Project Name: Tambellup Borden land resources survey

Project Code: TBO Site ID: 1386 Observation ID: 1

Agency Name: Agriculture Western Australia

Site Information

Desc. By: Angela Stuart-Street Locality:

Date Desc.:27/05/99Elevation:No DataMap Ref.:Rainfall:No Data

Northing/Long.: 6212853 AMG zone: 50 Runoff: No Data

Easting/Lat.: 549199 Datum: AGD84 Drainage: Well drained

<u>Geology</u>

ExposureType:Soil pitConf. Sub. is Parent. Mat.:No DataGeol. Ref.:No DataSubstrate Material:No Data

**Landform** 

Rel/Slope Class: Gently undulating rises 9-30m 1-3% Pattern Type: Dunefield

Morph. Type:Mid-slopeRelief:No DataElem. Type:DuneSlope Category:No DataSlope:1 %Aspect:0 degrees

Surface Soil Condition Soft

Erosion (wind); (scald) (sheet) (wave) (rill) (mass)

(gully) (stbank) (tunnel)

Soil Classification

Australian Soil Classification:Mapping Unit:N/ABleached-Mottled Natric Grey KurosolPrincipal Profile Form:N/AASC Confidence:Great Soil Group:N/A

All necessary analytical data are available. **Site Disturbance** Cultivation. Rainfed

Vegetation

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

Profile Morphology

A1p 0 - 0.1 m Dark greyish brown (10YR4/2-Moist); , 0-0%; Loamy sand; Single grain grade of structure: Sandy

(grains prominent) fabric; Moist; Loose consistence; Abrupt, Smooth change to -

A21e 0.1 - 0.3 m Pale brown (10YR6/3-Moist); , 0-0%; Sand; Single grain grade of structure; Sandy (grains prominent)

fabric; Moist; Loose consistence; Gradual, Smooth change to -

A22e 0.3 - 0.5 m Very pale brown (10YR7/3-Moist); , 0-0%; Coarse sand; Single grain grade of structure;

Sandy (grains

prominent) fabric; Moist; Loose consistence; Common (10 - 20 %), Ferruginous, Coarse (6 - 20 mm),

Concretions; Clear, Wavy change to -

B21 0.5 - 0.7 m Light brownish grey (2.5Y6/3-Moist); , 10YR68, 10-20% , 15-30mm, Faint; , 2.5YR36, 20-50% , 15-

30mm, Distinct; Sandy light clay; Weak grade of structure, 2-5 mm, Subangular blocky;

Moist; Very weak

consistence; Gradual, Wavy change to -

B22 0.7 - 1.1 m Light grey (2.5Y7/2-Moist); , 10YR68, 2-10% , 15-30mm, Faint; , 5YR58, 20-50% , 30-

mm, Prominent;
Sandy medium clay; Massive grade of structure; Sandy (grains prominent) fabric; Moist;

Weak

consistence; Gradual, Smooth change to -

B23 1.1 - 1.3 m Light brownish grey (2.5Y6/3-Moist); , 10YR66, 2-10% , 15-30mm, Faint; , 5YR58, 10-

20%, 15-30mm,

Distinct; Light clay; Moderate grade of structure, 2-5 mm, Subangular blocky; Moist; Very

weak

consistence; Clear, Tongued change to -

B31 1.3 - 1.5 m Light yellowish brown (2.5Y6/4-Moist); , 10YR66, 10-20% , 15-30mm, Faint; Coarse

sandy light clay;

Massive grade of structure; Sandy (grains prominent) fabric; Moist; Very weak

consistence; Clear,
Smooth change to -

B32 1.5 - 1.7 m Moderate grade

Moderate grade

Ight brownish grey (2.5Y6/3-Moist); , 10YR58, 10-20% , 15-30mm, Faint; Medium clay; of structure, 2-5 mm, Subangular blocky; Moist; Weak consistence; Gradual, Smooth change to 
B33 1.7 - 1.9 m , 15-30mm,

Tight brownish grey (2.5Y6/3-Moist); , 10YR68, 2-10% , 15-30mm, Faint; , 5YR58, 2-10% , 15-30mm, Faint; Medium clay; Moist; Weak consistence; Gradual, Smooth change to -

## Morphological Notes Observation Notes

## **Site Notes**

Depth

Site on broad low rise - deep sand on dune crest, shallow duplex downslope. Heavy rain yesterday collected in pit at 190cm. Pit located where site TBO #0937 done.

Exchangeable

Acidity

Na

CEC

**ECEC** 

**ESP** 

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Са

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Mg

**Exchangeable Cations** 

Agency Name: Agriculture Western Australia

1:5 EC

## **Laboratory Test Results:**

m		dS/m	Ca	wig	N.	Cmol (+)/kg	J	%
0 - 0.1	4.1B 5.2A	5A	1.43H	0.17	0.03	0.07	0.21J	1.7D
0.1 - 0.3	4.1B 4.7A	4A	0.13H	0.04	<0.02	0.04	0.16J	0.22D
0.3 - 0.5	4.4B 5.4A	1A	0.12H	0.05	<0.02	0.02	0.09J	0.2D
0.5 - 0.7	4.4B 5.8A	6A	0.72H	2.45	0.25	0.62	0.58J	4.04D
0.7 - 1.1	4.2B 5.9A	6A	0.28H	2.52	0.34	0.82	0.87J	3.96D
1.1 - 1.3	4B 5.8A	7A	0.11H	3.05	0.51	1.42	1.01J	5.09D
1.3 - 1.5	4.1B 5.9A	6A	0.02H	2.37	0.45	1.77	0.3J	4.61D
1.5 - 1.7	4.2B 5.7A	13A	0.04H	4.54	0.94	4.86	0.2J	10.38D
1.7 - 1.9	4.3B 5.8A	14A	0.05H	4.76	1.03	5.64	0.2J	11.48D
Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Particle Size Analysis GV CS FS Silt
Depth m	CaCO3							
m 0 - 0.1		C Clay	Р	Р	N	K	Density	GV CS FS Silt
m 0 - 0.1 2.2 0.1 - 0.3		C Clay %	Р	Р	N	K	Density	GV CS FS Silt %
m 0 - 0.1 2.2		C Clay %	Р	Р	N	K	Density	GV CS FS Silt %
m 0 - 0.1 2.2 0.1 - 0.3 1.6 0.3 - 0.5		C Clay % 1.4A 0.13A	Р	Р	N	K	Density	GV CS FS Silt % 2.9 2.3
m 0 - 0.1 2.2 0.1 - 0.3 1.6 0.3 - 0.5 2.9 0.5 - 0.7		C Clay % 1.4A 0.13A 0.06A	Р	Р	N	K	Density	GV CS FS Silt  %  2.9  2.3  2.1
m 0 - 0.1 2.2 0.1 - 0.3 1.6 0.3 - 0.5 2.9 0.5 - 0.7 38.6 0.7 - 1.1		C Clay % 1.4A 0.13A 0.06A 0.19A 0.13A 0.13A	Р	Р	N	K	Density	GV CS FS Silt  %  2.9  2.3  2.1  3.6  1.5  1.9
m 0 - 0.1 2.2 0.1 - 0.3 1.6 0.3 - 0.5 2.9 0.5 - 0.7 38.6 0.7 - 1.1 36.8 1.1 - 1.3		C Clay % 1.4A 0.13A 0.06A 0.19A 0.13A	Р	Р	N	K	Density	GV CS FS Silt    2.9  2.3  2.1  3.6  1.5

1.7 - 1.9 0.12A 4.5 70.4

## **Laboratory Analyses Completed for this profile**

15_NR_BSa 15_NR_CMR 15E1_AL 15E1_CA	Exchangeable bases (Ca++) - meq per 100g of soil - Auto calculated from available Exchangeable bases (Ca/Mg ratio) - Not recorded Exchangeable AI - by compulsive exchange, no pretreatment for soluble salts 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
37314	Total Clotheric 1 (70) Mothed C14 CCV/1

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Phosphate sorption index

P10\_1m2m P10\_20\_75a P10\_75\_106 P10\_NR\_C P10\_NR\_Saa 1000 to 2000u particle size analysis, (method not recorded) 20 to 75u particle size analysis, (arithmetic difference) 75 to 106u particle size analysis, (method not recorded)

Clay (%) - Not recorded
Sand (%) - Not recorded arithmetic difference, auto generated

P10\_NR\_Z P10\_NR\_Z P10106\_150 P10150\_180 Silt (%) - Not recorded

106 to 150u particle size analysis, (method not recorded) 150 to 180u particle size analysis, (method not recorded) P10180\_300 P10300\_600 180 to 300u particle size analysis, (method not recorded) 300 to 600u particle size analysis, (method not recorded) P106001000 600 to 1000u particle size analysis, (method not recorded)