**DER Project Name:** 

**Project Code: DER** Site ID: H271 Observation ID: 1

**Agency Name: CSIRO Division of Soils (TAS)** 

**Site Information** 

Site T4 of national soil fertility project on property "Penna":217M N from S fence + 9M E from W fence: Desc. By: K.D. Nicholls Locality:

Date Desc.: Elevation: 26/04/67 No Data Map Ref.: Northing/Long.: Rainfall: No Data 147.4733333 Runoff: Rapid Easting/Lat.: -42.77666667 Drainage: Poorly drained

Geology

ExposureType: Undisturbed soil core Conf. Sub. is Parent. Mat.: No Data

Geol. Ref.: No Data **Substrate Material:** Unconsolidated material (unidentified)

**Land Form** 

Rel/Slope Class: No Data Pattern Type: Alluvial fan Morph. Type: No Data Relief: No Data Elem. Type: Slope Category: Fan No Data 0 % Aspect: No Data Slope:

Surface Soil Condition (dry):

**Erosion:** 

**Soil Classification** 

**Australian Soil Classification: Mapping Unit:** N/A Bleached-Vertic Mesotrophic Brown Chromosol Dd3.43 Principal Profile Form: Solodized solonetz

**ASC Confidence: Great Soil Group:** 

No analytical data and little or no knowledge of this soil.

Site Disturbance: Cultivation. Rainfed

Vegetation:

Surface Coarse Fragments: No surface coarse fragments

| Profile Mor | phology |
|-------------|---------|
|-------------|---------|

| FIOIIIE | ivioi priology |  |
|---------|----------------|--|
| Ар      | 0 - 0.05 m     | Very dark brown (10YR2/2-Moist); Dark grey (10YR4/1-Dry); ; Sandy loam; Massive grade of structure; Moderately moist; Very weak consistence; Non-plastic; Diffuse change to -          |
| Ар      | 0.05 - 0.1 m   | Very dark brown (10YR2/3-Moist); Dark greyish brown (10YR4/2-Dry); ; Sandy loam; Massive grade of structure; Moderately moist; Very weak consistence; Non-plastic; Diffuse change to - |
| Ар      | 0.1 - 0.15 m   | Very dark brown (10YR2/3-Moist); Greyish brown (10YR5/2-Dry); ; Sandy loam; Massive grade of structure; Moderately moist; Very weak consistence; Non-plastic; Sharp change to -        |
| A2      | 0.15 - 0.2 m   | Very dark greyish brown (10YR3/2-Moist); Grey (10YR6/1-Dry); ; Loamy sand; Massive grade of structure; Moderately moist; Strong consistence; Non-plastic; Diffuse change to -          |
| A2      | 0.2 - 0.25 m   | Dark greyish brown (10YR4/2-Moist); Light grey (10YR7/1-Dry); ; Sand; Single grain grade of structure; Moderately moist; Strong consistence; Non-plastic; Sharp, Tongued change to -   |
| B1      | 0.25 - 0.3 m   | Dark brown (7.5YR3/2-Moist); Dark greyish brown (10YR4/2-Dry); , 10YR44; Sandy medium clay; Fine, (0 - 5) mm crack; Moderately moist; Non-plastic; Diffuse change to -                 |
| B1      | 0.3 - 0.4 m    | Dark brown (7.5YR3/2-Moist); , 7.5YR34; Light clay; Fine, (0 - 5) mm crack; Moderately moist; Very firm consistence; Moderately plastic; Normal plasticity; Diffuse change to -        |
| B1      | 0.4 - 0.5 m    | Brown (7.5YR4/2-Moist); , 7.5YR44; Light clay; Moderately moist; Very firm consistence; Moderately plastic; Normal plasticity; Diffuse change to -                                     |
| B1      | 0.5 - 0.6 m    | Brown (7.5YR4/2-Moist); , 7.5YR44; Light clay; Moderately moist; Very firm consistence; Moderately plastic; Normal plasticity; Diffuse change to -                                     |
| B2      | 0.6 - 0.7 m    | Brown (10YR4/3-Moist); , 10YR44; Medium clay; Moist; Very plastic; Normal plasticity; Diffuse change to -  |
| B2      | 0.7 - 0.8 m    | Brown (10YR4/3-Moist); , 10YR44; Medium clay; Moist; Very plastic; Normal plasticity; Diffuse change to -  |
| B2      | 0.8 - 0.9 m    | Brown (10YR4/3-Moist); , 7.5YR44; Medium clay; Moist; Very plastic; Normal plasticity; Diffuse change to -   |
| ВС      | 0.9 - 1 m      | Dark greyish brown (2.5Y4/3-Moist); , 7.5YR44; Medium clay; Moist; Very plastic; Normal plasticity; Very few (0 - 2 %), Calcareous, , Soft segregations; Diffuse change to -           |
| ВС      | 0.9 - 1 m      | Dark greyish brown (2.5Y4/3-Moist); , 7.5YR44; Medium clay; Moist; Very plastic; Normal  |

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|---------|-------------|--|
| ВС      | 1 - 1.2 m   | Dark greyish brown (2.5Y4/3-Moist); ; Medium clay; Moist; Very plastic; Normal plasticity; Very few (0 - 2 %), Calcareous, , Soft segregations; Diffuse change to -  |
| ВС      | 1.2 - 1.4 m | Dark greyish brown (2.5Y4/3-Moist); ; Medium clay; Moist; Very plastic; Normal plasticity; Very few (0 - 2 %), Calcareous, , Soft segregations; Diffuse change to -  |
| ВС      | 1.4 - 1.6 m | Dark greyish brown (2.5Y4/3-Moist); ; Medium clay; Moist; Very plastic; Normal plasticity; Very few (0 - 2 %), Calcareous, , Soft segregations; Diffuse change to -  |
| BC      | 1.6 - 1.8 m | Dark greyish brown (2.5Y4/3-Moist); , N20; , 2.5Y82; Medium clay; Moist; Very plastic; Normal plasticity; Very few (0 - 2 %), Unidentified, , ; Common (10 - 20 %), Calcareous, , Soft segregations; Diffuse change to - |
| ВС      | 1.8 - 2 m   | Dark greyish brown (2.5Y4/3-Moist); , N20; Medium clay; Moist; Very firm consistence; Moderately plastic; Normal plasticity; Very few (0 - 2 %), Unidentified, , ; Diffuse change to -                                   |

## **Morphological Notes**

## **Observation Notes**

100-140CM FEW SLICKENSIDES:160-180CM PROMINENT SLICKENSIDES:90-180CM CARBONATE CONCRETIONS ALSO:SURFACE <10% SA GV

## Site Notes

**HOBART** 

Project Name: DER
Project Code: DER Site ID: H271
Agency Name: CSIRO Division of Soils (TAS) Observation ID: 1

| Laboratory Test Results |
|-------------------------|
|-------------------------|

| Depth  | рН   | 1:5 EC<br>Ca  |             | nangeable<br>//g      | Cations<br>K | Ex<br>Na              | changeable<br>Acidity | CEC            | ECEC  | ESP                   |
|--|--|---|-------------|-----------------------|--------------|-----------------------|-----------------------|----------------|-------|-----------------------|
| m  |  | dS/m  | a 1         | ng                    | K            | Cmol (+)/k            |                       |                |       | %                     |
| 0 - 0.05<br>0.05 - 0.1<br>0.1 - 0.15<br>0.15 - 0.2<br>0.2 - 0.25<br>0.25 - 0.3<br>0.3 - 0.4<br>0.4 - 0.5<br>0.5 - 0.6<br>0.6 - 0.7<br>0.7 - 0.8<br>0.8 - 0.9<br>0.9 - 1<br>1 - 1.2<br>1.2 - 1.4<br>1.4 - 1.6<br>1.6 - 1.8<br>1.8 - 2 | 6.2A<br>5A<br>5.3A<br>6.5A<br>6.5A<br>7.5A<br>8.1A<br>8.6A<br>8.7A<br>8.8A<br>9.1A<br>9A<br>8.9A<br>9.2A | 0.268A<br>0.321A<br>0.125A<br>0.051A<br>0.057A<br>0.134A<br>0.211A<br>0.277A<br>0.378A<br>0.554A<br>0.702A<br>0.911A<br>1.08A<br>0.997A<br>0.839A<br>0.804A<br>0.935A |             |                       |              |                       |                       |                |       |                       |
|  |  |   |             |                       |              |                       |                       |                |       |                       |
| Depth  | CaCO3  | Organic<br>C  | Avail.<br>P | Total<br>P            | Total<br>N   | Total<br>K            | Bulk<br>Density       | Partic<br>GV C | S FS  | Analysis<br>Silt Clay |
| m<br>0 005   | %  | %   | mg/kg       | %                     | %            | %                     | Mg/m3                 |                | %     |                       |
| 0 - 0.05<br>0.05 - 0.1<br>0.1 - 0.15<br>0.15 - 0.2<br>0.2 - 0.25<br>0.25 - 0.3<br>0.3 - 0.4<br>0.4 - 0.5<br>0.5 - 0.6<br>0.6 - 0.7<br>0.7 - 0.8<br>0.8 - 0.9<br>0.9 - 1<br>1 - 1.2<br>1.2 - 1.4<br>1.4 - 1.6<br>1.6 - 1.8<br>1.8 - 2 |  |   |             |                       |              |                       |                       |                |       |                       |
| Depth  | COLE   | Sat. 0  |             | imetric/Vo<br>0.1 Bar |              | /ater Conter<br>1 Bar |                       | Bar            | K sat | K unsat               |
| m  |  | Jai. 0  | Dai         |                       | g - m3/m3    |                       | 5 Dai 13              |                | nm/h  | mm/h                  |
| 0 - 0.05<br>0.05 - 0.1<br>0.1 - 0.15<br>0.15 - 0.2<br>0.2 - 0.25   |  |   |             |                       |              |                       |                       |                |       |                       |

Project Name: Project Code: Agency Name: DER

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0.25 - 0.3 0.3 - 0.4 0.4 - 0.5 0.5 - 0.6 0.6 - 0.7 0.7 - 0.8 0.8 - 0.9 0.9 - 1 1 - 1.2 1.2 - 1.4 1.4 - 1.6 1.6 - 1.8 1.8 - 2

Project Name: Project Code: Agency Name: DER

Observation ID: 1 DER Site ID: H271

**CSIRO** Division of Soils (TAS)

## **Laboratory Analyses Completed for this profile**

Air-dry moisture content EC of 1:5 soil/water extract 2A1 3A1 4A1 5A2

pH of 1:5 soil/water suspension Chloride - 1:5 soil/water extract, automated colour