

Appendix I

Soil Log Sheets & Laboratory Results

SOIL TEST REPORT

Scone Research Centre

REPORT NO: SCO17/205R1

REPORT TO: Adam Bishop
Pitt & Sherry Operations
PO Box 5487
Chatswood NSW 1515

REPORT ON: Sixteen soil samples
Your Ref: Wellington Sites

PRELIMINARY RESULTS

ISSUED: Not issued

REPORT STATUS: Final

DATE REPORTED: 22-Dec-17

METHODS: Information on test procedures can be obtained from Scone Research Centre

TESTING CARRIED OUT ON SAMPLE AS RECEIVED
THIS DOCUMENT MAY NOT BE REPRODUCED EXCEPT IN FULL



L Dunn
Scone Laboratory

Lab No	Method	C6A/2	P7C/2 Particle Size Analysis – mechanical (%)					K Factor
	Sample Id	OC (%)	clay	silt	f sand	c sand	gravel	
1	Mumbil TP2/1	2.73	10	27	23	28	12	0.036
2	Mumbil TP2/2	0.51	13	27	19	24	17	0.048
3	Mumbil TP4/1	0.55	21	43	33	3	<1	0.061
4	Mumbil TP5/1	0.99	7	24	31	24	14	0.053
5	Mumbil TP6/2	0.52	19	30	25	6	20	0.053
6	Suntop TP1/1	0.88	7	17	32	38	6	0.043
7	Suntop TP1/2	0.28	4	15	31	37	13	0.049
8	Suntop TP2/1	1.24	1	18	35	37	9	0.049
9	Suntop TP4/1	0.85	1	23	33	35	8	0.055
10	Suntop TP5/1	0.65	3	15	36	24	22	0.057
11	Suntop TP5/2	0.44	33	17	6	21	23	0.021
12	Maryvale TP1/1	0.95	13	23	38	19	7	0.05
13	Maryvale TP1/2	0.65	34	26	25	12	3	0.034
14	Maryvale TP3/1	1.07	30	23	27	16	4	0.033
15	Maryvale TP3/2	0.49	28	21	28	22	1	0.035
16	Maryvale TP5/1	1.35	10	26	46	16	2	0.055

nt=not tested

na = not applicable

END OF TEST REPORT

SOIL PROFILE DESCRIPTION SHEET

Site / Location Maryvale	Date of Investigation 23/11/2017	Recorded by:	
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Depth (mm)	Horizon	Texture	Structure	Colour	Mottle / Gley	Coarse Frags. (%)	Roots	Moisture	Soil Notes (e.g. firmness, strength, drainage)	pH	EAT	EC (µS/cm)	M.F.	ECe	Site Notes (slope, landform, surface condition, surface rock)
Test Pit 1															
0-100	A	Light ^{sandy} clay loam	Massive	Brown	—	10%	Yes	D	1' p 40m friable						Stk slope
100-300	B	M heavy clay	Weakly ped	Red brown	—		Yes	D	very stc brick layer						med slope
300+															cultivated lucerne/mc
Test Pit 2															
0-200	A	light clay loam	weakly ped	Dark Chocolate Br	—	—	Yes	D							small at sink gully
200-600	B	light med clay	well structured	reddish Br	—	20% gravel	Yes	D							Stk slow gully
600+							Yes	D							
Test Pit 3															
0-100	A	sandy clay loam	weakly ped	Mid Brown	—	10%	Yes	D							lower fast slope
100-450	B	heavy clay	reasonably well structured	Chocolate brown somewhat	—	< 5%	Yes	moist							shaded 50m west of line by so-they aspect
4															
Test Pit 4															
0-80	A	Sandy loam	loose apedal	light red br		coarse 20%	Yes	D							cultivated paddock NW aspect
80-400	B	Med Clay	mod ped	reddish Br		< 10%	Yes	D							near ridge top upper slope
400+															
Test Pit 5															
0-100	A	loam	with structure mod ped	dark red br	—	—	Yes	D	friable						Root slope
100-400	B	mod-clay	well mod. structured	light reddish br	—	—	Yes	D							Wet slope

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Adam Bishop

Pitt & Sherry

PO Box 5487

WEST CHATSWOOD NSW 1515

Soil Analysis Report

10 Sample(s) received on 7/12/17 . Tested as per the following methods.

Method	Method Description
S201	Soil pH in 1:5 water or 1:5 CaCl ₂ suspension
S202	Soil Electrical Conductivity
S266	Available Sulfur by KCl ₄₀ extraction
S260	Bray's Extractable Phosphorus by FIA
S236	Organic Carbon by Walkley & Black
M630	Total Carbon and/or Total Nitrogen by Dumas Combustion
S273	Gillman & Sumpter Exchangeable Cations

Notes: Site: Maryvale

Results relate only to the items tested.

- When required, samples air dried at 40°C as per Soil Chemical Methods - Australasia (Rayment and Lyons 2011).
- Results are expressed on an air-dry weight basis unless otherwise stated.
- This report should not be reproduced except in full.
- Samples will be retained for one calendar month from the date of the final report. Samples will then be discarded.
- Clients wishing to recover their samples must contact the laboratory within this period. This laboratory will return residual samples at client expense.

Date of issue 15/12/17

Laboratory No. Client's ID	Units	Limit of Reporting	1 TP1/1	2 TP1/2	3 TP2/1	4 TP2/2	5 TP3/1	6 TP3/2	7 TP4/1	8 TP4/2
Cropping Analysis										
pH (Water)	pH units	0.04	5.8	6.4	6.5	7.1	6.9	8.7	6.3	7.2
pH (CaCl ₂)	pH units	0.04	4.8	5.5	-	-	5.9	7.6	-	-
Electrical Conductivity	dS/m	0.0010	0.061	0.069	0.035	0.029	0.20	0.34	0.072	0.044
Sulfur (KCl ₄)	mg/kg	2.0	9.3	5.8	-	-	7.3	5.8	-	-
Bray Phosphorus	mg/kg	0.060	3.6	1.5	-	-	5.8	0.40	-	-
Organic Carbon	%	0.050	0.94	0.85	-	-	0.97	0.42	-	-
Total Nitrogen	%	0.020	0.11	0.094	-	-	0.13	0.039	-	-
Exchangeable Cations										
Aluminium	cmol(+)/kg	0.10	<0.1	<0.1	-	-	<0.1	<0.1	-	-
Calcium	cmol(+)/kg	0.030	7.6	12	-	-	7.5	6.2	-	-
Potassium	cmol(+)/kg	0.010	0.70	0.57	-	-	0.61	0.24	-	-
Magnesium	cmol(+)/kg	0.0070	2.9	6.1	-	-	11	13	-	-
Sodium	cmol(+)/kg	0.030	0.052	0.10	-	-	2.1	6.0	-	-
CEC (effective)	cmol(+)/kg	0.20	11	18	-	-	21	26	-	-
Calcium/ Magnesium			2.6	1.9	-	-	0.68	0.47	-	-
Percent Aluminium Saturation	% of ECEC		N/A	N/A	-	-	N/A	N/A	-	-
Exchangeable Calcium	% of ECEC		67	64	-	-	35	24	-	-
Exchangeable Potassium	% of ECEC		6.3	3.1	-	-	2.8	0.94	-	-
Exchangeable Magnesium	% of ECEC		26	33	-	-	52	51	-	-
Exchangeable Sodium Percentage	% of ECEC		0.46	0.56	-	-	9.9	23	-	-

Laboratory No. Client's ID	Units	Limit of Reporting	9 TP5/1	10 TP5/2
Cropping Analysis				
pH (Water)	pH units	0.04	5.6	7.3
pH (CaCl ₂)	pH units	0.04	4.7	6.1
Electrical Conductivity	dS/m	0.0010	0.072	0.040
Sulfur (KCl ₄)	mg/kg	2.0	3.3	3.1
Bray Phosphorus	mg/kg	0.060	10	0.68
Organic Carbon	%	0.050	1.3	0.49
Total Nitrogen	%	0.020	0.12	0.050
Exchangeable Cations				
Aluminium	cmol(+)/kg	0.10	0.18	<0.1
Calcium	cmol(+)/kg	0.030	8.7	13
Potassium	cmol(+)/kg	0.010	1.1	0.86
Magnesium	cmol(+)/kg	0.0070	3.1	9.6
Sodium	cmol(+)/kg	0.030	0.063	0.51
CEC (effective)	cmol(+)/kg	0.20	13	24
Calcium/ Magnesium			2.8	1.4
Percent Aluminium Saturation	% of ECEC		1	N/A
Exchangeable Calcium	% of ECEC		66	55
Exchangeable Potassium	% of ECEC		8.2	3.6
Exchangeable Magnesium	% of ECEC		24	40
Exchangeable Sodium Percentage	% of ECEC		0.48	2.1