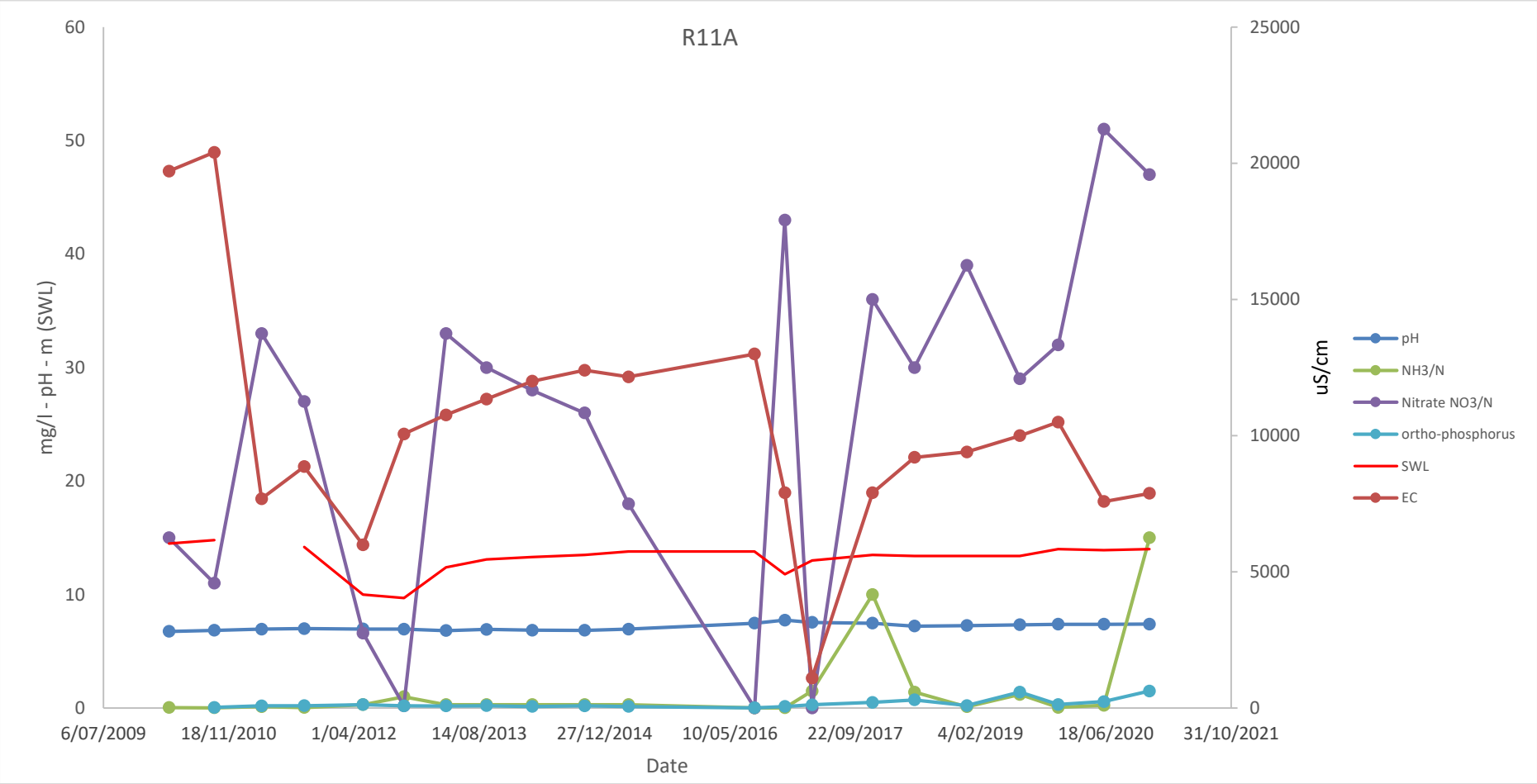

Figure 2: R11A Results Trending. 2020 results within historical range, with the exception of ionic forms of nitrogen (ammonia and nitrate) which are elevated. Nitrate levels are within an order of magnitude of historic results and may be indicative of effluent irrigation impacting groundwater through the soil strata as EC is also considered to be above the background range. The elevated ammonia result for December 2020 is under investigation and to be retested Q1 2021.

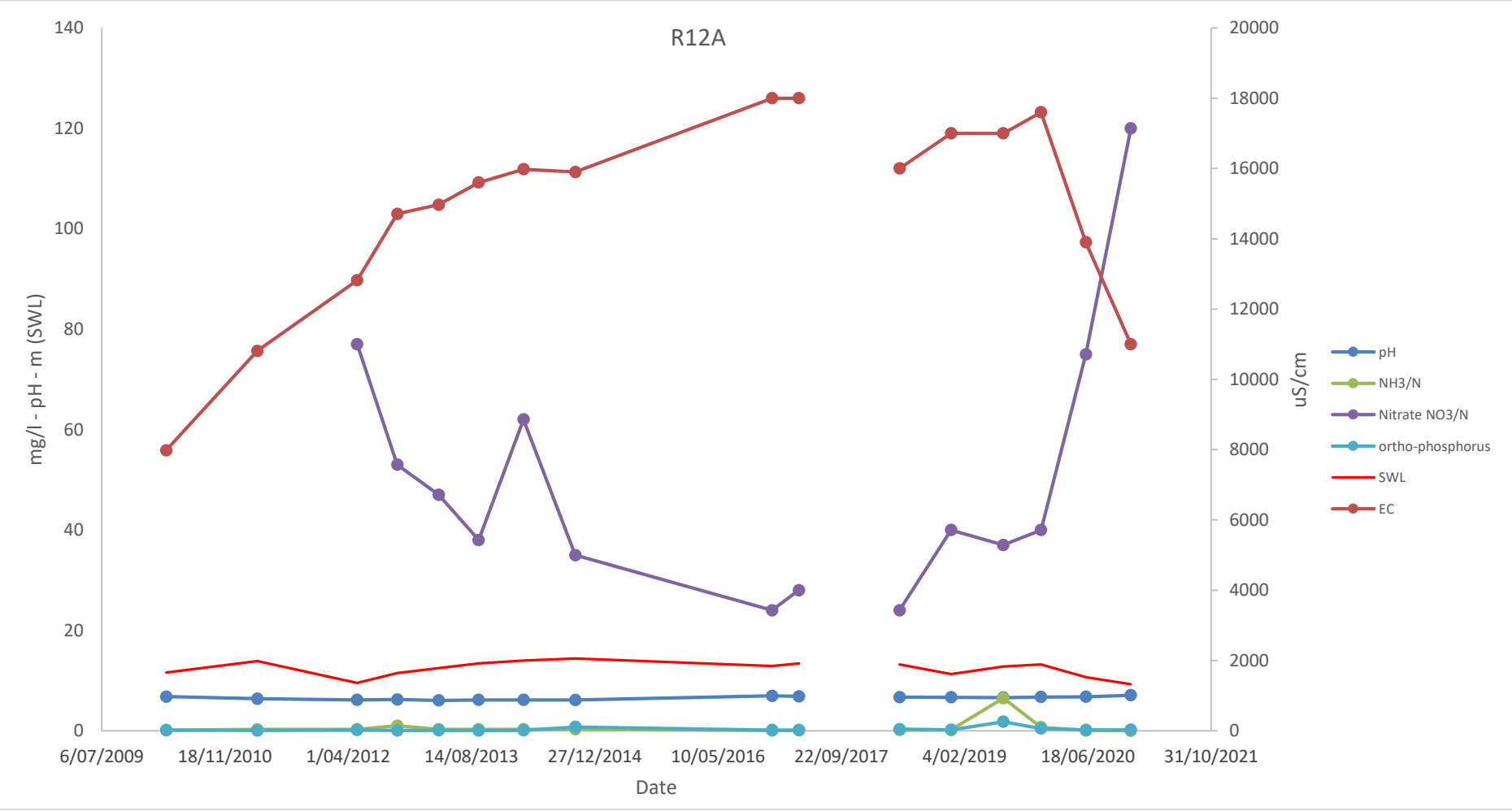

Figure 3: R12A Results Trending. 2020 results within historical range for SWL, ortho-phosphorous and pH. Nitrate is trending upwards and EC is decreasing. This may be indicative of clay soils buffering cation migration through the soil profile, while seepage of nitrate anions to the underlying groundwater is less constrained. 2021 monitoring program will investigate the potentially increasing trend.

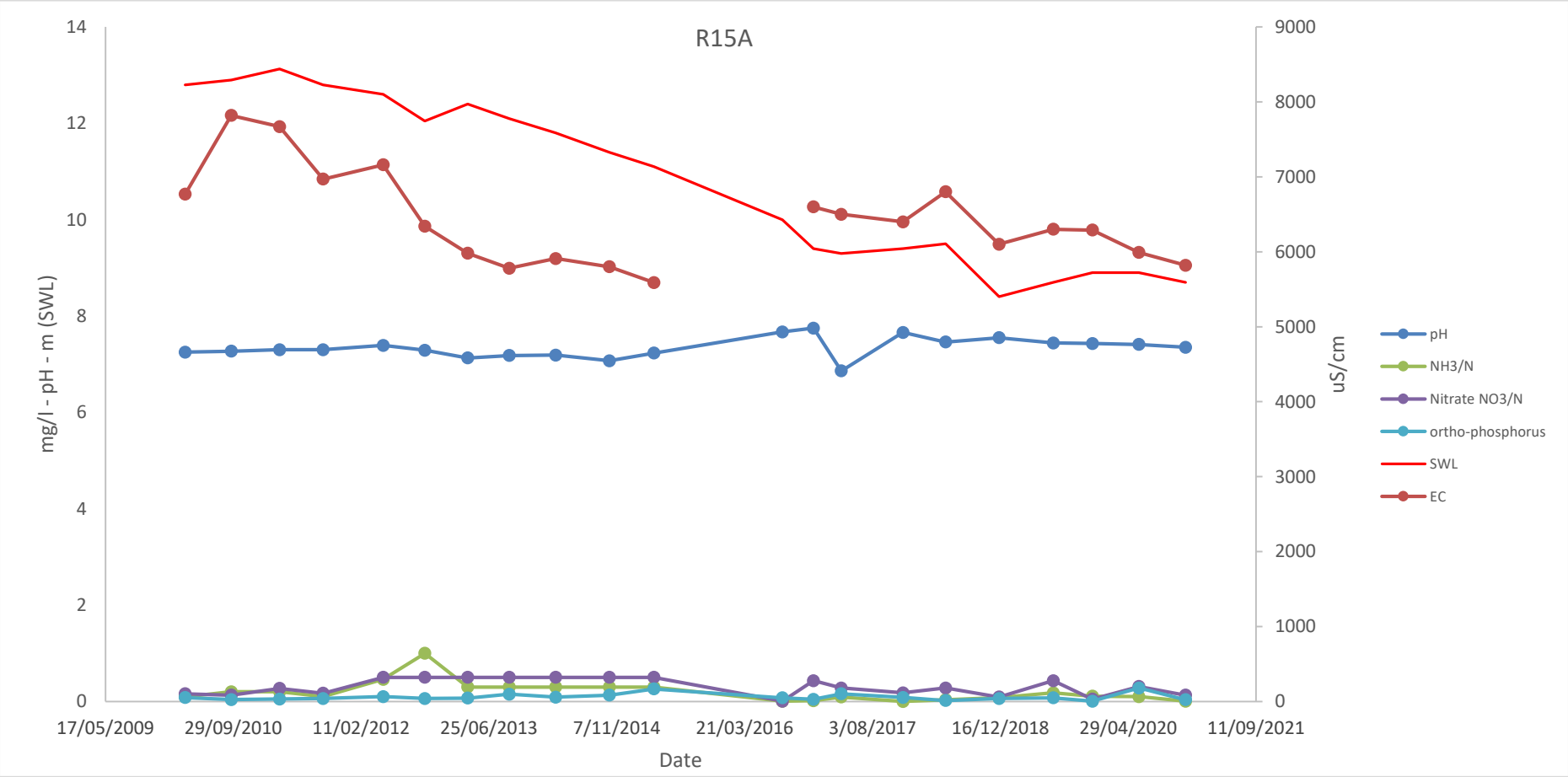

Figure 4: R15A Results Trending. Results within historical range however an overall increasing trend in the SWL is apparent (note inverse scale for SWL reported as 'depth-to-water').

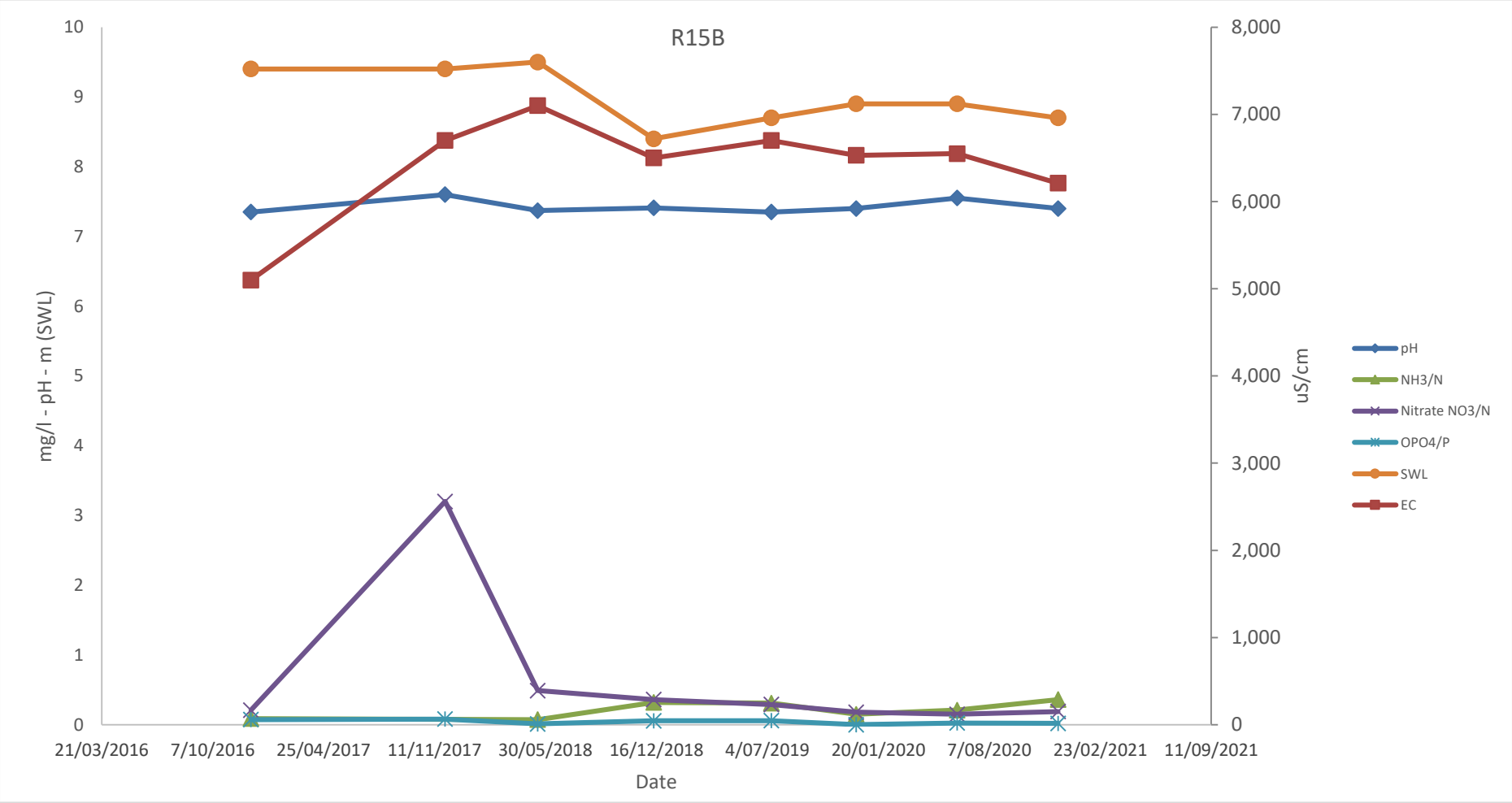

Figure 5:R15B Trending. Results within historical range.

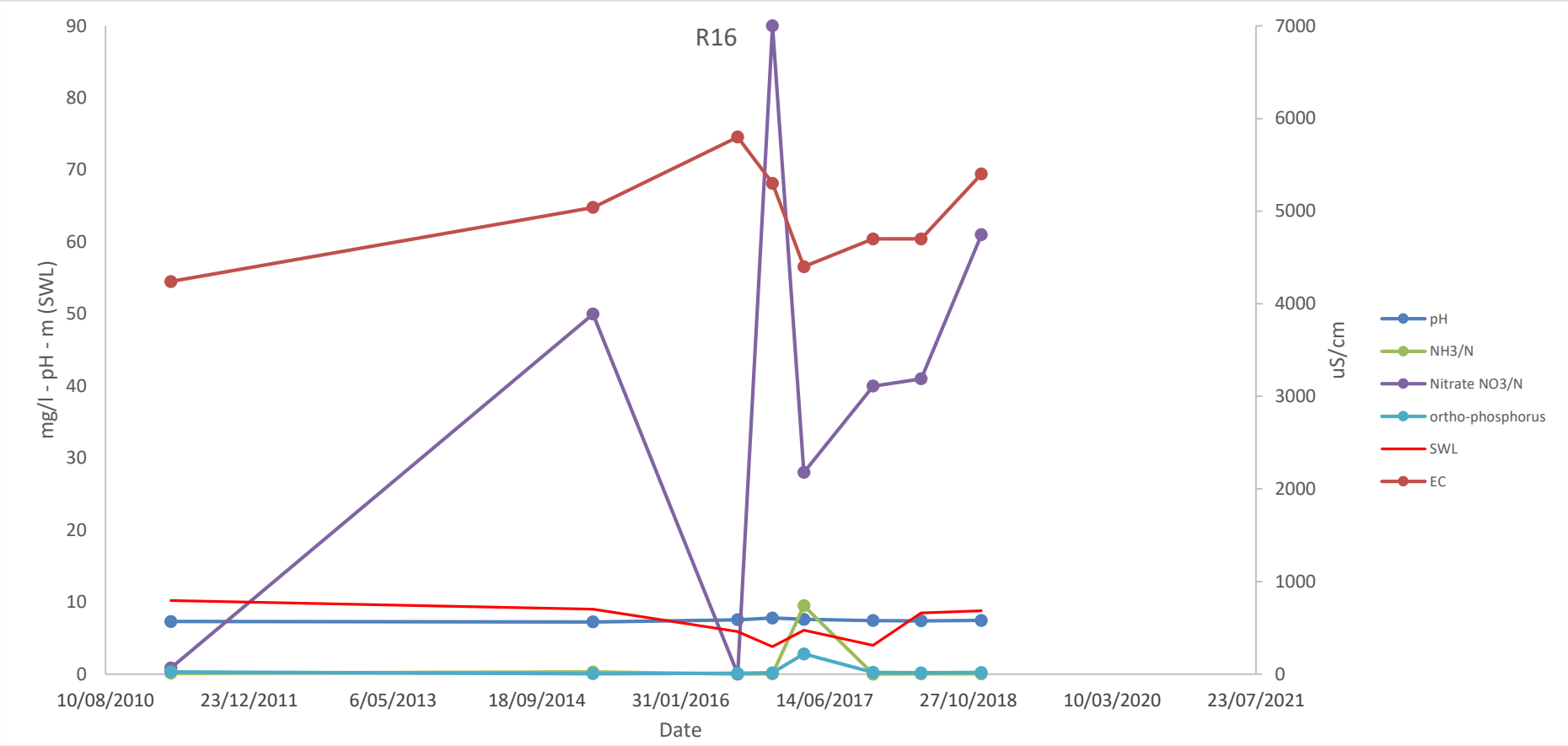

Figure 6: R16 Trending. Insufficient water to obtain sample in 2020. The ammonia concentration recorded for early 2017 (9.5mg/L) and the low nitrate in 2016 is thought to be anomalies due to potential sample interference or reporting error.

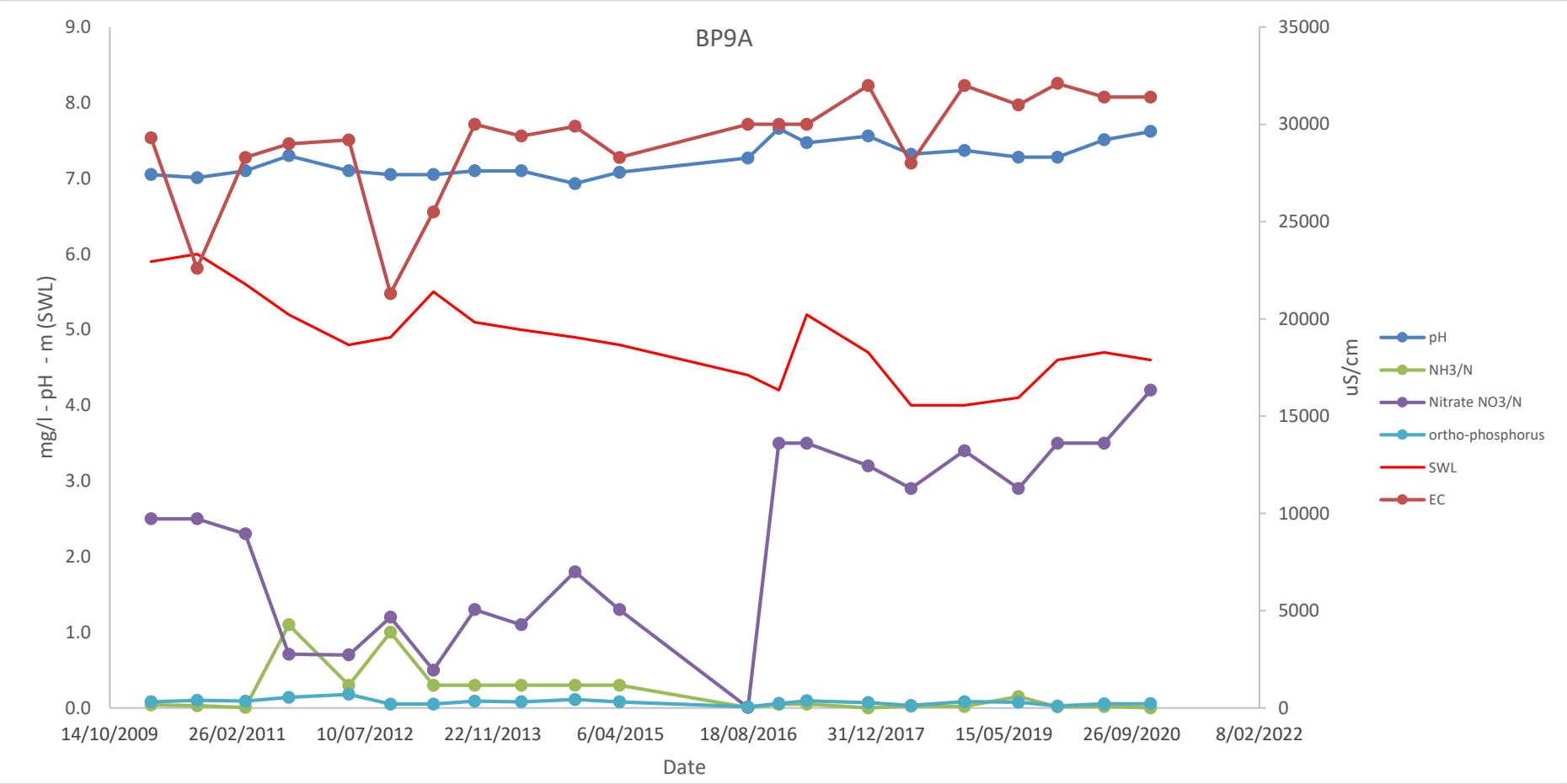

Figure 7: BP9A Trending. Results for 2020 typically within the historical range, with a slight increase in EC and Nitrate. 2021 monitoring program will investigate potentially increasing trends for these parameters.

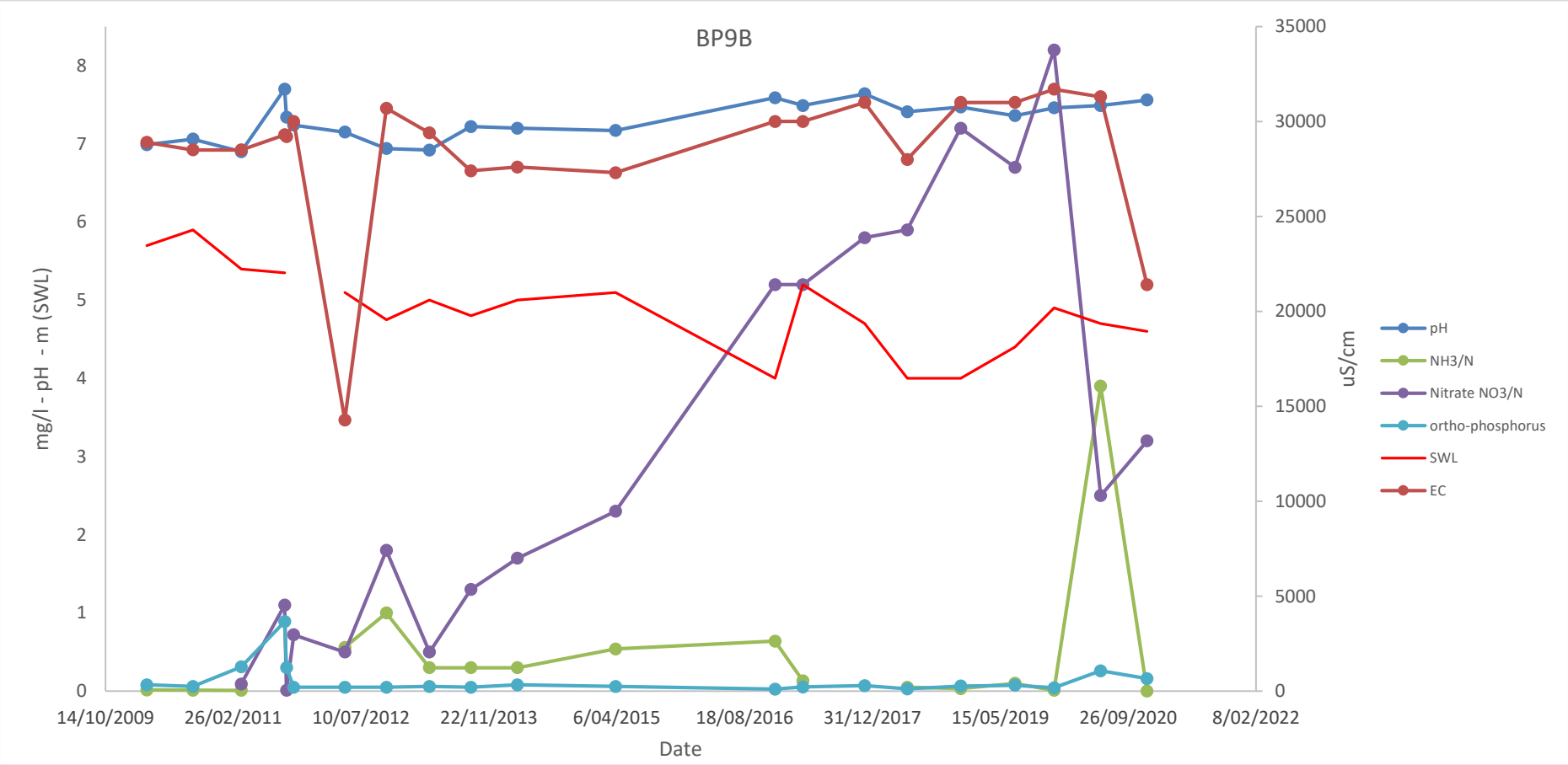

Figure 8: BP9B Trending. Results typically within historical range, with the exception of an anomalous ammonia spike in mid-2020 corresponding to a decrease in nitrate. This may have been associated with a temporary variation of the reduction-oxidation (redox) potential of groundwater resulting in reduction of nitrate to ammonia, however there is insufficient data to confirm this. 2021 monitoring program will further investigate these parameters.

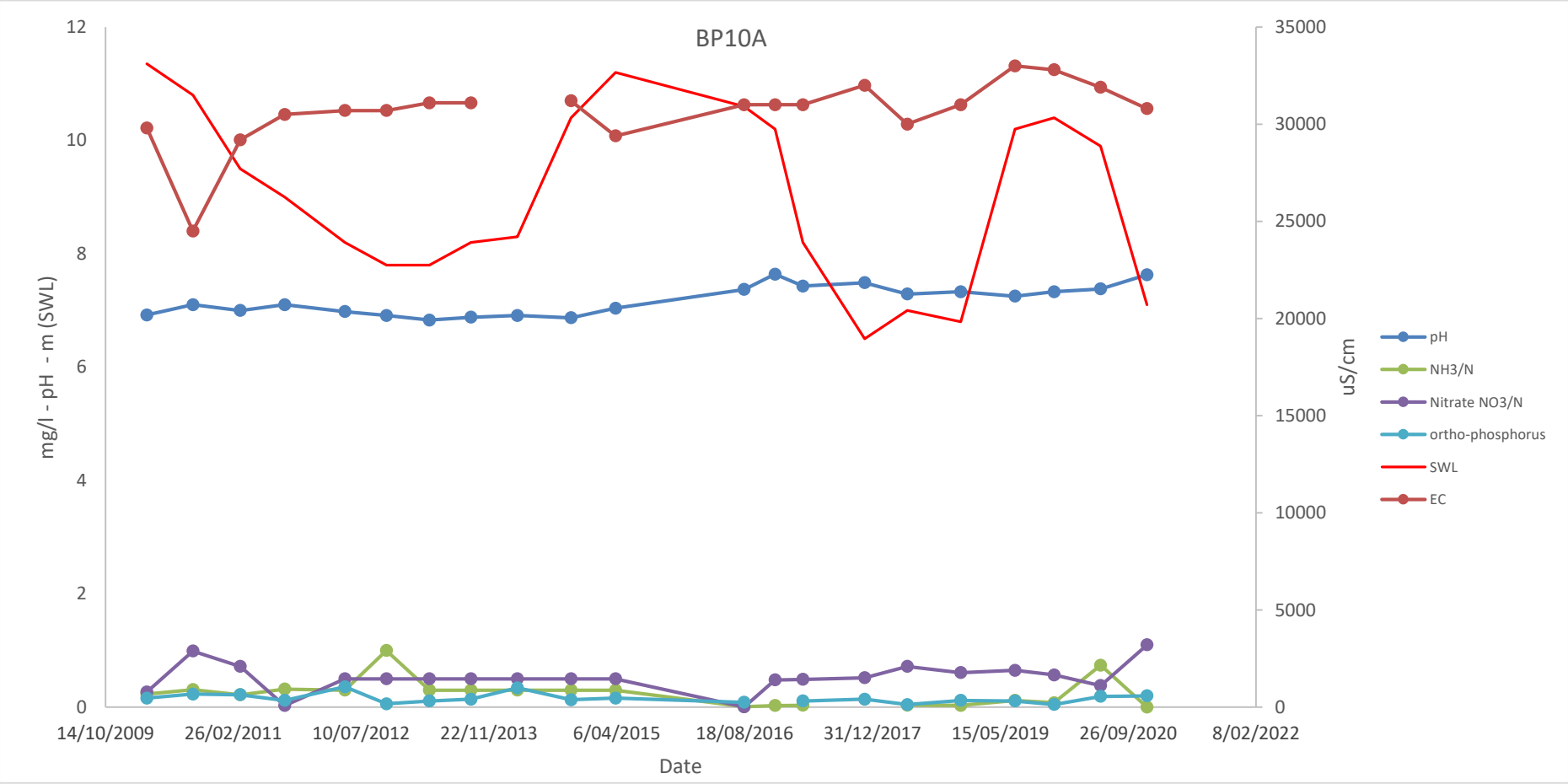

Figure 9: BP10A Trending. Results within historical range with the exception of nitrate. 2021 monitoring program will investigate potentially increasing trends for this parameter.

Type: Soil Quality Monitoring

Frequency: Yearly / 3 Years

Interpretation: Premise Consulting Report 2020

EPA Licence Location	JBS Sampling Location	Monitoring Frequency	Date of Sampling	Pollutant	Units of Measure	Number of samples required	Number of samples collected and analysed	0-10 cm depth	50-60 cm depth
EPA 1	**Pivot A**	**Yearly**	13/10/20	**Exchangeable Potassium**	**centimoles of positive charge/kg of soil**	2	2	1.76	1.00
				Available Phosphorus	**mg/kg**	2	2	155	3
				***Clay Dispersion**	**As approp.**				
				Conductivity	**deciSiemens/ m**	2	2	0.96	1.44
				***Aggregate stability**	**As approp.**				
				Nitrate	**mg/kg**	2	2	19	50
				pH	**pH**	2	2	6.8	7.9
				Exchangeable Sodium	**centimoles of positive charge per kg of soil**	2	2	0.234	0.789
				Exchangeable Calcium	**centimoles of positive charge per Kg of soil**	2	2	3.59	6.02

EPA Licence Location	JBS Sampling Location	Monitoring Frequency	Date of Sampling	Pollutant	Units of Measure	Number of samples required	Number of samples collected and analysed	0-10 cm depth	50-60 cm depth
				Exchangeable Magnesium	**centimoles of positive charge/kg of soil**	2	2	1.09	3.63
EPA 2	**Pivot B**	**Yearly**	13/10/20	**Exchangeable Potassium**	**centimoles of positive charge/kg of soil**	2	2	1.62	0.796
				Available Phosphorus	**mg/kg**	2	2	121	3
				***Clay Dispersion**	**As approp.**				
				Conductivity	**deciSiemens/m**	2	2	1.28	2.4
				***Aggregate stability**	**As approp.**				
				Nitrate	**mg/kg**	2	2	25	62
				pH	**pH**	2	2	6.8	7.6
				Exchangeable Sodium	**centimoles of positive charge per kg of soil**	2	2	0.309	1.33
				Exchangeable Calcium	**centimoles of positive charge per Kg of soil**	2	2	4.44	6.03
				Exchangeable Magnesium	**centimoles of positive charge/kg of soil**	2	2	1.42	4.37
EPA 3	**Pivot C**	**Yearly**	13/10/20	**Exchangeable Potassium**	**centimoles of positive charge/kg of soil**	2	2	1.65	0.813
				Available Phosphorus	**mg/kg**	2	2	126	3

EPA Licence Location	JBS Sampling Location	Monitoring Frequency	Date of Sampling	Pollutant	Units of Measure	Number of samples required	Number of samples collected and analysed	0-10 cm depth	50-60 cm depth
				***Clay Dispersion**	**As approp.**				
				Conductivity	**deciSiemens/ m**	2	2	0.8	0.56
				***Aggregate stability**	**As approp.**				
				Nitrate	**mg/kg**	2	2	8.8	11
				pH	**pH**	2	2	7.6	8.3
				Exchangeable Sodium	**centimoles of positive charge per kg of soil**	2	2	0.344	0.594
				Exchangeable Calcium	**centimoles of positive charge per Kg of soil**	2	2	6.46	4.63
				Exchangeable Magnesium	**centimoles of positive charge/kg of soil**	2	2	2.41	1.68
EPA 4	**BPA**	**Yearly**	13/10/20	**Exchangeable Potassium**	**centimoles of positive charge/kg of soil**	2	2	1.84	0.778
				Available Phosphorus	**mg/kg**	2	2	219	21
				***Clay Dispersion**	**As approp.**				
				Conductivity	**deciSiemens/ m**	2	2	0.96	0.8
				***Aggregate stability**	**As approp.**				
				Nitrate	**mg/kg**	2	2	27	22
				pH	**pH**	2	2	6.1	7.4
				Exchangeable Sodium	**centimoles of positive**	2	2	0.224	0.397

EPA Licence Location	JBS Sampling Location	Monitoring Frequency	Date of Sampling	Pollutant	Units of Measure	Number of samples required	Number of samples collected and analysed	0-10 cm depth	50-60 cm depth
					charge per kg of soil				
				Exchangeable Calcium	centimoles of positive charge per Kg of soil	2	2	3.85	3.79
				Exchangeable Magnesium	centimoles of positive charge/kg of soil	2	2	1.2	1.75
EPA 5	BPB	Yearly	13/10/20	Exchangeable Potassium	centimoles of positive charge/kg of soil	2	2	0.618	0.572
				Available Phosphorus	mg/kg	2	2	3	3
				*Clay Dispersion	As approp.				
				Conductivity	deciSiemens/m	2	2	0.4	1.76
				*Aggregate stability	As approp.				
				Nitrate	mg/kg	2	2	0.1	6.8
				pH	pH	2	2	7.1	8.7
				Exchangeable Sodium	centimoles of positive charge per kg of soil	2	2	0.74	0.56
				Exchangeable Calcium	centimoles of positive charge per Kg of soil	2	2	1.82	3.36
				Exchangeable Magnesium	centimoles of positive charge/kg of soil	2	2	1.51	6.28
EPA 6	BPC	Yearly	13/10/20	Exchangeable Potassium	centimoles of positive	2	2	3.25	0.782

EPA Licence Location	JBS Sampling Location	Monitoring Frequency	Date of Sampling	Pollutant	Units of Measure	Number of samples required	Number of samples collected and analysed	0-10 cm depth	50-60 cm depth
					charge/kg of soil				
				Available Phosphorus	mg/kg	2	2	286	3
				*Clay Dispersion	As approp.				
				Conductivity	deciSiemens/m	2	2	3.12	18
				*Aggregate stability	As approp.				
				Nitrate	mg/kg	2	2	49	10
				pH	pH	2	2	7.8	7.7
				Exchangeable Sodium	centimoles of positive charge per kg of soil	2	2	0.944	1.99
				Exchangeable Calcium	centimoles of positive charge per Kg of soil	2	2	14.2	32.3
				Exchangeable Magnesium	centimoles of positive charge/kg of soil	2	2	5.84	7.09
EPA 7	BPD	Yearly	13/10/20	Exchangeable Potassium	centimoles of positive charge/kg of soil	2	2	2.27	1.18
				Available Phosphorus	mg/kg	2	2	281	3
				*Clay Dispersion	As approp.				
				Conductivity	deciSiemens/m	2	2	1.68	6.24
				*Aggregate stability	As approp.				
				Nitrate	mg/kg	2	2	6.6	3.4

EPA Licence Location	JBS Sampling Location	Monitoring Frequency	Date of Sampling	Pollutant	Units of Measure	Number of samples required	Number of samples collected and analysed	0-10 cm depth	50-60 cm depth
				pH	**pH**	2	2	8.5	8.6
				Exchangeable Sodium	**centimoles of positive charge per kg of soil**	2	2	2.01	5.65
				Exchangeable Calcium	**centimoles of positive charge per Kg of soil**	2	2	13.1	15.2
				Exchangeable Magnesium	**centimoles of positive charge/kg of soil**	2	2	7	10.7
EPA 8	**BPE**	**Yearly**	13/10/20	**Exchangeable Potassium**	**centimoles of positive charge/kg of soil**	2	2	0.822	0.532
				Available Phosphorus	**mg/kg**	2	2	3	3
				***Clay Dispersion**	**As approp.**				
				Conductivity	**deciSiemens/ m**	2	2	1.36	6.72
				***Aggregate stability**	**As approp.**				
				Nitrate	**mg/kg**	2	2	8.1	2.5
				pH	**pH**	2	2	7.6	9
				Exchangeable Sodium	**centimoles of positive charge per kg of soil**	2	2	2.91	11.5
				Exchangeable Calcium	**centimoles of positive charge per Kg of soil**	2	2	5.99	15
				Exchangeable Magnesium	**centimoles of positive**	2	2	7.31	12.6

EPA Licence Location	JBS Sampling Location	Monitoring Frequency	Date of Sampling	Pollutant	Units of Measure	Number of samples required	Number of samples collected and analysed	0-10 cm depth	50-60 cm depth
					charge/kg of soil				
EPA 9	**BPF**	**Yearly**	13/10/20	**Exchangeable Potassium**	**centimoles of positive charge/kg of soil**	2	2	2.66	2.2
				Available Phosphorus	**mg/kg**	2	2	337	236
				***Clay Dispersion**	**As approp.**				
				Conductivity	**deciSiemens/ m**	2	2	4.4	1.92
				***Aggregate stability**	**As approp.**				
				Nitrate	**mg/kg**	2	2	85	35
				pH	**pH**	2	2	7.2	7.6
				Exchangeable Sodium	**centimoles of positive charge per kg of soil**	2	2	0.91	1.09
				Exchangeable Calcium	**centimoles of positive charge per Kg of soil**	2	2	14.4	14.4
				Exchangeable Magnesium	**centimoles of positive charge/kg of soil**	2	2	8.29	8.54
EPA 10	**BPG**	**Yearly**	13/10/20	**Exchangeable Potassium**	**centimoles of positive charge/kg of soil**	2	2	2.64	1.99
				Available Phosphorus	**mg/kg**	2	2	346	16
				***Clay Dispersion**	**As approp.**				
				Conductivity	**deciSiemens/ m**	2	2	3.04	1.6

EPA Licence Location	JBS Sampling Location	Monitoring Frequency	Date of Sampling	Pollutant	Units of Measure	Number of samples required	Number of samples collected and analysed	0-10 cm depth	50-60 cm depth
				***Aggregate stability**	**As approp.**				
				Nitrate	**mg/kg**	2	2	85	19
				pH	**pH**	2	2	8	8.8
				Exchangeable Sodium	**centimoles of positive charge per kg of soil**	2	2	0.955	2.89
				Exchangeable Calcium	**centimoles of positive charge per Kg of soil**	2	2	11.8	13.3
				Exchangeable Magnesium	**centimoles of positive charge/kg of soil**	2	2	8.1	12.2
EPA 11	**BPH**	**Yearly**	13/10/20	**Exchangeable Potassium**	**centimoles of positive charge/kg of soil**	2	2	1.27	1.2
				Available Phosphorus	**mg/kg**	2	2	3	3
				***Clay Dispersion**	**As approp.**				
				Conductivity	**deciSiemens/m**	2	2	0.4	0.24
				***Aggregate stability**	**As approp.**				
				Nitrate	**mg/kg**	2	2	1.9	1.7
				pH	**pH**	2	2	7.1	8
				Exchangeable Sodium	**centimoles of positive charge per kg of soil**	2	2	0.159	0.77
				Exchangeable Calcium	**centimoles of positive**	2	2	3.84	5.25

EPA Licence Location	JBS Sampling Location	Monitoring Frequency	Date of Sampling	Pollutant	Units of Measure	Number of samples required	Number of samples collected and analysed	0-10 cm depth	50-60 cm depth
					charge per Kg of soil				
				Exchangeable Magnesium	centimoles of positive charge/kg of soil	2	2	1.35	6.87
EPA 12	BPI	Yearly	13/10/20	Exchangeable Potassium	centimoles of positive charge/kg of soil	2	2	3.07	0.785
				Available Phosphorus	mg/kg	2	2	350	3
				*Clay Dispersion	As approp.				
				Conductivity	deciSiemens/m	2	2	3.84	3.36
				*Aggregate stability	As approp.				
				Nitrate	mg/kg	2	2	49	6.8
				pH	pH	2	2	7.5	8.6
				Exchangeable Sodium	centimoles of positive charge per kg of soil	2	2	0.99	5.38
				Exchangeable Calcium	centimoles of positive charge per Kg of soil	2	2	11	12.8
				Exchangeable Magnesium	centimoles of positive charge/kg of soil	2	2	7.39	9.25
EPA 13	BPJ	Yearly	13/10/20	Exchangeable Potassium	centimoles of positive charge/kg of soil	2	2	3.22	1.72
				Available Phosphorus	mg/kg	2	2	311	15

EPA Licence Location	JBS Sampling Location	Monitoring Frequency	Date of Sampling	Pollutant	Units of Measure	Number of samples required	Number of samples collected and analysed	0-10 cm depth	50-60 cm depth
				***Clay Dispersion**	**As approp.**				
				Conductivity	**deciSiemens/ m**	2	2	3.92	3.2
				***Aggregate stability**	**As approp.**				
				Nitrate	**mg/kg**	2	2	80	22
				pH	**pH**	2	2	8.1	8.7
				Exchangeable Sodium	**centimoles of positive charge per kg of soil**	2	2	1	4.19
				Exchangeable Calcium	**centimoles of positive charge per Kg of soil**	2	2	12.1	13.8
				Exchangeable Magnesium	**centimoles of positive charge/kg of soil**	2	2	8.04	12.7
EPA 14	**BPK**	**Yearly**	13/10/20	**Exchangeable Potassium**	**centimoles of positive charge/kg of soil**	2	2	2.64	2.16
				Available Phosphorus	**mg/kg**	2	2	255	74
				***Clay Dispersion**	**As approp.**				
				Conductivity	**deciSiemens/ m**	2	2	0.8	0.72
				***Aggregate stability**	**As approp.**				
				Nitrate	**mg/kg**	2	2	28	6.5
				pH	**pH**	2	2	7.2	7.9
				Exchangeable Sodium	**centimoles of positive**	2	2	0.446	1.4

EPA Licence Location	JBS Sampling Location	Monitoring Frequency	Date of Sampling	Pollutant	Units of Measure	Number of samples required	Number of samples collected and analysed	0-10 cm depth	50-60 cm depth
					charge per kg of soil				
				Exchangeable Calcium	centimoles of positive charge per Kg of soil	2	2	9.61	9.96
				Exchangeable Magnesium	centimoles of positive charge/kg of soil	2	2	7.75	10.4
EPA 15	BP DRY	Yearly	13/10/20	Exchangeable Potassium	centimoles of positive charge/kg of soil	2	2	0.681	0.639
				Available Phosphorus	mg/kg	2	2	3	3
				*Clay Dispersion	As approp.				
				Conductivity	deciSiemens/m	2	2	0.24	0.56
				*Aggregate stability	As approp.				
				Nitrate	mg/kg	2	2	1.1	4.5
				pH	pH	2	2	6.7	7.9
				Exchangeable Sodium	centimoles of positive charge per kg of soil	2	2	0.222	1.83
				Exchangeable Calcium	centimoles of positive charge per Kg of soil	2	2	1.91	2.96
				Exchangeable Magnesium	centimoles of positive charge/kg of soil	2	2	0.615	4.61
EPA 26	BPL	Yearly	13/10/20	Exchangeable Potassium	centimoles of positive	2	2	1.1	1.83

EPA Licence Location	JBS Sampling Location	Monitoring Frequency	Date of Sampling	Pollutant	Units of Measure	Number of samples required	Number of samples collected and analysed	0-10 cm depth	50-60 cm depth
					charge/kg of soil				
				Available Phosphorus	**mg/kg**	2	2	53	3
				***Clay Dispersion**	**As approp.**				
				Conductivity	**deciSiemens/ m**	2	2	0.4	0.32
				***Aggregate stability**	**As approp.**				
				Nitrate	**mg/kg**	2	2	4.3	4.6
				pH	**pH**	2	2	7.1	8.3
				Exchangeable Sodium	**centimoles of positive charge per kg of soil**	2	2	0.472	1.34
				Exchangeable Calcium	**centimoles of positive charge per Kg of soil**	2	2	3.98	5.26
				Exchangeable Magnesium	**centimoles of positive charge/kg of soil**	2	2	2.24	6.92

*** 3 Yearly Monitoring – Last undertaken in 2018, due next in 2021**