

Project Name: Salmon Gums survey
Project Code: SGS **Site ID:** 0002 **Observation ID:** 1
Agency Name: Agriculture Western Australia

Site Information

Desc. By:	Brendan Nicholas	Locality:	
Date Desc.:	20/11/95	Elevation:	No Data
Map Ref.:		Rainfall:	No Data
Northing/Long.:	6302303 AMG zone: 51	Runoff:	No Data
Easting/Lat.:	421731 Datum: AGD84	Drainage:	Imperfectly drained

Geology

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

Landform

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

Morph. Type:	No Data	Relief:	No Data
Elem. Type:	Plain	Slope Category:	No Data
Slope:	1.5 %	Aspect:	45 degrees

Surface Soil Condition Firm, Hardsetting

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

Soil Classification

Australian Soil Classification:	Mapping Unit:	N/A
Calcic Mesonatric Yellow Sodosol Medium Non-gravelly Loamy Clayey Deep	Principal Profile Form:	Dy4.43
ASC Confidence:	Great Soil Group:	N/A

All necessary analytical data are available.

Site Disturbance Cultivation. Rainfed

Vegetation

Surface Coarse Fragments

Profile Morphology

Ap	0 - 0.12 m	Brown (10YR4/3-Moist); , 0-0% ; Loam; Single grain grade of structure; Rough-ped fabric; Moderately moist; Very weak consistence; 0-2%, rounded, Ferricrete, coarse fragments; Clear, Smooth change to -
A2e	0.12 - 0.23 m	Very pale brown (10YR8/3-Moist); , 0-0% ; Clayey sand; Single grain grade of structure; Moderately moist; Very weak consistence; Clear, Tongued change to -
B21t	0.23 - 0.32 m	Yellow (10YR7/6-Moist); , 0-0% ; Light clay; Strong grade of structure, 200-500 mm, Columnar; Rough-ped fabric; Moderately moist; Firm consistence; Common cutans, 10-50% of ped faces or walls coated, faint; Few (2 - 10 %), Calcareous, , ; Gradual, Smooth change to -
B22tk	0.32 - 0.6 m	Reddish yellow (7.5YR6/6-Moist); ; Light clay; Weak grade of structure, Granular; Rough-ped fabric; Moderately moist; Very firm consistence; 0-2%, fine gravelly, 2-6mm, rounded, Ferricrete, coarse fragments; Common (10 - 20 %), Calcareous, Coarse (6 - 20 mm), Nodules; Soil matrix is Slightly calcareous; Gradual, Smooth change to -
B31	0.6 - 0.8 m	Strong brown (7.5YR5/6-Moist); ; Medium clay; Weak grade of structure, Granular; Rough-ped fabric; Moderately moist; Strong consistence; 2-10%, rounded, Ironstone, coarse fragments; Very few (0 - 2 %), Calcareous, Fine (0 - 2 mm), Fragments; Soil matrix is Slightly calcareous; Gradual, Smooth change to -
B32	0.8 - 1.1 m	Yellowish red (5YR4/6-Moist); ; Medium clay; Weak grade of structure, Granular; Rough-ped fabric; Moderately moist; Strong consistence; 2-10%, rounded, Ironstone, coarse fragments;

Morphological Notes

A2e
B21t

THIN TOUNGE OF A2
BROAD FLAT COLUMN

Observation Notes

Site Notes

small rock outcrops within paddock [lab data suggests sandy duplex] Represents heavy dirt in the southern mallee.
Not a Kumarl clay

Project Name: Salmon Gums survey
 Project Code: SGS Site ID: 0002 Observation 1
 Agency Name: Agriculture Western Australia

Laboratory Test Results:

Depth m	pH	1:5 EC dS/m	Ca	Exchangeable Mg	Cations K	Na Cmol (+)/kg	Exchangeable Acidity	CEC	ECEC	ESP %
0 - 0.1	6.5B 7.7H	12B	7.05A	1.69	0.9	0.81			10.45D	
0.1 - 0.12	7.1B 8.1H	7B	2.47A	0.85	0.27	0.22			3.81D	
0.12 - 0.23	7.4B 8.4H	19B	6.98E	6.86	0.88	2.1		19B	16.82D	11.05
0.23 - 0.5	8.2B 9.2H	42B	6.14E	8.96	1.33	4.88		22B	21.31D	22.18
0.5 - 0.7	8.5B 9.7H 8.5B 9.7H	50B	2.82E 2.82E	7.11 7.11	1.42 1.42	7.01 7.01		18B 18B	18.36D 18.36D	38.94
0.5 - 0.7	8.5B 9.7H 8.5B 9.7H	50B	2.82E 2.82E	7.11 7.11	1.42 1.42	7.01 7.01		18B 18B	18.36D 18.36D	38.94
0.7 - 1	8.6B 9.8H	39B	1.59E	6.55	1.52	7.55		16B	17.21D	47.19
1 - 1.2	8.5B 9.5H	82B	1.09E	6.12	1.43	8.73		17B	17.37D	51.35

Depth m	CaCO3 %	Organic C Clay %	Avail. P mg/kg	Total P %	Total N %	Total K %	Bulk Density Mg/m3	Particle GV CS	Size FS %	Analysis Silt
0 - 0.1 12.8		1.49D		140B	0.076E					5.2
0.1 - 0.12 5	<2C	0.56D		36B	0.02E					3.5
0.12 - 0.23 44.4	2C	0.49D		31B	0.025E					4
0.23 - 0.5 48.6	7C	0.18D		28B	0.015E					6.3
0.5 - 0.7 41.5	4C	0.07D		20B	0.008E					5.8
	4C	0.07D		20B	0.008E					5.8
0.5 - 0.7 41.5	4C	0.07D		20B	0.008E					5.8
	4C	0.07D		20B	0.008E					5.8
0.7 - 1 39.4	3C	0.04D		20B	0.005E					4.5
1 - 1.2 43.5	<2C	0.06D		18B	0.008E					3.1

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

15A1_NA
for soluble

15C1_CA
pretreatment for

salts

Exchangeable bases (Ca²⁺,Mg²⁺,Na⁺,K⁺) - 1M ammonium chloride at pH 7.0, no pretreatment

salts

Exchangeable bases (Ca²⁺,Mg²⁺,Na⁺,K⁺) - alcoholic 1M ammonium chloride at pH 8.5,

soluble salts

Project Name: Salmon Gums survey
Project Code: SGS **Site ID:** 0002 **Observation** 1
Agency Name: Agriculture Western Australia

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	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for
soluble salts	
15C1_NA	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, 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
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)