

Project Name: **SCEAM - Soil Condition Evaluation & Monitoring Project, Tasmania**
 Project Code: **SCEAM** Site ID: **S73** Observation ID: **1**
 Agency Name: **TAS Department of Primary Industries and Water**

Site Information

Desc. By: G. Scholtz
 Date Desc.: 09/05/07
 Map Ref.: Sheet No. : 4622 1:25000
 Northing/Long.:
 Easting/Lat.:

Locality: Warra
 Elevation: 200 metres
 Rainfall: 1500
 Runoff: Very slow
 Drainage: Moderately well drained

Geology

Exposure Type: Soil pit
 Geol. Ref.: No Data

Conf. Sub. is Parent. Mat.: certain
 Substrate Material: Dolerite

Land Form

Rel/Slope Class: Rolling mountains >300m
 10-32%
 Morph. Type: Mid-slope
 Elem. Type: Bench
 Slope: 2 %

Pattern Type: Mountains
 Relief: 300 metres
 Slope Category: Moderately inclined
 Aspect: 150 degrees

Surface Soil Condition (dry): Loose

Erosion: Stable, Minor (sheet) Partial, No mass movement (mass)

Soil Classification

Australian Soil Classification:
 Haplic Dystrophic Red Dermosol Medium Moderately gravelly Sandy Sandy Very deep
ASC Confidence: Reasonable confidence

Site Disturbance: No effective disturbance. Natural

Vegetation: Tall Strata - Cycad, 20.01-35m, Closed or dense. *Species includes - Eucalyptus obliqua

Surface Coarse Fragments: 90-100%, cobbly, 60-200mm, rounded, Dolerite; 90-100%, large Boulders, >2m, rounded, Dolerite

Profile Morphology

Ah	0 - 10 m	(/-Moist); (/-Dry); Fine sandy loam; Weak grade of structure, 2-5 mm, Granular; Common (1-5 per 100mm ²) Very fine (0.075-1mm) macropores, Common (1-5 per 100mm ²) Fine (1-2mm) macropores, Dry; Loose consistence; Non-plastic; Non-sticky; 20-50%, cobbly, 60-200mm, rounded, dispersed, Dolerite, coarse fragments; 20-50%, stony, 200-600mm, rounded, dispersed, Dolerite, coarse fragments; 20-50%, bouldery, 600mm-2m, subrounded, dispersed, Dolerite, coarse fragments;
B1	10 - 40 m	Yellowish red (5YR4/6-Moist); Yellowish red (5YR5/8-Dry); Clay loam; Strong grade of structure, 10-20 mm, Angular blocky; Moderate grade of structure, 2-5 mm, Angular blocky; Rough-ped fabric; Rough-ped fabric; Medium, (5 - 10) mm crack; Coarse, (10 - 20) mm crack; Many (>5 per 100mm ²) Very fine (0.075-1mm) macropores, Many (>5 per 100mm ²) Medium (2-5mm) macropores, Dry; Weak consistence; Slightly plastic; Normal plasticity; Slightly sticky; 20-50%, cobbly, 60-200mm, rounded, dispersed, Dolerite, coarse fragments; 20-50%, stony, 200-600mm, rounded, dispersed, Dolerite, coarse fragments; 20-50%, bouldery, 600mm-2m, subrounded, dispersed, Dolerite, coarse fragments; Abundant, very fine (0-1mm) roots; Abundant, fine (1-2mm) roots; Abundant, medium (2-5mm) roots, Wavy change to -
B21t	40 - 60 m	Red (10R4/8-Moist); Red (2.5YR4/8-Dry); Mottles, 10-20%, 5-15mm, Distinct, 7.5YR5/8; Medium clay; Strong grade of structure, 10-20 mm, Angular blocky; Strong grade of structure, 2-5 mm, Granular; Smooth-ped fabric; Earthy fabric; Medium, (5 - 10) mm crack; Coarse, (10 - 20) mm crack; Very coarse, (20 - 50) mm crack; Many (>5 per 0.01m ²) Fine (1-2mm) macropores, Many (>5 per 0.01m ²) Coarse (>5mm) macropores, Moderately moist; Firm consistence; Slightly plastic; Normal plasticity; Moderately sticky; 20-50%, cobbly, 60-200mm, rounded, dispersed, Dolerite, coarse fragments; 20-50%, stony, 200-600mm, rounded, dispersed, Dolerite, coarse fragments; 20-50%, bouldery, 600mm-2m, subrounded, dispersed, Dolerite, coarse fragments; Common cutans, 10-50% of ped faces or walls coated, distinct; Abundant, very fine (0-1mm) roots; Abundant, fine (1-2mm) roots; Abundant, medium (2-5mm) roots; Abundant, coarse (>5mm) roots; Gradual, Wavy change to -
B22t	60 - 120 m	Red (10R4/8-Moist); Red (2.5YR4/8-Dry); Mottles, 20-50%, 30-mm, Distinct, 7.5YR5/8; Medium clay; Strong grade of structure, 10-20 mm, Angular blocky; Angular blocky; Smooth-ped fabric; Smooth-ped fabric; Fine, (0 - 5) mm crack; Medium, (5 - 10) mm crack; Few (<1 per 100mm ²) Very fine (0.075-1mm) macropores, Moderately moist; Firm consistence; Moderately plastic; Normal plasticity; Moderately sticky; 50-90%, cobbly, 60-200mm, rounded, dispersed, Dolerite, coarse fragments; 50-90%, stony, 200-600mm, rounded, dispersed, Dolerite, coarse fragments; 50-90%, bouldery, 600mm-2m, subrounded, dispersed, Dolerite, coarse fragments; Common cutans, 10-50% of ped faces



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					
73	0	to 75 mm	5.46	5.2	4.5	0.17	12.65	4.54	0.45	1.07	19.17	2.35	4.50	0.51	419
	200	to 275 mm	3.89	5.5	4.5	0.08	4.49	2.66	0.38	0.64	8.58	4.43	3.60	0.17	258
	400	to 600 mm	1.45	6.1	5.1	0.04	1.50	2.16	0.26	0.63	4.76	5.46	7.10	0.09	228
	600	to 900 mm	0.70	6.0	5.1	0.05	1.01	1.90	0.41	0.27	4.04	10.15	3.20	0.06	101
	900	to 1200 mm	0.52	6.1	4.9	0.04	0.49	1.24	0.72	0.10	3.37	21.36	3.90	0.05	29