Project Name: **SCEAM - Soil Condition Evaluation & Monitoring Project, Tasmania**
Project Code: **SCEAM** **Site ID:** **C15** **Observation ID:** **1**
Agency Name: **TAS Department of Primary Industries and Fisheries**

Site Information

Desc. By:	D.B. Kidd	**Locality:**	Trowutta, forest
Date Desc.:	21/04/05	**Elevation:**	175 metres
Map Ref.:	GPS S.A. Off	**Rainfall:**	1384
Northing/Long.:	5457543 AMG zone: 55	**Runoff:**	Moderately rapid
Easting/Lat.:	338046 Datum: GDA94	**Drainage:**	Moderately well drained

Geology

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

Landform

Rel/Slope Class: Gently undulating plains <9m 1-3% **Pattern Type:** No Data

Morph. Type:	Mid-slope	**Relief:**	No Data
Elem. Type:	Hillslope	**Slope Category:**	Very gently sloped
Slope:	8 %	**Aspect:**	No Data

Surface Soil Condition

Firm

Erosion

Soil Classification

Australian Soil Classification: **Mapping Unit:** N/A
Acidic Mesotrophic Brown Ferrosol Medium Non-gravelly Clayey Clayey Moderately deep **Principal Profile Form:** Gn4.31

ASC Confidence: **Great Soil Group:** N/A
Confidence level not specified

Site Disturbance

Vegetation

Surface Coarse Fragments

No surface coarse fragments

Profile Morphology

O 0 - 0.02 m Organic Layer; , 0-0% ; Light clay; Moderately moist; Non-plastic; Slightly sticky; Abrupt, Smooth change to -

Ap 0.02 - 0.22 m Dark yellowish brown (10YR4/6-Moist); , 0-0% ; Light clay; Moderate grade of structure, 10-20 mm, Subangular blocky; Moderate grade of structure, 2-5 mm, Granular; Rough-ped fabric; Medium, (5 - 10) mm crack; Common (1-5 per 100mm2) Fine (1-2mm) macropores, Moderately moist; Weak consistence; Moderately plastic; Normal plasticity; Slightly sticky; Field pH 5.6 (pH meter); Common, fine (1-2mm) roots; Common, fine (1-2mm) roots; Common, fine (1-2mm) roots; Clear, Smooth change to -

B1 0.22 - 0.56 m Yellowish brown (10YR5/6-Moist); , 0-0% ; Medium clay; Moderate grade of structure, 20-50 mm, Polyhedral; Moderate grade of structure, 10-20 mm, Subangular blocky; Rough-ped fabric; Moderately moist; Weak consistence; Moderately plastic; Normal plasticity; Slightly sticky; Very few (0 - 2 %), Ferruginous, Medium (2 -6 mm), Nodules; Field pH 5.3 (pH meter); Few, fine (1-2mm) roots; Diffuse, Smooth change to -

B2 0.56 - 1.02 m Strong brown (7.5YR5/6-Moist); Mottles, 5YR46, 2-10% , 0-5mm, Faint; Medium clay; Moderate grade of structure, 20-50 mm, Polyhedral; Moderate grade of structure, 10-20 mm, Polyhedral; Rough-ped fabric; Moderately moist; Firm consistence; Common cutans, 10-50% of ped faces or walls coated, distinct; Field pH 5.3 (pH meter); Few, very fine (0-1mm) roots; Diffuse, Smooth change to -

Morphological Notes

Observation Notes

Site Notes

Property owner Gunns.

Project Name: SCEAM - Soil Condition Evaluation & Monitoring Project, Tasmania
Project Code: SCEAM **Site ID:** C15 **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	4.4C 5.3A	0.056A	3.56A	0.6	0.32	0.16	0.3895D 0.57G 1.27175A		5.91175B	
0.2 - 0.275	4.5C 5.4A	0.052A	3.66A	0.59	0.32	0.15	0.2885D 0.54G 0.8845A		5.6045B	
0.35 - 0.45	4.9C 5.4A	0.05A	1.54A	0.43	0.43	0.04	0.12345D 0.61G 0.26525A		2.70525B	
0.6 - 0.8	5.1C 5.4A	0.048A	2.53A	0.6	0.2	0.07	0.14665D 0.25G 0.2155A		3.6155B	

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		4.77B	81H 0I		0.34D						
0.2 - 0.275		4.53B	38H 0I		0.28D						
0.35 - 0.45		0.95B	1H 1.1I		0.1D						
0.6 - 0.8		0.59B	1H 0.9I		0.07D						

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
4A1	pH of 1:5 soil/water suspension

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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