Project Name: **SCEAM - Soil Condition Evaluation & Monitoring Project, Tasmania**
Project Code: **SCEAM** **Site ID:** **N4** **Observation ID:** **1**
Agency Name: **TAS Department of Primary Industries and Fisheries**

Site Information

Desc. By:		**Locality:**	
Date Desc.:	05/08/04	**Elevation:**	181 metres
Map Ref.:	GPS S.A. Off	**Rainfall:**	732
Northing/Long.:	5396968 AMG zone: 55	**Runoff:**	No Data
Easting/Lat.:	498485 Datum: GDA94	**Drainage:**	No Data

Geology

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

Landform

Rel/Slope Class:	Undulating rises 9-30m 3-10%	**Pattern Type:**	Low hills
Morph. Type:	Simple-slope	**Relief:**	No Data
Elem. Type:	Hillslope	**Slope Category:**	Very gently sloped
Slope:	3 %	**Aspect:**	234 degrees

Surface Soil Condition

Firm

Erosion

Partial, Minor (sheet) Partial, Minor (rill)

Soil Classification

Australian Soil Classification:
Haplic Natric Red Kurosol Medium Gravelly Clay-loamy Clayey Deep

Mapping Unit: N/A
Principal Profile Form: Dr4.11

ASC Confidence:
All necessary analytical data are available.

Great Soil Group: N/A

Site Disturbance

Vegetation

Surface Coarse Fragments

10-20%, coarse gravelly, 20-60mm, ,

Profile Morphology

A1p 0 - 0.02 m Dark reddish brown (5YR2.5/2-Moist); , 0-0% ; Clay loam; ; Earthy fabric; Moderately moist; Weak consistence; Non-plastic; Non-sticky; 2-10%, medium gravelly, 6-20mm, subrounded, dispersed, coarse fragments; Very few (0 - 2 %), Ferruginous, Fine (0 - 2 mm), Nodules; Few, fine (1-2mm) roots; Sharp, Smooth change to -

A2p 0.02 - 0.28 m Dark reddish brown (5YR2.5/2-Moist); , 0-0% ; Clay loam; Earthy fabric; Moist; Weak consistence; Non-plastic; Non-sticky; 10-20%, medium gravelly, 6-20mm, subrounded, dispersed, coarse fragments; Very few (0 - 2 %), Ferruginous, Fine (0 - 2 mm), Nodules; Few, fine (1-2mm) roots; Sharp, Smooth change to -

B21 0.28 - 0.58 m Yellowish red (5YR4/6-Moist); Mottles, 7.5YR58, 10-20% , 0-5mm, Distinct; Medium heavy clay; Rough-ped fabric; Moist; Very firm consistence; Non-plastic; Moderately sticky; 10-20%, medium gravelly, 6-20mm, subangular, dispersed, coarse fragments; Common cutans, 10-50% of ped faces or walls coated, distinct; Few (2 - 10 %), Ferruginous, Fine (0 - 2 mm), Nodules; Gradual, Wavy change to -

B22 0.58 - 1.204 m Strong brown (7.5YR5/8-Moist); Mottles, 5YR46, 20-50% , 5-15mm, Distinct; Medium heavy clay; Rough-ped fabric; Moist; Very firm consistence; Non-plastic; Very sticky; 0-2%, fine gravelly, 2-6mm, subangular, dispersed, coarse fragments; Common cutans, 10-50% of ped faces or walls coated, distinct; Few (2 - 10 %), Ferruginous, Fine (0 - 2 mm), Nodules;

Morphological Notes

A1p	CL has Gritty texture.
A2p	CL has Gritty texture.
B21	MHC has Gritty texture.

B22 MHC has Gritty texture.

Observation Notes

Site Notes

Property owner, R & P Patterson. "Moreton Hill"

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Laboratory Test Results:

Depth	pH	1:5 EC	Exchangeable Cations Ca	Mg	K	Na	Exchangeable Acidity	CEC	ECEC	ESP
m		dS/m				Cmol (+)/kg				%
0 - 0.075	5.5C 6.3A	0.075A	14.28A	1.6	0.85	0.12	0.02D 0G 0.05A		16.9B	
0.175 - 0.25	5.5C 6.3A	0.081A	11.4A	1.53	0.45	0.14	0.01D 0G 0.06A		13.58B	
0.28 - 0.58	4.4C 4.7A	0.118A	4.75A	3.62	0.11	0.17	0.5285D 1.3G 2.6325A		11.2825B	
0.58 - 0.78	4.1C 4.2A	0.145A	2.94A	4.54	0.11	0.24	0.71D 2.45G 3.4625A		11.2925B	
0.78 - 0.98	4.2C 5A	0.263A	1.97A	10.94	0.3	4.16	0.8625D 2.93G 4.04A		21.41B	
0.98 - 1.2	4C 4.6A	0.523A	1.92A	10.92	0.29	6.53	0.99D 2.52G 3.66A		23.32B	

Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Particle Size Analysis GV	CS	FS	Silt
		Clay									
m	%	%	mg/kg	%	%	%	Mg/m3			%	
0 - 0.075		3.83B	174H 57I		0.35D						
0.175 - 0.25		3.09B	82H 29I		0.27D						
0.28 - 0.58		0.67B	1H 0.9I		0.06D						
0.58 - 0.78		0.27B	1H 0.5I		0.06D						
0.78 - 0.98		0.26B	1H 0.6I		0.03D						
0.98 - 1.2		0.2B	1H 0.7I		0.03D						

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

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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
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