

Project Name: SCEAM - Soil Condition Evaluation & Monitoring Project, Tasmania
 Project Code: SCEAM Site ID: S12 Observation ID: 1
 Agency Name: TAS Department of Primary Industries and Water

Site Information

Desc. By: R. Moreton
 Date Desc.: 23/03/06
 Map Ref.:
 Northing/Long.:
 Easting/Lat.:
 Locality: Richmond
 Elevation: 54 metres
 Rainfall: 512
 Runoff: Rapid
 Drainage: Imperfectly drained

Geology

Exposure Type: Soil pit
 Geol. Ref.: Quaternary Alluvium
 Conf. Sub. is Parent. Mat.: Probable
 Substrate Material: Alluvium

Land Form

Rel/Slope Class: Undulating plains <9m 3-10%
 Morph. Type: Lower-slope
 Elem. Type: Hillslope
 Slope: 10 %
 Pattern Type: Hills
 Relief: No Data
 Slope Category: Gently inclined
 Aspect: 35 degrees

Surface Soil Condition (dry): Loose

Erosion: No Data

Soil Classification

Australian Soil Classification:
 Eutrophic Mottled-Subnatric Brown Sodosol Thick Slightly
 gravelly Clay-loamy Clayey Deep

ASC Confidence:

All necessary analytical data are available.

Site Disturbance: Complete clearing. Pasture/ crop

Vegetation:

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



Profile Morphology

Ap	0 - 0.18 m	Dark brown (10YR3/3-Moist); Brown (10YR5/3-Dry); Mottles, 2-10%, 0-5mm, Faint, 7.5YR4/6; Fine sandy clay loam; Moderate grade of structure, 100-200 mm, Polyhedral; Moderate grade of structure, 100-200 mm, Subangular blocky; Earthy fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm ²) Fine (1-2mm) macropores, Dry; Very firm consistence; Slightly plastic; Normal plasticity; Slightly sticky; 2-10%, cobbly, 60-200mm, subrounded, dispersed, Sandstone, coarse fragments; Few, very fine (0-1mm) roots; Clear, Smooth change to -
A21	0.18 - 0.27 m	Dark yellowish brown (10YR3/6-Moist); Dark yellowish brown (10YR3/4-Dry); Mottles, 0-2%, 0-5mm, Prominent, 5YR4/6; Sandy clay loam; Moderate grade of structure, 20-50 mm, Columnar; Earthy fabric; Medium, (5 - 10) mm crack; Few (<1 per 100mm ²) Medium (2-5mm) macropores, Dry; Very firm consistence; Slightly plastic; Normal plasticity; Slightly sticky; Clear, Smooth change to -
A22	0.27 - 0.45 m	Dark yellowish brown (10YR4/6-Moist); Dark yellowish brown (10YR4/4-Dry); Weak grade of structure, 10-20 mm, Angular blocky; Earthy fabric; Fine, (0 - 5) mm crack; Moderately moist; Firm consistence; Moderately plastic; Normal plasticity; Moderately sticky; Clear, Smooth change to -
B21t	0.45 - 0.6 m	Yellowish brown (10YR5/4-Moist); Dark yellowish brown (10YR4/4-Dry); Light clay; Massive grade of structure; Earthy fabric; Fine, (0 - 5) mm crack; Moderately moist; Firm consistence; Very plastic; Normal plasticity; Very sticky; Gradual, Irregular change to -
B22t	0.6 - 0.8 m	Light olive brown (2.5Y5/4-Moist); Olive brown (2.5Y4/4-Dry); Mottles, 10-20%, 5-15mm, Distinct, 5Y6/2; Light clay; Weak grade of structure, 20-50 mm, Angular blocky; Weak grade of structure, 5-10 mm, Angular blocky; Earthy fabric; Fine, (0 - 5) mm crack; Moderately moist; Firm consistence; Very plastic; Superplastic; Very sticky; Few cutans, <10% of ped faces or walls coated, distinct; Few (2 - 10 %), Other, Soft segregations, Very coarse (20 - 60 mm) segregations; Gradual, Smooth change to -
B3t	0.8 - 1.2 m	Dark yellowish brown (10YR4/6-Moist); Yellowish brown (10YR5/6-Dry); Mottles, 10-20%, 0-5mm, Distinct, 2.5Y6/4; Light clay; Massive grade of structure; Earthy fabric; Moderately moist; Very firm consistence; Moderately plastic; Normal plasticity; Very sticky; Few (2 - 10 %), Other, Veins, Very coarse (20 - 60 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 I (mg/kg)
					Ca	Mg	Na	K					
S12 0 to 75 mm	2.11	6.0	5.3	0.07	6.77	7.40	0.34	0.35	15.12	2.25	38.60	0.16	159
200 to 275 mm	1.26	7.2	6.7	0.11	7.65	14.01	1.04	0.29	23.03	4.52	5.90	0.10	127
100 to 200 mm	0.51	8.0	7.1	0.31	3.55	17.80	2.93	0.25	24.55	11.93	2.70	0.09	109
340 to 650 mm	0.44	8.7	7.8	0.47	3.87	23.80	4.78	0.38	32.85	14.55	1.10	0.05	153
650 to 800 mm	0.17	8.7	8.1	0.78	2.57	20.20	5.37	0.46	28.62	18.76	0.40	0.02	216
800 to 1200 mm	0.09	8.6	7.9	0.74	1.58	15.66	5.08	0.48	22.82	22.26	0.90	0.04	259