Soil Monitoring Data December 2019

Point 14

Published: 10 January 2020 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 2019		
						Min Value	Mean Value	Max Value
14 – Surface	03/12/2019	18/12/2019	рН	Yearly	рН	5.4	6.0	7.8
			Available Phosphorus (Bray)	Yearly	mg/kg	1.5	2.3	3.9
			Available Phosphorus (Colwell)	Yearly	mg/kg	40	64	109
			Chloride	Yearly	mg/kg	70	135	180
			Conductivity	Yearly	μS/cm	300	398	487
			Exchangeable Calcium	Yearly	meq/100g	3.5	4.2	4.7
			Exchangeable Magnesium	Yearly	meq/100g	0.8	0.3	1.1
			Exchangeable Potassium	Yearly	meq/100g	<0.1	0.2	0.4
			Exchangeable Sodium	Yearly	meq/100g	0.2	0.4	0.7
			Cation Exchange Capacity	Yearly	meq/100g	5.4	5.7	6.1
			Moisture Content	Yearly	%	9.2	11.2	14.8
14 – Sub- surface	03/12/2019	18/12/2019	рН	Yearly	рН	7.4	7.7	8.0
			Available Phosphorus (Bray)	Yearly	mg/kg	<1.0	1.1	2.5
			Available Phosphorus (Colwell)	Yearly	mg/kg	19	23	30
			Chloride	Yearly	mg/kg	20	50	70
			Conductivity	Yearly	μS/cm	166	226	278
			Exchangeable Calcium	Yearly	meq/100g	1.9	2.4	3.0
			Exchangeable Magnesium	Yearly	meq/100g	<0.2	<0.2	<0.2
			Exchangeable Potassium	Yearly	meq/100g	<0.2	<0.2	<0.2
			Exchangeable Sodium	Yearly	meq/100g	0.5	0	0.8
			Cation Exchange Capacity	Yearly	meq/100g	2.3	2.9	3.7
			Moisture Content	Yearly	%	3.5	5.9	9.2

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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 2019				
						Min Value	Mean Value	Max Value		
15 – Surface	03/12/2019	18/12/2019	рН	Yearly	рН	7.6	7.8	8.2		
			Available Phosphorus (Bray)	Yearly	mg/kg	<1.0	<1.0	<1.0		
			Available Phosphorus (Colwell)	Yearly	mg/kg	11	21	38		
			Chloride	Yearly	mg/kg	40	77	110		
			Conductivity	Yearly	μS/cm	100	146	180		
			Exchangeable Calcium	Yearly	meq/100g	3.5	6.0	7.3		
			Exchangeable Magnesium	Yearly	meq/100g	0.5	1.0	1.4		
			Exchangeable Potassium	Yearly	meq/100g	<0.2	0.2	0.4		
			Exchangeable Sodium	Yearly	meq/100g	<0.2	0.3	0.5		
			Cation Exchange Capacity	Yearly	meq/100g	4.2	7.6	9.7		
			Moisture Content	Yearly	%	3.0	14.8	32.8		
15 – Sub- surface	03/12/2019	18/12/2019	рН	Yearly	рН	8.1	8.4	8.6		
			Available Phosphorus (Bray)*	Yearly	mg/kg	<1.0	<1.0	<1.0		
			Available Phosphorus (Colwell)**	Yearly	mg/kg	<5	5	6		
			Chloride	Yearly	mg/kg	20	23	30		
			Conductivity	Yearly	μS/cm	86	97	116		
			Exchangeable Calcium	Yearly	meq/100g	2.0	1.0	3.0		
			Exchangeable Magnesium	Yearly	meq/100g	<0.2	<0.2	<0.2		
			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	3.2	1.0	3.2		
			Moisture Content	Yearly	%	2.0	6.7	14.9		

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Published: 10 January 2020 Licensee: Cargill Newcastle EPL no.: 5810 Pollutant December 2019 **EPA Point** Date of Date Measurement Units of Sampling Results Period & Measure Min Mean Max Monitoring Received Value Value Value Frequency Required by EPL 17 – 04/12/2019 18/12/2019 5.5 7.8 рΗ Yearly рΗ 6.8 Surface Available Phosphorus Yearly mg/kg 1.6 5.5 8.5 (Bray) Available Phosphorus Yearly mg/kg 34 103 201 (Colwell) Chloride 365 820 Yearly mg/kg 220 Conductivity Yearly $\mu S/cm$ 308 454 853 Exchangeable Calcium Yearly meq/100g 3 6.4 10.1 meq/100g 1.3 Exchangeable Magnesium Yearly < 0.2 8.0 Exchangeable Potassium meq/100g <0.2 0.2 0.2 Yearly meq/100g Exchangeable Sodium Yearly 0.2 0.4 0.5 Cation Exchange Capacity Yearly meq/100g 3.4 7.7 11.8 Moisture Content % 22.9 Yearly 14.3 33.6 17 – Sub-04/12/2019 18/12/2019 рΗ Yearly рΗ 7.4 8.0 8.6 surface Available Phosphorus Yearly mg/kg 1.4 4.0 8.4 (Bray)* Available Phosphorus Yearly mg/kg 20 103 (Colwell)** Chloride 40 108 180 Yearly mg/kg 1000 Conductivity μS/cm 333 Yearly 122 Exchangeable Calcium 2.0 Yearly meq/100g 1.3 1.6 Exchangeable Magnesium Yearly meq/100g <0.2 <0.2 <0.2 Exchangeable Potassium Yearly meq/100g <0.2 <0.2 <0.2 Exchangeable Sodium meq/100g 0.3 0.4 Yearly < 0.2 Cation Exchange Capacity Yearly meq/100g 1.3 1.9 2.4 **Moisture Content** Yearly 7.9 16.4 24.9