| Project Name<br>Project Code:<br>Agency Name                                                                                                                                                                                                                                                                                                                                              | FLI Site ID:                                                                                                                                                                                                                       |                                                                                                                                                                                                       | bservation ID:                                                   | 1                                                         |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------------------------|--|--|--|
| Site Informati<br>Desc. By:<br>Date Desc.:<br>Map Ref.:<br>Northing/Long.<br>Easting/Lat.:                                                                                                                                                                                                                                                                                                | K.D. Nicholls<br>23/04/53<br>Sheet No. : 8517 1:100000                                                                                                                                                                             | Locality:<br>Elevation:<br>Rainfall:<br>Runoff:<br>Drainage:                                                                                                                                          | 4.8km NNW of W<br>76 metres<br>740<br>Rapid<br>Moderately well o | /hitemark 4.8km SE of Blue Rocks:<br>drained              |  |  |  |
| <u>Geology</u><br>ExposureType:<br>Geol. Ref.:                                                                                                                                                                                                                                                                                                                                            | Soil pit<br>No Data                                                                                                                                                                                                                | Conf. Sub. is Pare<br>Substrate Materia                                                                                                                                                               |                                                                  |                                                           |  |  |  |
| Land Form<br>Rel/Slope Class<br>Morph. Type:<br>Elem. Type:<br>Slope:<br>Surface Seil (                                                                                                                                                                                                                                                                                                   | No Data<br>Hillslope<br>0 %                                                                                                                                                                                                        | Pattern Type:<br>Relief:<br>Slope Category:<br>Aspect:                                                                                                                                                | Hills<br>No Data<br>Gently inclined<br>No Data                   |                                                           |  |  |  |
| Erosion:                                                                                                                                                                                                                                                                                                                                                                                  | Condition (dry):                                                                                                                                                                                                                   |                                                                                                                                                                                                       |                                                                  |                                                           |  |  |  |
| Soil Classification Mapping Unit: N/A   Australian Soil Classification: Principal Profile Form: Dy5.62   Eutrophic Mottled-Subnatric Yellow Sodosol Great Soil Group: Yellow podzolic soil   ASC Confidence: Great Soil Group: Yellow podzolic soil   All necessary analytical data are available. Site Disturbance: Complete clearing. Pasture, native or improved, but never cultivated |                                                                                                                                                                                                                                    |                                                                                                                                                                                                       |                                                                  |                                                           |  |  |  |
| Vegetation:<br>Surface Coars                                                                                                                                                                                                                                                                                                                                                              | Low Strata - Fern, 0.26-0.5m,<br>se Fragments:                                                                                                                                                                                     | Mid-dense. *Species                                                                                                                                                                                   | includes - Pteridiun                                             | n esculentum                                              |  |  |  |
| Profile Morph<br>A1 0 - 0.1                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                    |                                                                                                                                                                                                       |                                                                  | e grade of structure; Moist;<br>Quartz, coarse fragments; |  |  |  |
| A1/A2 0.1 - 0.                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                    | Light brown (7.5YR6/4-Moist); , 10YR42; Coarse sand; Massive grade of structure; Moist; Loose consistence; 2-10%, fine gravelly, 2-6mm, subangular, Quartz, coarse fragments; ManyDiffuse change to - |                                                                  |                                                           |  |  |  |
| A2 0.3 - 0.                                                                                                                                                                                                                                                                                                                                                                               | 57 m Light brown (7.5YR6/4-Mc<br>Loose consistence; 2-10%                                                                                                                                                                          | Light brown (7.5YR6/4-Moist); ; Coarse sand; Massive grade of structure; Moderately moist;<br>Loose consistence; 2-10%, fine gravelly, 2-6mm, stratified, Gravel, coarse fragments; Common            |                                                                  |                                                           |  |  |  |
| B 0.57 - 0                                                                                                                                                                                                                                                                                                                                                                                | B 0.57 - 0.62 m Light grey (2.5Y7/2-Moist); ; Clayey sand; Massive grade of structure; Moist; Very weak consistence; 20-50%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments; , Weakly cemented; CommonDiffuse change to - |                                                                                                                                                                                                       |                                                                  |                                                           |  |  |  |
| 0.62 - 0                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                    | Light grey (2.5Y7/2-Moist); , 10YR56; , 10YR81; Heavy clay; Massive grade of structure; Very weak consistence; 20-50%, fine gravelly, 2-6mm, Gravel, coarse fragments; Common                         |                                                                  |                                                           |  |  |  |
| 0.91 - 1                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                    | Yellowish brown (10YR5/6-Moist); , 2.5Y72; , 10YR81; Heavy clay; Massive grade of structure;<br>Very weak consistence; 20-50%, fine gravelly, 2-6mm, Gravel, coarse fragments; Few                    |                                                                  |                                                           |  |  |  |
| C 1.12 - 7                                                                                                                                                                                                                                                                                                                                                                                | 1.5 m Light grey (2.5Y7/2-Moist)<br>Very weak consistence; 20                                                                                                                                                                      |                                                                                                                                                                                                       |                                                                  | sive grade of structure; Moist;<br>rse fragments; Few     |  |  |  |
| C 2.13 - 2                                                                                                                                                                                                                                                                                                                                                                                | 2.31 m Yellowish brown (10YR5/6<br>gravelly, 2-6mm, Gravel, c                                                                                                                                                                      |                                                                                                                                                                                                       | d; Moist; Loose con                                              | sistence; 20-50%, fine                                    |  |  |  |
| Morphologica                                                                                                                                                                                                                                                                                                                                                                              | I Notes                                                                                                                                                                                                                            |                                                                                                                                                                                                       |                                                                  |                                                           |  |  |  |

Observation Notes 62-91CM MUCH (<50%) MICA FLAKES:112-213CM VERY ABUNDANT (<90%) MICA

Site Notes

METTA

| Project Name: | FLI                   |             |     |                        |   |
|---------------|-----------------------|-------------|-----|------------------------|---|
| Project Code: | FLI                   | Site ID:    | H65 | <b>Observation ID:</b> | 1 |
| Agency Name:  | <b>CSIRO</b> Division | of Soils (T | AS) |                        |   |

## Laboratory Test Results:

| Depth                                     | рН                   | 1:5 EC            |                      | hangeable<br>Ng | Cations<br>K    | Na            | Exchangeable<br>Acidity | CEC               | ECEC                                   | ESP |
|-------------------------------------------|----------------------|-------------------|----------------------|-----------------|-----------------|---------------|-------------------------|-------------------|----------------------------------------|-----|
| m                                         |                      | dS/m              | Ca I                 | vig             | ĸ               | Cmol (        |                         |                   |                                        | %   |
| 0 - 0.1<br>0.1 - 0.3<br>0.3 - 0.57        | 7.1A<br>5.7A<br>5.9A |                   | 4.4H                 | 1.3             | 0.26            | 0.08          | 1E                      | 4C                | 7B                                     |     |
| 0.57 - 0.62<br>0.62 - 0.89<br>0.91 - 1.07 | 7.2A<br>7.6A<br>6.5A |                   | 6.9H                 | 5.2             | 1.01            | 1.09          | 2.1E                    |                   | 16.3B                                  |     |
| 1.12 - 1.5<br>2.13 - 2.31                 | 7.3A<br>5.5A         |                   | 1.85H                | 3.7             | 0.3             | 1.98          | 1.4E                    |                   | 9.2B<br>1.8A                           |     |
| Depth<br>m                                | CaCO3<br>%           | Organic<br>C<br>% | Avail.<br>P<br>mg/kg | Total<br>P<br>% | Total<br>N<br>% | Tot<br>K<br>% | Density                 | Particle<br>GV CS | Size Analy<br>FS Sil <sup>i</sup><br>% |     |
|                                           |                      |                   |                      |                 |                 |               |                         |                   |                                        |     |

| 0 - 0.1<br>0.1 - 0.3<br>0.3 - 0.57        | 1.04D<br>0.41D<br>0.13D | 0.066A | 9  | 73B | 21 | 2 | 3  |
|-------------------------------------------|-------------------------|--------|----|-----|----|---|----|
| 0.57 - 0.62<br>0.62 - 0.89<br>0.91 - 1.07 | 0.102                   | 0.002D | 24 | 42B | 19 | 9 | 31 |
| 1.12 - 1.5<br>2.13 - 2.31                 |                         |        | 31 | 63B | 22 | 6 | 10 |

| Depth | COLE | Gravimetric/Volumetric Water Contents |          |         |         |       | K sat | K unsat |  |  |
|-------|------|---------------------------------------|----------|---------|---------|-------|-------|---------|--|--|
|       |      | Sat.                                  | 0.05 Bar | 0.1 Bar | 0.5 Bar | 1 Bar | 5 Bar | 15 Bar  |  |  |
| m     |      | g/g - m3/m3                           |          |         | mm/h    | mm/h  |       |         |  |  |

0 - 0.1 0.1 - 0.3 0.3 - 0.57 0.57 - 0.62 0.62 - 0.89 0.91 - 1.07 1.12 - 1.5 2.13 - 2.31

| Project Name: | FLI     |                     |      |
|---------------|---------|---------------------|------|
| Project Code: | FLI     | Site ID:            | H65  |
| Agency Name:  | CSIRO D | ivision of Soils (T | 'AS) |

## Laboratory Analyses Completed for this profile

| 15_BASES<br>15D1_CEC | Sum of Ex. cations + Ex. acidity - Sum of basic exch. cations<br>CEC - 1M ammonium acetate at pH 7.0, pretreatment for soluble salts; manual leach                                     |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 15E1_CA              | Exchangeable bases (Ca2+,Mg2+,Na+,K+) by compulsive exchange, no pretreatment for soluble                                                                                              |
| 15E1_K               | Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts                                                                                              |
| 15E1_MG              | Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts<br>Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts |
| 15E1_NA<br>15G1 H    | Hydrogen Cation - meg per 100g of soil - 1M KCl Exch. Acidity By titration to pH 8.0                                                                                                   |
| 15J H                | Sum of Ex. cations + Ex. acidity - Sum of basic exch. cations and exch. (Hydrogen)                                                                                                     |
| 2_LOI                | Loss on Ignition (%)                                                                                                                                                                   |
| 2A1                  | Air-dry moisture content                                                                                                                                                               |
| 4A1                  | pH of 1:5 soil/water suspension                                                                                                                                                        |
| 5A2                  | Chloride - 1:5 soil/water extract, automated colour                                                                                                                                    |
| 6A1_UC               | Organic carbon (%) - Uncorrected Walkley and Black method                                                                                                                              |
| 7A2                  | Total nitrogen - semimicro Kjeldahl, automated colour                                                                                                                                  |
| 9A_HCL               | Total element - P(%) - By boiling HCl                                                                                                                                                  |
| P10_GRAV             | Gravel (%)                                                                                                                                                                             |
| P10A1_C              | Clay (%) - Pipette                                                                                                                                                                     |
| P10A1_CS             | Coarse sand (%) - Pipette                                                                                                                                                              |
| P10A1_FS             | Fine sand (%) - Pipette                                                                                                                                                                |
| P10A1_Z              | Silt (%) - Pipette                                                                                                                                                                     |

Observation ID: 1