

Project Name: SCEAM - Soil Condition Evaluation & Monitoring Project, Tasmania
 Project Code: SCEAM Site ID: S6 Observation ID: 1
 Agency Name: TAS Department of Primary Industries and Water

Site Information

Desc. By: R. Moreton
 Date Desc.: 04/04/06
 Map Ref.:
 Northing/Long.:
 Easting/Lat.:

Locality: Kempton
 Elevation: 162 metres
 Rainfall: 528
 Runoff: Moderately rapid
 Drainage: Imperfectly drained

Geology

Exposure Type: Soil pit
 Geol. Ref.: Triassic Sandstone

Conf. Sub. is Parent. Mat.: Probable
 Substrate Material: Sandstone

Land Form

Rel/Slope Class: Rolling rises 9-30m 10-32%
 Morph. Type: Lower-slope
 Elem. Type: Hillslope
 Slope: 9 %

Pattern Type: Low hills
 Relief: No Data
 Slope Category: Gently inclined
 Aspect: 295 degrees

Surface Soil Condition (dry): Soft

Erosion: No Data

Soil Classification

Australian Soil Classification:
 Sodic Brown Brown Dermosol Medium Non-gravelly
 Clay-loamy Clayey Deep

ASC Confidence:
 All necessary analytical data are available.

Site Disturbance: Complete clearing.

Vegetation:

Surface Coarse Fragments: 2-10%, cobbly, 60-200mm



Profile Morphology

Ap	0 - 0.18 m	Very dark greyish brown (10YR3/2-Moist); Dark greyish brown (10YR4/2-Dry); Sandy clay loam; Moderate grade of structure, 5-10 mm, Subangular blocky; Moderate grade of structure, 20-50 mm, Subangular blocky; Earthy fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm ²) Very fine (0.075-1mm) macropores, Dry; Loose consistence; Non-plastic; Slightly sticky; 0-2%, medium gravelly, 6-20mm, subrounded, dispersed, coarse fragments; Common, fine (1-2mm) roots; Abrupt, Smooth change to -
A2	0.18 - 0.28 m	Very dark greyish brown (10YR3/2-Moist); Brown (10YR4/3-Dry); Mottles, 2-10%, 5-15mm, Distinct, 7.5YR3/1; Fine sandy clay loam; Massive grade of structure; Weak grade of structure, 2-5 mm, Polyhedral; Earthy fabric; Dry; Firm consistence; Non-plastic; Slightly sticky; 0-2%, coarse gravelly, 20-60mm, subangular, dispersed, coarse fragments; Few (2 - 10 %), Ferromanganiferous, Nodules, Fine (0 - 2 mm) segregations; Few, fine (1-2mm) roots; Abrupt, Wavy change to -
B1t	0.28 - 0.6 m	Very dark brown (10YR2/2-Moist); Mottles, 2-10%, 0-5mm, Distinct, 10YR3/4; Light medium clay; Strong grade of structure, 100-200 mm, Columnar; Strong grade of structure, 20-50 mm, Prismatic; Smooth-ped fabric; Medium, (5 - 10) mm crack; Moderately moist; Strong consistence; Very plastic; Normal plasticity; Very sticky; Common cutans, 10-50% of ped faces or walls coated, faint; Common, fine (1-2mm) roots; Gradual, Smooth change to -
B2t	0.6 - 0.85 m	Brown (7.5YR4/4-Moist); Mottles, 2-10%, 0-5mm, Distinct, 10YR3/2; Medium clay; Moderate grade of structure, 20-50 mm, Subangular blocky; Weak grade of structure, 10-20 mm, Subangular blocky; Smooth-ped fabric; Moderately moist; Very firm consistence; Very plastic; Normal plasticity; Very sticky; Few (2 - 10 %), Earthy, Veins, Coarse (6 - 20 mm) segregations; Clear, Smooth change to -
B3t	0.85 - 1.1 m	Olive brown (2.5Y4/4-Moist); Light medium clay; Massive grade of structure; Smooth-ped fabric; Moderately moist; Firm consistence; Very plastic; Normal plasticity; Very sticky; Many cutans, >50% of ped faces or walls coated, distinct; Few (2 - 10 %), Other, Nodules, Medium (2 - 6 mm) segregations;

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	1.83	5.6	4.9	0.20	6.13	4.38	0.38	0.59	11.64	3.26	15.00	0.16	240
200	to 275 mm	1.09	6.9	5.7	0.08	9.17	15.53	1.99	0.39	27.19	7.32	3.20	0.08	151
300	to 600 mm	0.97	8.0	7.1	0.20	6.45	25.87	3.79	0.45	36.60	10.36	1.90	0.09	171
600	to 850 mm	0.26	9.0	8.0	0.30	5.01	23.48	4.76	0.44	33.70	14.12	1.70	0.04	159
850	to 1100 mm	0.07	9.2	8.4	0.71	5.07	24.78	6.03	0.46	36.34	16.59	1.70	0.02	184