

**Project Name:** Jerramungup soils inventory (=JER LRS)  
**Project Code:** JSI **Site ID:** 0366 **Observation ID:** 1  
**Agency Name:** Agriculture Western Australia

**Site Information**

|   |  |
|---|--|
| <b>Desc. By:</b> Tim Overheu                | <b>Locality:</b>                         |
| <b>Date Desc.:</b> 13/10/93                 | <b>Elevation:</b> 80 metres              |
| <b>Map Ref.:</b>                            | <b>Rainfall:</b> No Data                 |
| <b>Northing/Long.:</b> 6185000 AMG zone: 50 | <b>Runoff:</b> No Data                   |
| <b>Easting/Lat.:</b> 650000 Datum: AGD84    | <b>Drainage:</b> Moderately well drained |

**Geology**

|   |  |
|---|--|
| <b>ExposureType:</b> Existing vertical exposure | <b>Conf. Sub. is Parent. Mat.:</b> No Data |
| <b>Geol. Ref.:</b> No Data                      | <b>Substrate Material:</b> No Data         |

**Land Form**

|   |                                 |
|---|---------------------------------|
| <b>Rel/Slope Class:</b> Level plain <9m <1% | <b>Pattern Type:</b> Sand plain |
| <b>Morph. Type:</b> Flat                    | <b>Relief:</b> No Data          |
| <b>Elem. Type:</b> Plain                    | <b>Slope Category:</b> No Data  |
| <b>Slope:</b> 0 %                           | <b>Aspect:</b> No Data          |

**Surface Soil Condition** Loose

**Erosion:** (wind); (scald) (sheet) (rill) (mass) (gully)  
(stbank) (tunnel)

**Soil Classification**

|   |                                       |
|---|---------------------------------------|
| <b>Australian Soil Classification:</b> N/A            | <b>Mapping Unit:</b> N/A              |
| <b>ASC Confidence:</b> Confidence level not specified | <b>Principal Profile Form:</b> Dy5.82 |
|   | <b>Great Soil Group:</b> N/A          |

**Site** Limited clearing, for example selective logging

**Vegetation:**

**Surface Coarse** No surface coarse fragments; No surface coarse fragments

**Profile**

|      |              |  |
|------|--------------|--|
| A1   | 0 - 0.15 m   | Grey (10YR5/1-Moist); , 0-0% ; Loamy sand; Single grain grade of structure; Sandy (grains prominent)   |
|      |              | fabric; Dry; Loose consistence; Very few (0 - 2 %), Ferruginous, Fine (0 - 2 mm), Concretions; Water repellent; Field pH 6.9 (pH meter); Clear change to -   |
| A21  | 0.15 - 0.6 m | White (10YR8/2-Moist); Mottles, 2.5Y66, 2-10% , 0-5mm, Faint; Loamy sand; Single grain grade of structure; Sandy (grains prominent) fabric; Dry; Loose consistence; Very few (0 - 2 %), Ferruginous, Fine (0 - 2 mm), Concretions; Field pH 7 (pH meter); Abrupt change to -   |
| A3   | 0.6 - 1.3 m  | Brownish yellow (10YR6/6-Moist); Mottles, 7.5YR32, 10-20% , 5-15mm, Distinct; Sandy clay loam; Single grain grade of structure; Sandy (grains prominent) fabric; Moderately moist; Strong consistence; Very many (50 - 100 %), Ferruginous, Coarse (6 - 20 mm), Concretions; Ferricrete, Moderately cemented, Vesicular; Field pH 7.1 (pH meter); Abrupt change to - |
| B21  | 1.3 - 1.5 m  | Light yellowish brown (10YR6/4-Moist); Mottles, 10YR58, 2-10% , 0-5mm, Distinct; Sandy light clay; Strong grade of structure, 5-10 mm, Subangular blocky; Smooth-ped fabric; Moderately moist; Firm consistence; Very many (50 - 100 %), Ferruginous, Medium (2 -6 mm), Concretions; Field pH 7.2 (pH meter); Clear change to -                                      |
| B21b | 1.5 - 1.8 m  | Very pale brown (10YR7/4-Moist); Mottles, 10YR71, 10-20% , 15-30mm, Prominent; Light medium clay; Moderate grade of structure, 5-10 mm, Subangular blocky; Smooth-ped fabric; Moderately moist; Very weak consistence; Field pH 7.1 (pH meter);  |

**Morphological Notes**

**Observation Notes**

**Site Notes**

Pit 1 on o'mearas. Sand/laterite/clay. A1 very fine sand with few very fine buckshot gravel segregations. Linear mottles. A3 sandy matrix.  
Weakly cemented laterite layer. Seepage layer at top of b21. Mottled clay. 50-55 cm yellow tinge in

**Project Name:** Jerramungup soils inventory (=JER LRS)  
**Project Code:** JSI **Site ID:** 0366 **Observation** 1  
**Agency Name:** Agriculture Western Australia

**Laboratory Test Results:**

| Depth      | pH           | 1:5 EC | Ca    | Exchangeable Mg | Cations K | Na          | Exchangeable Acidity | CEC | ECEC  | ESP |
|------------|--------------|--------|-------|-----------------|-----------|-------------|----------------------|-----|-------|-----|
| m          |              | dS/m   |       |                 |           | Cmol (+)/kg |                      |     |       | %   |
| 0 - 0.15   | 4.6B<br>5.7H | 2B     | 1.43H | 0.33            | 0.04      | 0.05        | 0.15J                |     | 1.85D |     |
| 0.15 - 0.6 | 5B<br>5.9H   | 1B     | 0.11H | 0.12            | 0.04      | 0.03        | 0.08J                |     | 0.3D  |     |
| 0.6 - 1.3  | 4.7B<br>5.7H | 2B     | 0.3H  | 0.18            | 0.12      | 0.06        | 0.34J                |     | 0.66D |     |
| 1.3 - 1.5  | 5.4B<br>6.8H | 2B     | 0.6A  | 0.63            | 0.09      | 0.21        |                      |     | 1.53D |     |
| 1.5 - 1.8  | 5.2B<br>6.2H | 9B     | 1.32H | 3.15            | 0.12      | 0.82        | 0.03J                |     | 5.41D |     |

| Depth      | CaCO3 | Organic C Clay | Avail. P | Total P | Total N | Total K | Bulk Density | Particle Size Analysis |
|------------|-------|----------------|----------|---------|---------|---------|--------------|------------------------|
| m          | %     | %              | mg/kg    | %       | %       | %       | Mg/m3        | GV CS FS Silt          |
| 0 - 0.15   |       | 0.76D          |          | 30B     | 0.032E  |         |              | 0.9                    |
| 1.4        |       |                |          |         |         |         |              |                        |
| 0.15 - 0.6 |       | 0.08D          |          | 11B     | 0.004E  |         |              | 0.3                    |
| 0.8        |       |                |          |         |         |         |              |                        |
| 0.6 - 1.3  |       | 0.3D           |          | 18B     | 0.011E  |         |              | 1.2                    |
| 3.5        |       |                |          |         |         |         |              |                        |
| 1.3 - 1.5  |       | 0.21D          |          | 16B     | 0.009E  |         |              | 1                      |
| 7.4        |       |                |          |         |         |         |              |                        |
| 1.5 - 1.8  |       | 0.19D          |          | 24B     | 0.008E  |         |              | 1.6                    |
| 41.7       |       |                |          |         |         |         |              |                        |

**Laboratory Analyses Completed for this profile**

|                |  |
|----------------|--|
| 15_NR_BSa      | Exchangeable bases (Ca++) - meq per 100g of soil - Auto calculated from available            |
| 15_NR_CMRR     | Exchangeable bases (Ca/Mg ratio) - Not recorded  |
| 15A1_CA        | Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment      |
| for soluble    | salts  |
| 15A1_CEC       | Exchangeable bases (CEC) - 1M ammonium chloride at pH 7.0, no pretreatment for soluble salts |
| 15A1_K         | Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment      |
| for soluble    | salts  |
| 15A1_MG        | Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment      |
| for soluble    | salts  |
| 15A1_NA        | Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment      |
| for soluble    | salts  |
| 15E1_AL        | Exchangeable Al - by compulsive exchange, no pretreatment for soluble salts                  |
| 15E1_CA        | Exchangeable bases (Ca2+,Mg2+,Na+,K+) by compulsive exchange, no pretreatment for soluble    |
| salts          |  |
| 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    |
| 15E1_MN        | Exchangeable bases (Mn2+) by compulsive exchange, no pretreatment for soluble salts          |
| 15E1_NA        | Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts    |
| 15J_BASES      | Sum of Bases   |
| 15L1_a         | Exchangeable bases Base saturation percentage (BSP) - Auto calculated from available using   |
| Sum of Cations | and measured clay  |
| 15N1_a         | Exchangeable sodium percentage (ESP) - Auto calculated from available using CEC              |
| 15N1_b         | Exchangeable sodium percentage (ESP) - Auto calculated from available using Sum of Cations   |
| 18A1_NR        | Bicarbonate-extractable potassium (not recorded)   |
| 3_NR           | Electrical conductivity or soluble salts - Not recorded                                      |
| 4_NR           | pH of soil - Not recorded  |

|          |  |
|----------|--|
| 4B_AL_NR | Aluminium in 1:5 soil/0.01M calcium chloride extract - method not recorded |
| 4B1      | pH of 1:5 soil/0.01M calcium chloride extract - direct                     |
| 6A1_UC   | Organic carbon (%) - Uncorrected Walkley and Black method                  |
| 7A1      | Total nitrogen - semimicro Kjeldahl, steam distillation                    |
| 9A3      | Total Phosphorus (ppm) - semimicro kjeldahl, automated colour              |

**Project Name:** Jerramungup soils inventory (=JER LRS)  
**Project Code:** JSI **Site ID:** 0366 **Observation** 1  
**Agency Name:** Agriculture Western Australia

|            |   |
|------------|---|
| 9B_NR      | Bicarbonate-extractable phosphorus (not recorded)             |
| 9H1        | Anion storage capacity  |
| P10_1m2m   | 1000 to 2000u particle size analysis, (method not recorded)   |
| P10_20_75  | 20 to 75u particle size analysis, (method not recorded)       |
| P10_75_106 | 75 to 106u particle size analysis, (method not recorded)      |
| P10_NR_C   | Clay (%) - Not recorded                                       |
| P10_NR_Saa | Sand (%) - Not recorded arithmetic difference, auto generated |
| P10_NR_Z   | Silt (%) - Not recorded                                       |
| P10106_150 | 106 to 150u particle size analysis, (method not recorded)     |
| P10150_180 | 150 to 180u particle size analysis, (method not recorded)     |
| P10180_300 | 180 to 300u particle size analysis, (method not recorded)     |
| P10300_600 | 300 to 600u particle size analysis, (method not recorded)     |
| P106001000 | 600 to 1000u particle size analysis, (method not recorded)    |