

Soil Monitoring Data December 2015

Point 14

Published: 18 January 2016 Licensee: Cargill Newcastle EPL no.: 5810								
EPA Point ID	Date of Sampling	Date Results Received	Pollutant	Measurement Period & Monitoring Frequency Required by EPL	Units of Measure	December 2015		
						Min Value	Mean Value	Max Value
14 – Surface	07/12/2015	12/01/2016	pH	Yearly	pH	5.6	6.7	8.4
			Available Phosphorus (Bray)	Yearly	mg/kg	1.5	10.3	24.5
			Available Phosphorus (Colwell)	Yearly	mg/kg	19.0	94.8	166
			Chloride	Yearly	mg/kg	30.0	146.7	300
			Conductivity	Yearly	µS/cm	108.0	234	396
			Exchangeable Calcium	Yearly	meq/100g	3.0	5.6	8.5
			Exchangeable Magnesium	Yearly	meq/100g	0.3	1.3	2.6
			Exchangeable Potassium	Yearly	meq/100g	0.1	0.1	0.2
			Exchangeable Sodium	Yearly	meq/100g	<0.2	0.9	1.7
			Cation Exchange Capacity	Yearly	meq/100g	3.6	7.9	13.0
			Moisture Content	Yearly	%	7.4	31.2	48.3
14 – Sub-surface	07/12/2015	12/01/2016	pH	Yearly	pH	6.3	7.7	8.8
			Available Phosphorus (Bray)	Yearly	mg/kg	<1.0	<0.1	<0.1
			Available Phosphorus (Colwell)	Yearly	mg/kg	10	37.3	143
			Chloride	Yearly	mg/kg	20	42	100
			Conductivity	Yearly	µS/cm	82	176	359
			Exchangeable Calcium	Yearly	meq/100g	2.4	4.2	7
			Exchangeable Magnesium	Yearly	meq/100g	0.3	0.8	2.0
			Exchangeable Potassium	Yearly	meq/100g	<0.1	0.1	0.3
			Exchangeable Sodium	Yearly	meq/100g	0.2	0.3	0.6
			Cation Exchange Capacity	Yearly	meq/100g	3.3	6.1	9.7
			Moisture Content	Yearly	%	5.9	14.9	22.3

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EPA Point ID	Date of Sampling	Date Results Received	Pollutant	Measurement Period & Monitoring Frequency Required by EPL	Units of Measure	December 2015		
						Min Value	Mean Value	Max Value
15 – Surface	07/12/2015	12/01/2016	pH	Yearly	pH	7.9	8.0	8.2
			Available Phosphorus (Bray)	Yearly	mg/kg	<0.1	1.5	2.8
			Available Phosphorus (Colwell)	Yearly	mg/kg	16.0	21.0	26
			Chloride	Yearly	mg/kg	20	73.3	120
			Conductivity	Yearly	µS/cm	80	172	239
			Exchangeable Calcium	Yearly	meq/100g	2.1	5.4	7.1
			Exchangeable Magnesium	Yearly	meq/100g	0.2	0.8	1.2
			Exchangeable Potassium	Yearly	meq/100g	<0.2	0.13	0.2
			Exchangeable Sodium	Yearly	meq/100g	<0.2	0.23	0.3
			Cation Exchange Capacity	Yearly	meq/100g	2.4	6.5	8.9
			Moisture Content	Yearly	%	2.2	11.7	21.1
15 – Sub-surface	07/12/2015	12/01/2016	pH	Yearly	pH	8.5	8.7	8.9
			Available Phosphorus (Bray)*	Yearly	mg/kg	<0.1	<0.1	<0.1
			Available Phosphorus (Colwell)**	Yearly	mg/kg	<5	4.7	9
			Chloride	Yearly	mg/kg	10	13.3	20
			Conductivity	Yearly	µS/cm	72	109	156
			Exchangeable Calcium	Yearly	meq/100g	1.8	3.0	4.5
			Exchangeable Magnesium	Yearly	meq/100g	<0.2	0.3	0.5
			Exchangeable Potassium	Yearly	meq/100g	<0.2	<0.2	<0.2
			Exchangeable Sodium	Yearly	meq/100g	<0.2	<0.2	<0.2
			Cation Exchange Capacity	Yearly	meq/100g	2.0	3.4	5.2
			Moisture Content	Yearly	%	2.7	7.7	13.9

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						Min Value	Mean Value	Max Value
16 – Surface	07/12/2015	12/01/2016	pH	Yearly	pH	7.2	7.5	7.8
			Available Phosphorus (Bray)*	Yearly	mg/kg	2.8	4.5	6.2
			Available Phosphorus (Colwell)**	Yearly	mg/kg	10	25.7	34
			Chloride	Yearly	mg/kg	80	167	220
			Conductivity	Yearly	µS/cm	171	272	331
			Exchangeable Calcium	Yearly	meq/100g	5	7.6	12.7
			Exchangeable Magnesium	Yearly	meq/100g	1	1.0	1
			Exchangeable Potassium	Yearly	meq/100g	<0.2	0.2	0.3
			Exchangeable Sodium	Yearly	meq/100g	0.4	0.6	0.9
			Cation Exchange Capacity	Yearly	meq/100g	6.6	9.4	14.9
			Moisture Content	Yearly	%	25.7	34.5	41.6
16 – Sub-surface	07/12/2015	12/01/2016	pH	Yearly	pH	8.2	8.4	8.5
			Available Phosphorus (Bray)*	Yearly	mg/kg	1.0	3.7	8.8
			Available Phosphorus (Colwell)**	Yearly	mg/kg	6.0	10.7	17.0
			Chloride	Yearly	mg/kg	30.0	53.3	70.0
			Conductivity	Yearly	µS/cm	133.0	173.0	214.0
			Exchangeable Calcium	Yearly	meq/100g	2.5	5.1	6.5
			Exchangeable Magnesium	Yearly	meq/100g	0.2	0.5	1.1
			Exchangeable Potassium	Yearly	meq/100g	<0.2	0.12	<0.2
			Exchangeable Sodium	Yearly	meq/100g	<0.2	0.3	0.5
			Cation Exchange Capacity	Yearly	meq/100g	3.0	6.1	8.3
			Moisture Content	Yearly	%	12.5	16.0	18.6

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						Min Value	Mean Value	Max Value
17 – Surface	08/12/2015	12/01/2016	pH	Yearly	pH	5.8	6.8	7.4
			Available Phosphorus (Bray)*	Yearly	mg/kg	4.4	24.4	52.2
			Available Phosphorus (Colwell)**	Yearly	mg/kg	56	79.8	112
			Chloride	Yearly	mg/kg	80	191.7	360
			Conductivity	Yearly	µS/cm	338	470.2	827
			Exchangeable Calcium	Yearly	meq/100g	4.1	6.7	8.6
			Exchangeable Magnesium	Yearly	meq/100g	0.4	0.8	1.5
			Exchangeable Potassium	Yearly	meq/100g	<0.1	0.1	0.4
			Exchangeable Sodium	Yearly	meq/100g	0.1	0.5	1.1
			Cation Exchange Capacity	Yearly	meq/100g	5	8.1	11.3
			Moisture Content	Yearly	%	12.6	30.0	38.7
17 – Sub-surface	08/12/2015	12/01/2016	pH	Yearly	pH	8.1	8.3	8.4
			Available Phosphorus (Bray)*	Yearly	mg/kg	1.2	7.0	23.5
			Available Phosphorus (Colwell)**	Yearly	mg/kg	9	32.0	69
			Phosphorus as P (total)	3-Yearly	mg/kg	0	#DIV/0!	0
			Phosphorus Sorption Capacity	3-Yearly	mg P sorbed/kg soil	0	#DIV/0!	0
			TKN	3-Yearly	mg/kg	0	#DIV/0!	0
			Nitrate as N	3-Yearly	mg/kg	0	#DIV/0!	0
			Nitrogen as N (total)	3-Yearly	mg/kg	0	#DIV/0!	0
			Nitrogen Oxides	3-Yearly	mg/kg	0	#DIV/0!	0
			Chloride	Yearly	mg/kg	<10	6.7	10
			Conductivity	Yearly	µS/cm	105	130.0	172
			Exchangeable Calcium	Yearly	meq/100g	1.5	2.5	4.2
			Exchangeable Magnesium	Yearly	meq/100g	<0.2	0.2	0.4
			Exchangeable Potassium	Yearly	meq/100g	<0.2	<0.2	<0.2
			Exchangeable Sodium	Yearly	meq/100g	<0.2	<0.2	<0.2
Cation Exchange Capacity	Yearly	meq/100g	1.7	2.8	4.8			
Moisture Content	Yearly	%	6.1	10.3	12.9			