

**Project Name:** Tambellup Borden land resources survey  
**Project Code:** TBO **Site ID:** 1376 **Observation ID:** 1  
**Agency Name:** Agriculture Western Australia

#### Site Information

<b>Desc. By:</b>	Melanie Roberts	<b>Locality:</b>	
<b>Date Desc.:</b>	28/01/99	<b>Elevation:</b>	No Data
<b>Map Ref.:</b>		<b>Rainfall:</b>	No Data
<b>Northing/Long.:</b>	6202370 AMG zone: 50	<b>Runoff:</b>	No Data
<b>Easting/Lat.:</b>	597460 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

<b>Rel/Slope Class:</b>	Undulating rises 9-30m 3-10%	<b>Pattern Type:</b>	Rises
<b>Morph. Type:</b>	Upper-slope	<b>Relief:</b>	No Data
<b>Elem. Type:</b>	Hillslope	<b>Slope Category:</b>	No Data
<b>Slope:</b>	3 %	<b>Aspect:</b>	No Data

#### Surface Soil Condition Loose

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

#### Soil Classification

<b>Australian Soil Classification:</b>		<b>Mapping Unit:</b>	N/A
Mottled Mesotrophic Yellow Chromosol		<b>Principal Profile Form:</b>	N/A
<b>ASC Confidence:</b>		<b>Great Soil Group:</b>	N/A
All necessary analytical data are available.			

**Site Disturbance** Cultivation. Rainfed

#### Vegetation

**Surface Coarse Fragments** 20-50%, cobbly, 60-200mm, subrounded, Sandstone; 2-10%, cobbly, 60-200mm, subrounded, Ironstone

#### Profile Morphology

A1c	0 - 0.12 m	Dark greyish brown (10YR4/2-Moist); , 0-0% ; Clayey fine sand; Single grain grade of structure; 2-10%,
A2ec	0.12 - 0.4 m	Light yellowish brown (10YR6/4-Moist); , 0-0% ; Clayey fine sand; Single grain grade of structure; 20-50%, medium gravelly, 6-20mm, subrounded, Ironstone, coarse fragments; 20-50%, coarse gravelly, 20-60mm, subrounded, Sandstone, coarse fragments; Clear, Smooth change to -
B21t	0.4 - 0.7 m	Brownish yellow (10YR6/6-Moist); Mottles, 2.5YR46, 10-20% , 5-15mm, Prominent; Light medium clay; Moderate grade of structure, 50-100 mm, Polyhedral; Clear change to -
B22t	0.7 - 1.2 m	Light grey (10YR7/2-Moist); Mottles, 10YR66, 20-50% , 30-mm, Distinct; Mottles, 2.5YR46, 10-20% , 5-15mm, Prominent; Medium clay; Strong grade of structure, 20-50 mm, Polyhedral; Clear change to -
B23t	1.2 - 1.75 m	Light grey (2.5Y7/1-Moist); Mottles, 2.5YR46, 2-10% , 15-30mm, Prominent; Mottles, 10YR68, 10-20% , 0-5mm, Distinct; Light medium clay; Strong grade of structure, 50-100 mm, Polyhedral;

#### Morphological Notes

#### Observation Notes

#### Site Notes

Samples taken for chemical analysis.

**Project Name:** Tambellup Borden land resources survey  
**Project Code:** TBO **Site ID:** 1376 **Observation** 1  
**Agency Name:** Agriculture Western Australia

#### Laboratory Test Results:

Depth	pH	1:5 EC	Exchangeable Cations	Exchangeable	CEC	ECEC	ESP
-------	----	--------	----------------------	--------------	-----	------	-----

m	dS/m	Ca	Mg	K	Na Cmol (+)/kg	Acidity	%	
0 - 0.12	4.4B 5.2A	18A	1.54H	0.43	0.2	0.34	0.18J	2.51D
0.12 - 0.4	4.6B 5.8A	2A	0.34H	0.11	0.04	0.05	0.12J	0.54D
0.4 - 0.6	5.1B 6.2A	11A	0.43H	5.24	0.2	1.27	0.08J	7.14D
0.75 - 1.15	4.9B 5.8A	32A	0.04H	4.2	0.11	2.29	0.08J	6.64D
1.25 - 1.6	4.8B 5.7A	54A	0.05H	3.46	0.08	2.7	0.03J	6.29D

Depth	CaCO3	Organic C Clay	Avail. P	Total P	Total N	Total K	Bulk Density	Particle GV	Size CS	Analysis FS	Silt
m	%	%	mg/kg	%	%	%	Mg/m3			%	
0 - 0.12 1.9		1.66A									2.4
0.12 - 0.4 3.7		0.25A									2.7
0.4 - 0.6 65.5		0.3A									2.4
0.75 - 1.15 45.2		0.1A									5
1.25 - 1.6 37.1		0.07A									13.6

#### Laboratory Analyses Completed for this profile

15_NR_BSa	Exchangeable bases (Ca++) - meq per 100g of soil - Auto calculated from available
15_NR_CM	Exchangeable bases (Ca/Mg ratio) - Not recorded
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
15N1_b	Exchangeable sodium percentage (ESP) - Auto calculated from available using Sum of Cations
3A1	EC of 1:5 soil/water extract
4A1	pH of 1:5 soil/water suspension
4B_AL	Aluminium in 1:5 soil/0.01M calcium chloride extract - following Method 4A1
4B1	pH of 1:5 soil/0.01M calcium chloride extract - direct
6A1	Organic carbon - Walkley and Black
9A_S14	Total element - P(%) method S14 CCWA
9I1	Phosphate sorption index
P10_1m2m	1000 to 2000u particle size analysis, (method not recorded)
P10_20_75a	20 to 75u particle size analysis, (arithmetic difference)
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)