

**Project Name:** Jerramungup soils inventory (=JER LRS)  
**Project Code:** JSI **Site ID:** 1157 **Observation ID:** 1  
**Agency Name:** Agriculture Western Australia

#### Site Information

<b>Desc. By:</b>	Tim Overheu	<b>Locality:</b>	
<b>Date Desc.:</b>	09/11/94	<b>Elevation:</b>	248 metres
<b>Map Ref.:</b>		<b>Rainfall:</b>	400
<b>Northing/Long.:</b>	6253062 AMG zone: 50	<b>Runoff:</b>	No Data
<b>Easting/Lat.:</b>	682501 Datum: AGD84	<b>Drainage:</b>	Imperfectly drained

#### Geology

<b>ExposureType:</b>	Auger boring	<b>Conf. Sub. is Parent. Mat.:</b>	No Data
<b>Geol. Ref.:</b>	No Data	<b>Substrate Material:</b>	No Data

#### Land Form

**Rel/Slope Class:** Gently undulating plains <9m 1-3% **Pattern Type:** Plain

<b>Morph. Type:</b>	Simple-slope	<b>Relief:</b>	No Data
<b>Elem. Type:</b>	Plain	<b>Slope Category:</b>	No Data
<b>Slope:</b>	%	<b>Aspect:</b>	No Data

#### Surface Soil Condition Hardsetting

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

#### Soil Classification

<b>Australian Soil Classification:</b>		<b>Mapping Unit:</b>	N/A
Mesotrophic Mottled-Mesonatric Grey Sodosol		<b>Principal Profile Form:</b>	Dy5.42
<b>ASC Confidence:</b>		<b>Great Soil Group:</b>	Solodized

solonetz

All necessary analytical data are available.

**Site** Complete clearing. Pasture, native or improved, cultivated at some stage

#### Vegetation:

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

#### Profile

Ap	0 - 0.1 m	Dark greyish brown (10YR4/2-Moist); , 0-0% ; Sandy loam; Single grain grade of structure; Sandy
		(grains prominent) fabric; Dry; Very weak consistence; 0-2%, fine gravelly, 2-6mm, angular, Quartz,
		coarse fragments; Field pH 6.8 (pH meter); Abrupt change to -
A21	0.1 - 0.3 m	Light brownish grey (10YR6/2-Moist); , 0-0% ; Coarse sand; Single grain grade of structure; Sandy
		(grains prominent) fabric; Dry; Very weak consistence; 2-10%, fine gravelly, 2-6mm, angular, Quartz,
		coarse fragments; Field pH 6.9 (pH meter); Abrupt change to -
B21	0.2 - 0.55 m	Light brownish grey (2.5Y6/2-Moist); Mottles, 5YR58, 10-20% , 15-30mm, Prominent;
Medium clay;		Strong grade of structure, 50-100 mm, Columnar; Smooth-ped fabric; Moderately moist;
Very firm		consistence; 0-2%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments; Field pH 6.7
(pH meter);		Clear change to -
B22	0.55 - 0.75 m	Light olive grey (5Y6/2-Moist); Mottles, 5YR56, 10-20% , 30-mm, Prominent; Light
medium clay; Strong		grade of structure, 5-10 mm, Subangular blocky; Smooth-ped fabric; Moderately moist;
Very firm		consistence; 0-2%, medium gravelly, 6-20mm, angular, Quartz, coarse fragments; Field
pH 6.7 (pH		meter); Abrupt change to -
C	0.75 - 1.4 m	White (10YR8/2-Moist); Mottles, 10YR68, 2-10% , 15-30mm, Distinct; Moderately moist;
Firm		consistence; 2-10%, coarse gravelly, 20-60mm, subangular, Granulite, coarse fragments;
Field pH 6.8		(pH meter);

#### Morphological Notes

#### Observation Notes

**Site Notes**

Relatively high point in the landscape overlooking areas to the south similar to a yate soil, gritty red/brown loam over clay(maybe buried horizon

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**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 - 0.1	4.3B 5.2H	5B	1.1H	0.27	0.14	0.15	0.3J		1.66D	
0.1 - 0.25	4.6B 5.4H	2B	0.29H	0.19	0.04	0.04	0.09J		0.56D	
0.25 - 0.55	4.9B 5.7H	40B	0.74H	3.4	0.16	1.5	0.11J		5.8D	
0.55 - 0.75	6.9B 7.8H	52B	0.54A	2.8	0.25	2			5.59D	
0.75 - 1.4	6.8B 7.2H	240B	0.38E	2.4	0.18	1.2			4.16D	

Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Particle Size Analysis
m	%	Clay %	mg/kg	%	%	%	Mg/m3	GV CS FS Silt
0 - 0.1		1.07D		84B	0.065E	0.92A		
4.6								4.2
0.1 - 0.25		0.25D		21B	0.013E	1A		3.2
2.6								
0.25 - 0.55		0.27D		31B	0.022E	0.65A		2.5
53.7								
0.55 - 0.75		0.05D		20B	0.009E	0.89A		3.6
47.4								
0.75 - 1.4		0.05D		21B	<0.005E	1A		8.3
28.5								

**Laboratory Analyses Completed for this profile**

15_NR_BSa	Exchangeable bases (Ca++) - meq per 100g of soil - Auto calculated from available
15_NR_CMV	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_MN	Exchangeable bases (Mn2+) - 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
15C1_CA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - alcoholic 1M ammonium chloride at pH 8.5,
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
17A1	Total Potassium - X-ray fluorescence
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

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6A1_UC	Organic carbon (%) - Uncorrected Walkley and Black method
7A1	Total nitrogen - semimicro Kjeldahl, steam distillation
9A3	Total Phosphorus (ppm) - semimicro kjeldahl, automated colour
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)