

**Project Name:** Salmon Gums survey  
**Project Code:** SGS **Site ID:** 0001 **Observation ID:** 1  
**Agency Name:** Agriculture Western Australia

**Site Information**

<b>Desc. By:</b>	Brendan Nicholas	<b>Locality:</b>	
<b>Date Desc.:</b>	23/11/97	<b>Elevation:</b>	No Data
<b>Map Ref.:</b>		<b>Rainfall:</b>	No Data
<b>Northing/Long.:</b>	6299350 AMG zone: 51	<b>Runoff:</b>	No Data
<b>Easting/Lat.:</b>	422546 Datum: AGD84	<b>Drainage:</b>	Moderately well drained

**Geology**

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

**Landform**

**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>	315 degrees

**Surface Soil Condition** Loose

**Erosion** (wind);

**Soil Classification**

<b>Australian Soil Classification:</b>		<b>Mapping Unit:</b>	N/A
Calcic Hypernatric Yellow Sodosol		<b>Principal Profile Form:</b>	Dy4.43
<b>ASC Confidence:</b>		<b>Great Soil Group:</b>	Solodized

solonetz

All necessary analytical data are available.

**Site Disturbance** Cultivation. Rainfed

**Vegetation**

**Surface Coarse Fragments** No surface coarse fragments

**Profile Morphology**

A1	0.01 - 0.16 m	Brown (10YR4/3-Moist); Very pale brown (10YR8/3-Moist); , 0-0% ; Fine sand; Single grain grade of
Columnar; Strong		structure; Single grain grade of structure; Strong grade of structure, 200-500 mm,
Smooth change		grade of structure, 100-200 mm, Prismatic; Moderately moist; Loose consistence; Clear,
		to -
A2e	0.16 - 0.19 m	Very pale brown (10YR8/3-Moist); , 0-0% ; Fine sand; Single grain grade of structure;
Moderately moist;		Very weak consistence; Clear, Tongued change to -
B11t	0.19 - 0.3 m	(2.5YR2.5/3-Moist); , 0-0% ; Fine sandy light clay; Strong grade of structure, 100-200
mm, Columnar;		Dry; Strong consistence; Common (10 - 20 %), Calcareous, , Nodules; Gradual, Smooth
change to -		
B22tk	0.3 - 0.63 m	Olive grey (5Y5/2-Moist); , 0-0% ; Silty light medium clay; Strong grade of structure, 100-
200 mm,		Prismatic; Dry; Very firm consistence; Common (10 - 20 %), Calcareous, Coarse (6 - 20
mm), Nodules;		Gradual, Smooth change to -
B23k	0.63 - 0.95 m	Pale olive (5Y6/3-Moist); , 0-0% ; Silty light medium clay; Strong grade of structure, 100-
200 mm,		Prismatic; Strong grade of structure, 20-50 mm, Angular blocky; Dry; Very firm
consistence; Very many		(50 - 100 %), Calcareous, Coarse (6 - 20 mm), Nodules; Gradual, Smooth change to -
B24k	0.95 - 1.2 m	Olive grey (5Y5/2-Moist); , 0-0% ; Light medium clay; Strong grade of structure, 100-200
mm, Prismatic;		Dry; Very firm consistence; Very many (50 - 100 %), Calcareous, Extremely coarse (> 60
mm), Nodules;		Soil matrix is Highly calcareous; Gradual change to -

**Morphological Notes**

**Observation Notes**

**Site Notes**

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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	5B 6.3H	7B	2.56H	0.56	0.44	0.36	0.02J		3.92D	
0.1 - 0.12	5.9B 7.1H	8B	2.09A	0.58	0.46	0.34			3.47D	
0.12 - 0.17	7B 8.2H	15B	4.46E	3.48	1.77	1.49		12B	11.2D	12.42
0.17 - 0.32	7.9B 9H	23B	5.25E	5.41	2.96	2.34		16B	15.96D	14.63
0.32 - 0.45	8.1B 9.4H	26B	4.16E	6.41	3.53	4.88		19B	18.98D	25.68
0.44 - 0.75	8.6B 9.7H	44B	2.87E	6.07	3.83	6.25		19B	19.02D	32.89
0.75 - 1	8.6B 9.7H	58B	2.18E	5.06	3.37	7.97		18B	18.58D	44.28

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		0.92D		59B	0.047E				2.2
5.4									
0.1 - 0.12		0.52D		34B	0.027E				2
4.9									
0.12 - 0.17	<2C	0.25D		27B	0.023E				2.7
26.8									
0.17 - 0.32	2C	0.2D		28B	0.021E				3.4
36.3									
0.32 - 0.45	2C	0.1D		36B	0.016E				4.1
48.3									
0.44 - 0.75	3C	0.08D		33B	0.013E				3.6
47.4									
0.75 - 1	3C	0.09D		30B	0.012E				3.1
46.4									

**Laboratory Analyses Completed for this profile**

12C1 Calcium chloride extractable boron - manual colour  
 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  
 15C1\_CA Exchangeable bases (Ca2+,Mg2+,Na+,K+) - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts  
 15C1\_CEC CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts  
 15C1\_K Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts

15C1_MG soluble salts	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for
15C1_NA soluble salts	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for
15E1_AL	Exchangeable Al - by compulsive exchange, no pretreatment for soluble salts
15E1_CA salts	Exchangeable bases (Ca <sup>2+</sup> ,Mg <sup>2+</sup> ,Na <sup>+</sup> ,K <sup>+</sup> ) by compulsive exchange, no pretreatment for soluble
15E1_K	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts

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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
19B_NR	Calcium Carbonate (CaCO3) - 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
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)