

ROUTINE AGRICULTURAL SOIL ANALYSIS REPORT

Job No:	D6083
No of Samples:	1
Date Supplied:	9th September 2024
Supplied by:	Martins E. Ions & Associated Pty Ltd

				Sample ID:	Sample 1	Heavy Soil	Medium Soil	Light Soil	Sandy Soil
				Crop:	Palagonite				
				Client:	Soil	e.g Clay	e.g Clay Loam	e.g Loam	e.g Loamy Sand
Method	Nutrient	Units		D6083/1	Indicative guidelines only- refer Note 6				
Morgan 1	Calcium	Ca		2152	1150	750	375	175	
	Magnesium	Mg	mg/kg	803	160	105	60	25	
	Potassium	K		7	113	75	60	50	
	Phosphorus	P		1.1	15	12	10	5.0	
Bray1	Phosphorus	P	mg/kg	2.4	45 ^{note 8}	30 ^{note 8}	24 ^{note 8}	20 ^{note 8}	
Colwell				14	80	50	45	35	
Bray2				92	90 ^{note 8}	60 ^{note 8}	48 ^{note 8}	40 ^{note 8}	
KCl	Nitrate Nitrogen	N	mg/kg	0.9	15	13	10	10	
	Ammonium Nitrogen			1.6	20	18	15	12	
	Sulfur	S		4.4	10.0	8.0	8.0	7.0	
1:5 Water	pH		units	8.41	6.5	6.5	6.3	6.3	
	Conductivity		dS/m	0.097	0.200	0.150	0.120	0.100	
Calculation	Organic Matter		% OM	0.1	>5.5	>4.5	>3.5	>2.5	
Ammonium Acetate + Calculations	Calcium	Ca	cmol ⁺ /Kg	22.14					
			kg/ha	9937					
			mg/kg	4436	3125	2150	1000	375	
	Magnesium	Mg	cmol ⁺ /Kg	12.24					
			kg/ha	3333					
			mg/kg	1488	290	200	145	75	
	Potassium	K	cmol ⁺ /Kg	0.10					
			kg/ha	87					
mg/kg	39	235	190	150	100				
Sodium	Na	cmol ⁺ /Kg	0.94						
		kg/ha	483						
mg/kg	216	69	60	51	25				
KCl	Aluminium	Al	cmol ⁺ /Kg	0.01					
			kg/ha	2					
			mg/kg	1	54	45	41	14	
Acidity Titration	Hydrogen	H ⁺	cmol ⁺ /Kg	0.00					
			kg/ha	0					
			mg/kg	0	6	5	5	2	
Calculation	Effective Cation Exchange Capacity (ECEC)		cmol ⁺ /Kg	35.43	20	14	7	4	
Base Saturation Calculations	Calcium	Ca		62.5	77	76	69	60	
	Magnesium	Mg		34.6	12	12	16	20	
	Potassium	K	%	0.3	3	4	5	8	
	Sodium - ESP	Na		2.6	2	2	3	3	
	Aluminium	Al		0.0	7	7	7	9	
	Hydrogen	H ⁺		0.0					
Calculation	Calcium/ Magnesium Ratio		ratio	1.8	6.4	6.3	4.3	3.0	
DTPA	Zinc	Zn		0.5	6.0	5.0	4.0	3.0	
	Manganese	Mn	mg/kg	6	25	22	18	15	
	Iron	Fe		37	25	22	18	15	
	Copper	Cu		0.3	2.4	2.0	1.6	1.2	
CaCl ₂	Boron	B	mg/kg	0.06	2.0	1.7	1.4	1.0	
	Silicon	Si		78	50	45	40	35	
LECO IR Analyser	Total Carbon	C	%	0.08	>3.1	>2.6	>2.0	>1.4	
	Total Nitrogen	N	%	0.03	>0.30	>0.25	>0.20	>0.15	
Calculation	Carbon/ Nitrogen Ratio		ratio	2.7	10-12	10-12	10-12	10-12	
	Basic Texture			Loam	..	..	..	..
	Basic Colour			Brownish	..	..	..	..
Calculation	Chloride Estimate		equiv. ppm	62	..	..	..	..