

Project Name: SCEAM - Soil Condition Evaluation & Monitoring Project, Tasmania  
 Project Code: SCEAM Site ID: C7 Observation ID: 1  
 Agency Name: TAS Department of Primary Industries and Water

**Site Information**

Desc. By: D.B. Kidd  
 Date Desc.: 03/08/05  
 Map Ref.:  
 Northing/Long.:  
 Easting/Lat.:  
 Locality: Penguin  
 Elevation: 200 metres  
 Rainfall: 1141  
 Runoff: Moderately rapid  
 Drainage: Well drained

**Geology**

Exposure Type: Soil pit  
 Geol. Ref.: Tertiary Basalt  
 Conf. Sub. is Parent. Mat.: certain  
 Substrate Material: Basalt

**Land Form**

Rel/Slope Class: Undulating hills 90-300m 3-10%  
 Morph. Type: Lower-slope  
 Elem. Type: Footslope  
 Slope: 3 %  
 Pattern Type: Low hills  
 Relief: No Data  
 Slope Category: Very gently sloped  
 Aspect: 20 degrees

**Surface Soil Condition (dry):** Firm

**Erosion:** No Data

**Soil Classification**

**Australian Soil Classification:**  
 Acidic Mesotrophic Red Ferrosol Medium Non-gravelly  
 Clayey Clayey Deep

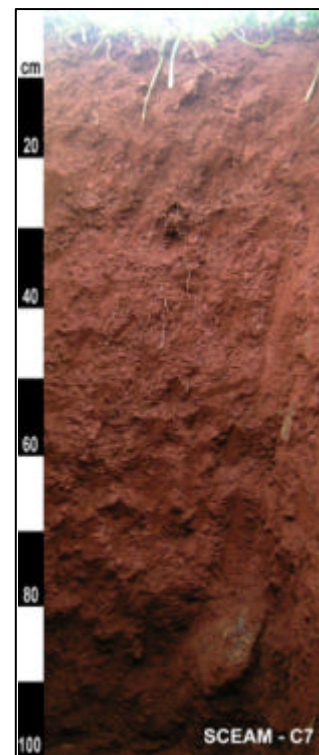
**ASC Confidence:**

Analytical data are incomplete but reasonable confidence.

**Site Disturbance:** Complete clearing. Pasture

**Vegetation:** Pasture

**Surface Coarse Fragments:** 0-2%, cobbly, 60-200mm



**Profile Morphology**

AP	0 - 0.19 m	Dark reddish brown (5YR3/3-Moist); Light clay; Moderate grade of structure, 10-20 mm, Subangular blocky; Moderate grade of structure, 2-5 mm, Granular; Rough-ped fabric; Fine, (0 - 5) mm crack; Common (1-5 per 100mm <sup>2</sup> ) Very fine (0.075-1mm) macropores, Moderately moist; Weak consistence; Moderately plastic; Subplastic; Slightly sticky; 0-2%, cobbly, 60-200mm, subrounded, dispersed, Basalt, coarse fragments; Many, very fine (0-1mm) roots; Gradual, Smooth change to -
AB	0.19 - 0.33 m	Dark reddish brown (5YR3/4-Moist); Clay loam (Heavy); Moderate grade of structure, 20-50 mm, Subangular blocky; Moderate grade of structure, 2-5 mm, Granular; Rough-ped fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm <sup>2</sup> ) Very fine (0.075-1mm) macropores, Moist; Weak consistence; Moderately plastic; Subplastic; Slightly sticky; 0-2%, cobbly, 60-200mm, subrounded, dispersed, Basalt, coarse fragments; Fewcutans, <10% of ped faces or walls coated, distinct; Cultivation pan, Weakly cemented, Discontinuous, Massive; Many, very fine (0-1mm) roots; Gradual, Smooth change to -
B21t	0.33 - 0.68 m	(/-Moist); Light clay; Strong grade of structure, 20-50 mm, Angular blocky; Moderate grade of structure, 10-20 mm, Subangular blocky; Rough-ped fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm <sup>2</sup> ) Very fine (0.075-1mm) macropores, Moist; Weak consistence; Slightly plastic; Subplastic; Slightly sticky; 0-2%, cobbly, 60-200mm, subrounded, dispersed, Basalt, coarse fragments; Common cutans, 10-50% of ped faces or walls coated, distinct; Common, very fine (0-1mm) roots; Gradual, Smooth change to -
B22t	0.68 - 1.05 m	Dark red (2.5YR3/6-Moist); Mottles, 0-2%, 0-5mm, Faint, 5YR4/6; Light clay; Moderate grade of structure, 20-50 mm, Subangular blocky; Moderate grade of structure, 5-10 mm, Subangular blocky; Rough-ped fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm <sup>2</sup> ) Very fine (0.075-1mm) macropores, Moist; Firm consistence; Slightly plastic; Subplastic; Slightly sticky; 0-2%, cobbly, 60-200mm, subrounded, dispersed, Basalt, coarse fragments; Common cutans, 10-50% of ped faces or walls coated, distinct; Few (2 - 10 %), Ferromanganiferous, Nodules, Fine (0 - 2 mm) segregations; Few, very fine (0-1mm) roots;

**Chemistry Data**

			Organic C%	pH (H2O)	pH (CaCl2)	EC (dS/m)	Exchangeable Bases (meq/100g)				ECEC (meq/100g)	ESP %	Olsen P (mg/kg)	Total N %	Colwell_K (mg/kg)
							Ca	Mg	Na	K					
0	to	75 mm	4.14	5.7	5.0	0.07	9.69	1.47	0.13	0.63	12.20	1.07	31.10	0.39	253
200	to	275 mm	4.83	5.8	5.1	0.07	10.28	1.89	0.15	0.69	13.41	1.12	32.30	0.42	261
350	to	650 mm	2.34	4.9	4.4	0.08	2.47	0.51	0.16	0.19	5.03	3.18	2.70	0.19	69
700	to	1000 mm	1.28	4.9	4.6	0.10	2.57	0.51	0.07	0.18	4.27	1.64	2.60	0.11	65