## Project Name: SCEAM - Soil Condition Evaluation \& Monitoring Project, Tasmania

Project Code:
SCEAM Site ID: S72 Observation ID: 1
Agency Name: TAS Department of Primary Industries and Water

## Site Information

| Desc. By: | G. Scholtz |  |
| :--- | :--- | :--- |
| Date Desc.: | 08/05/07 |  |
| Map Ref.: | Sheet No. : SK55-8 | 1:250000 |
| Northing/Long.: |  |  |
| Easting/Lat.: |  |  |
| Geology |  |  |
| ExposureType: | Soil pit |  |
| Geol. Ref.: | Jurassic Dolerite |  |
| Land Form |  |  |
| Rel/Slope Class: | Rolling hills $90-300 \mathrm{~m}$ | $10-32 \%$ |
| Morph. Type: | Mid-slope |  |
| Elem. Type: | Hillslope |  |
| Slope: | $15 \%$ |  |


| Locality: | Weld Valley |
| :--- | :--- |
| Elevation: | 200 metres |
| Rainfall: | 1500 |
| Runoff: | Rapid |
| Drainage: | Well drained |

Geology
Expol:

Land Form
Rel/Slope Class: Rolling hills $90-300 \mathrm{~m} 10-32 \%$
Mid-slope
Slope: $\quad 15 \%$
Surface Soil Condition (dry): Loose
Erosion: Partial, Minor (sheet) Partial, Present (mass)

## Soil Classification

Australian Soil Classification:
Haplic Dystrophic Red Dermosol Medium Slightly gravelly
Clay-loamy Clayey Very deep

## ASC Confidence:



Analytical data are incomplete but 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: $10-20 \%$, cobbly, $60-200 \mathrm{~mm}$, rounded, Dolerite

## Profile Morphology

Organic Layer; Very dark brown (10YR2/2-Moist); Very dark grey (10YR3/1-Dry); Loam (Fibric); Many (>5 per 0.01m2) Coarse ( $>5 \mathrm{~mm}$ ) macropores, Dry; Loose consistence; Non-plastic; Non-sticky; 2-10\%, coarse gravelly, 20-60mm, rounded, dispersed, Dolerite, coarse fragments; 2-10\%, coarse gravelly, 20-60mm, rounded, dispersed, Dolerite, coarse fragments; $2-10 \%$, cobbly, $60-200 \mathrm{~mm}$, rounded, dispersed, Dolerite, coarse fragments; Abundant, very fine ( $0-1 \mathrm{~mm}$ ) roots; Abundant, fine ( $1-2 \mathrm{~mm}$ ) roots; Abundant, medium $(2-5 \mathrm{~mm})$ roots; Abundant, coarse ( $>5 \mathrm{~mm}$ ) roots; Clear, Wavy change to -

B1 5-15 m Strong brown (7.5YR4/6-Moist); Strong brown (7.5YR5/8-Dry); Clay loam; Moderate grade of structure, 10-20 mm, Angular blocky; Rough-ped fabric; Coarse, (10-20) mm crack; Common ( $1-5$ per 100mm2) Medium ( $2-5 \mathrm{~mm}$ ) macropores, Many ( $>5$ per 100mm2) Coarse ( $>5 \mathrm{~mm}$ ) macropores, Dry; Weak consistence; Slightly plastic; Normal plasticity; Slightly sticky; 2-10\%, coarse gravelly, 20-60mm, rounded, dispersed, Dolerite, coarse fragments; 2-10\%, cobbly, 60-200mm, rounded, dispersed, Dolerite, coarse fragments; 2-10\%, stony, $200-600 \mathrm{~mm}$, rounded, dispersed, Dolerite, coarse fragments; Abundant, very fine ( $0-1 \mathrm{~mm}$ ) roots; Abundant, fine (1-2mm) roots; Abundant, medium (2-5mm) roots; Abundant, coarse ( $>5 \mathrm{~mm}$ ) roots; Gradual, Wavy change to -

B21 15-60 m Yellowish red (5YR4/6-Moist); Yellowish red (5YR5/8-Dry); Medium clay; Strong grade of structure, 20-50 mm, Angular blocky; Rough-ped fabric; Coarse, (10-20) mm crack; Very coarse, (20-50) mm crack; Common (1-5 per 100mm2) Medium ( $2-5 \mathrm{~mm}$ ) macropores, Common (1-5 per 0.01m2) Coarse ( $>5 \mathrm{~mm}$ ) macropores, Dry; Weak consistence; Moderately plastic; Normal plasticity; Moderately sticky; Gradual, Wavy change to -

B22 60-80 m Red (2.5YR4/6-Moist); Yellowish red (5YR5/8-Dry); Medium clay; Strong grade of structure, $10-20 \mathrm{~mm}$, Angular blocky; Weak grade of structure, 5-10 mm, Angular blocky; Smooth-ped fabric; Rough-ped fabric; Coarse, (10-20) mm crack; Coarse, (10-20) mm crack; Common ( $1-5$ per 0.01 m 2 ) Medium ( $2-5 \mathrm{~mm}$ ) macropores, Many ( $>5$ per 0.01 m 2 ) Coarse ( $>5 \mathrm{~mm}$ ) macropores, Moderately moist; Firm consistence; Very plastic; Normal plasticity; Very sticky; 2-10\%, coarse gravelly, 20-60mm, rounded, dispersed, Dolerite, coarse fragments; $2-10 \%$, cobbly, $60-200 \mathrm{~mm}$, rounded, dispersed, Dolerite, coarse fragments; 2-10\%, stony, $200-600 \mathrm{~mm}$, rounded, dispersed, Dolerite, coarse fragments; Abundant, very fine ( $0-1 \mathrm{~mm}$ ) roots; Abundant, fine (1-2mm) roots; Abundant, medium ( $2-5 \mathrm{~mm}$ ) roots;

## Chemistry Data

|  |  |  | Organic C\% | $\begin{gathered} \mathrm{pH} \\ (\mathrm{H} 20) \end{gathered}$ | $\begin{gathered} \mathrm{pH} \\ (\mathrm{CaCl} 2) \end{gathered}$ | $\begin{gathered} \mathrm{EC} \\ (\mathrm{dS} / \mathrm{m}) \end{gathered}$ | Exchangeable Bases (meq/100g) |  |  |  | $\begin{gathered} \text { ECEC } \\ (\mathrm{meq} / 100 \mathrm{~g}) \end{gathered}$ | $\begin{gathered} \text { ESP } \\ \% \end{gathered}$ | Olsen P Total N ( $\mathrm{mg} / \mathrm{kg}$ ) \% |  | Colwell_K (mg/kg) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Ca |  |  |  | Mg | Na | K |  |  |  |  |  |
| ${ }^{72} \mathbf{0}$ | to | 75 mm |  | 5.64 | 5.5 | 4.9 | 0.17 | 12.26 | 3.09 | 0.31 | 1.02 | 16.93 | 1.83 | 16.60 | 0.35 | 412 |
| 150 | to | 225 mm | 2.31 | 5.5 | 4.7 | 0.06 | 2.99 | 1.41 | 0.19 | 0.69 | 5.68 | 3.35 | 16.50 | 0.14 | 254 |
| 250 | to | 500 mm | 1.29 | 5.1 | 4.3 | 0.02 | 1.80 | 1.16 | 0.10 | 0.15 | 4.52 | 2.21 | 4.30 | 0.09 | 64 |
| 600 | to | 800 mm | 1.35 | 5.2 | 4.3 | 0.03 | 2.01 | 1.75 | 0.13 | 0.26 | 5.17 | 2.51 | 4.00 | 0.09 | 89 |
| 900 | to | 1200 mm | 1.06 | 5.5 | 4.6 | 0.02 | 1.93 | 2.29 | 0.15 | 0.30 | 4.88 | 3.07 | 4.40 | 0.08 | 113 |

