Project Name: **SCEAM - Soil Condition Evaluation & Monitoring Project, Tasmania**
Project Code: **SCEAM** **Site ID: N7** **Observation ID: 1**
Agency Name: **TAS Department of Primary Industries and Fisheries**

Site Information

Desc. By:	D.B. Kidd	**Locality:**	Nearest town, Hagley.
Date Desc.:	05/08/04	**Elevation:**	180 metres
Map Ref.:	GPS S.A. Off	**Rainfall:**	824
Northing/Long.:	5407422 AMG zone: 55	**Runoff:**	Moderately rapid
Easting/Lat.:	487981 Datum: GDA94	**Drainage:**	Imperfectly drained

Geology

ExposureType:	Soil pit	**Conf. Sub. is Parent. Mat.:**	No Data
Geol. Ref.:	No Data	**Substrate Material:**	No Data

Landform

Rel/Slope Class:	Rolling low hills 30-90m 10-32%	**Pattern Type:**	Low hills
Morph. Type:	Crest	**Relief:**	No Data
Elem. Type:	Hillslope	**Slope Category:**	Very gently sloped
Slope:	4 %	**Aspect:**	No Data

Surface Soil Condition
Firm

Erosion
Partial, Minor (sheet)

Soil Classification

Australian Soil Classification: Haplic Eutrophic Brown Ferrosol Medium Non-gravelly Clay-loamy Clayey Deep

Mapping Unit: N/A

Principal Profile Form: Db1.11

ASC Confidence: All necessary analytical data are available.

Great Soil Group: N/A

Site Disturbance

Vegetation

Surface Coarse Fragments
20-50%, coarse gravelly, 20-60mm, ,

Profile Morphology

Ap 0 - 0.21 m Dark yellowish brown (10YR3/4-Moist); , 0-0% ; Clay loam; Massive grade of structure; Earthy fabric; Moist; Very weak consistence; Non-plastic; Non-sticky; 2-10%, fine gravelly, 2-6mm, subrounded, dispersed, Dolerite, coarse fragments; Common, very fine (0-1mm) roots; Abrupt, Wavy change to -

A3 0.21 - 0.37 m Dark brown (7.5YR3/4-Moist); Mottles, 0-2% , 0-5mm, Faint; Light clay; Weak grade of structure, 2-5 mm, Polyhedral; Earthy fabric; Moist; Very weak consistence; Non-plastic; Non-sticky; 50-90%, cobbly, 60-200mm, subrounded, stratified, Dolerite, coarse fragments; Few, very fine (0-1mm) roots; Abrupt, Wavy change to -

B2 0.37 - 1.2 m Strong brown (7.5YR4/6-Moist); Mottles, 2.5YR56, 10-20% , 0-5mm, Distinct; Medium clay; Strong grade of structure, 50-100 mm, Subangular blocky; Rough-ped fabric; Moist; Firm consistence; Slightly plastic; Normal plasticity; Moderately sticky; 10-20%, coarse gravelly, 20-60mm, subrounded, dispersed, Lacustrine Sediment, coarse fragments; Few cutans, <10% of ped faces or walls coated, distinct; Very few (0 - 2 %), Ferromanganiferous, Fine (0 - 2 mm), Soft segregations; Very few (0 - 2 %), Ferruginous-organic, Fine (0 - 2 mm), Soft segregations; Few, very fine (0-1mm) roots;

Morphological Notes

Ap	CL has light & gritty texture.
A3	LC has gritty texture progressing to gravelly.
B2	MC has heavy & gritty texture.

Observation Notes
Charcoal 5 - 20mm ~ 15 -50 cm.

Site Notes
Property owner, McMahon. Pit dug at 2m along transect due to locality of pipes adjacent transect's end.

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Project Code: SCEAM **Site ID:** N7 **Observation** 1
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Laboratory Test Results:

Depth	pH	1:5 EC	Exchangeable Cations				Exchangeable Acidity	CEC	ECEC	ESP
			Ca	Mg	K	Na				
m		dS/m	Cmol (+)/kg							%
0 - 0.075	5.5C 6.2A	0.068A	11.08A	2.96	0.28	0.12	0D 0G 0A		14.44B	
0.175 - 0.25	5.5C 6.1A	0.114A	10.66A	2.89	0.44	0.19	0D 0G 0A		14.18B	
0.37 - 0.67	5.9C 6.5A	0.079A	9.94A	4.34	0.14	0.13	0.064435D 0G 0.0825A		14.6325B	
0.7 - 1	5.4C 6.2A	0.054A	8.06A	6.13	0.15	0.16	0.127175D 0.06G 0.16125A		14.66125B	

Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Particle Size Analysis			
		Clay						GV	CS	FS	Silt
m	%	%	mg/kg	%	%	%	Mg/m3			%	
0 - 0.075		2.3B	80H 24.6I		0.22D						
0.175 - 0.25		2.42B	80H 27.6I		0.22D						
0.37 - 0.67		0.44B	2H 1.4I		0.08D						
0.7 - 1		0.39B	3H 1.9I		0.05D						

Laboratory Analyses Completed for this profile

10B_NR	Extractable sulfur (mg/kg) - Not recorded
12_NR_FE	Total element - Fe(%) - Not recorded
12A1_CU	DTPA - extractable copper, zinc, manganese and iron
12A1_FE	DTPA - extractable copper, zinc, manganese and iron
12A1_MN	DTPA - extractable copper, zinc, manganese and iron
12A1_ZN	DTPA - extractable copper, zinc, manganese and iron
12C1	Calcium chloride extractable boron - manual colour
15_NR_AL	Aluminium Cation - meq per 100g of soil - Not recorded
15_NR_H	Hydrogen Cation - meq per 100g of soil - Not recorded
15A1_CA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment for soluble salts
15A1_K	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment for soluble salts
15A1_MG	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment for soluble salts
15A1_NA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment for soluble salts
15G_C_AL2	Exchangeable aluminium - meq per 100g of soil - Aluminium By KCl extraction and detremination By AAS
15G1	Exchange acidity (hydrogen and aluminium) by 1M potassium chloride
15J_H	Sum of Ex. cations + Ex. acidity - Sum of basic exch. cations and exch. (Hydrogen)
15N1	Exchangeable sodium percentage (ESP)
18A1	Bicarbonate-extractable potassium

3A1	EC of 1:5 soil/water extract

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4A1	pH of 1:5 soil/water suspension
4B2	pH of 1:5 soil/0.01M calcium chloride extract - following Method 4A1
6B2	Total organic carbon - high frequency induction furnace, volumetric
7A5	Total nitrogen - high frequency induction furnace, thermal conductivity
7C1a	Ammonium-N, in presence or absence of nitrite
7C1b	(Nitrate+nitrite)-N, in presence of nitrite
9B2_COL	Bicarbonate-extractable phosphorus - automated colour. Based on Colwell (1965). Method no longer recommended
9C2	Olsen-extractable phosphorus - automated colour