Project Name: Chittering land resources survey

Project Code: CHT Site ID: 1110 Observation ID: 1

Agency Name: Agriculture Western Australia

Site Information

Desc. By: B. Purdie Locality:

Date Desc.: 22/04/98 Elevation:
Map Ref.: Rainfall:

Northing/Long.: 6505675 AMG zone: 50 Runoff: No Data
Easting/Lat.: 403606 Datum: AGD84 Drainage: Imperfectly drained

<u>Geology</u>

ExposureType:Existing vertical exposureConf. Sub. is Parent. Mat.:No DataGeol. Ref.:No DataSubstrate Material:No Data

Land Form

Rel/Slope Class: No Data Pattern Type: Plain Morph. Type: Relief: No Data Flat Elem. Type: Terrace plain Slope Category: No Data Slope: 1 % Aspect: No Data

Surface Soil Condition Soft

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

(gully) (stbank) (tunnel)

Soil Classification

Australian Soil Classification:Mapping Unit:N/AHumose-Bleached Hypercalcic Grey ChromosolPrincipal Profile Form:Dy5.53ASC Confidence:Great Soil Group:N/A

Confidence level not specified

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

Vegetation: Surface Coarse

Profile

1Ah 0 - 0.15 m Very dark grey (10YR3/1-Moist); ; Clayey sand; Weak grade of structure, 2-5 mm, ; Very

weak

consistence; Water repellent; Field pH 6.8 (pH meter); Abundant, fine (1-2mm) roots;

No Data

No Data

Clear, Smooth

change to -

1A21e 0.15 - 0.65 m

Single grain

 $Light\ grey\ (10YR7/2\text{-Moist});\ Mottles,\ 10YR56,\ 10\text{-}20\%\ ,\ 5\text{-}15mm,\ Distinct};\ Clayey\ sand;$

grade of structure; Moist; Weak consistence; Field pH 6.8 (pH meter); Few, coarse (>

5mm) roots; Clear,

Smooth change to -

1A22e 0.65 - 0.85 m

grain grade of

 $Very\ pale\ brown\ (10YR7/3-Moist);\ ,\ 5G42,\ 10\text{-}20\%\ ,\ 30\text{-}mm,\ Distinct;\ Clayey\ sand};\ Single\ (10YR7/3-Moist);\ ,\ 5G42,\ 10\text{-}20\%\ ,\ 30\text{-}mm,\ Distinct;\ Clayey\ sand};\ Single\ (10YR7/3-Moist);\ ,\ 5G42,\ 10\text{-}20\%\ ,\ 30\text{-}mm,\ Distinct;\ Clayey\ sand};\ Single\ (10YR7/3-Moist);\ ,\ 5G42,\ 10\text{-}20\%\ ,\ 30\text{-}mm,\ Distinct;\ Clayey\ sand};\ Single\ (10YR7/3-Moist);\ ,\ 5G42,\ 10\text{-}20\%\ ,\ 30\text{-}mm,\ Distinct;\ Clayey\ sand};\ Single\ (10YR7/3-Moist);\ ,\ 5G42,\ 10\text{-}20\%\ ,\ 30\text{-}mm,\ Distinct;\ Clayey\ sand};\ Single\ (10YR7/3-Moist);\ ,\ 5G42,\ 10\text{-}20\%\ ,\ 30\text{-}mm,\ Distinct;\ Clayey\ sand};\ Single\ (10YR7/3-Moist);\ ,\ 5G42,\ 10\text{-}20\%\ ,\ 30\text{-}mm,\ Distinct;\ Clayey\ sand};\ Single\ (10YR7/3-Moist);\ ,\ 5G42,\ 10\text{-}20\%\ ,\ 30\text{-}mm,\ Distinct;\ Clayey\ sand};\ Single\ (10YR7/3-Moist);\ ,\ 5G42,\ 10\text{-}20\%\ ,\ 30\text{-}20\%\ ,\ 3$

structure; Moist; Weak consistence; Field pH 8.4 (pH meter); Few, coarse (>5mm) roots;

Abrupt, Wavy

change to

2B21ctk 0.85 - 1.25 m

medium clay;

Light brownish grey (2.5Y6/2-Moist); Mottles, 10YR68, 20-50%, 0-5mm, Distinct; Light

Single grain grade of structure; Moist; Firm consistence; Soil matrix is Very highly

calcareous; Field pH

9.5 (pH meter); Abrupt, Irregular change to -

3C1 1.25 - 2 m consistence; 10-20%,

White (2.5Y8/2-Moist); ; Clay loam, sandy; Massive grade of structure; Moist; Firm

coarse fragments; Field pH 9.5 (pH meter); Gradual, Irregular change to -

4C2 2 - 2.4 m

coarse fragments, riela pri 9.5 (pri meter), Oradiai, megdiar change to

Light brownish grey (2.5Y6/2-Moist); Light grey (2.5Y7/2-Moist); Mottles, 10YR56, 10-20% Distinct; Mottles, 5G42, 10-20%, 30-mm, Distinct; Light medium clay; Massive grade of

structure;

. 5-15mm.

Massive grade of structure; Moist; Firm consistence; Many (20 - 50 %), Calcareous, Very

coarse (20 -

60 mm), Soft segregations; Field pH 9.7 (pH meter);

2.4 - m

Pale red (2.5YR7/2-Moist); Mottles, 5G42, 10-20%, 30-mm, Distinct; Light medium clay;

Massive grade

of structure; Soil matrix is Very highly calcareous; Field pH 9.5 (pH meter);

Morphological Notes
1Ah Few coars roots
3C1 Mixed material

Observation Notes

Site Notes

Photo Roll 58-20/21 Slightly salty clay at 85cm. and as such classed as a deep pale sand. Rooting depth could be limited due to high lime content of clay.

Project Name: Chittering land resources survey
Project Code: CHT Site ID: 1110
Agency Name: Agriculture Western Australia Observation 1

Laboratory	Test Results:
------------	---------------

Depth	рН	1:5 EC		hangeable		Na	Exchangeable	CEC	ECEC	ESP
m		dS/m	Ca	Mg	K	Na Cmol	Acidity (+)/kg			%
0 - 0.15	5.3B 6.1H	19B	3.07H	1.08	0.17	0.55	<0.02J		4.87D	
0 - 0.15	5.3B 6.1H	19B	3.07H	1.08	0.17	0.55	<0.02J		4.87D	
0 - 0.15	5.3B 6.1H	19B	3.07H	1.08	0.17	0.55	<0.02J		4.87D	
0.02 - 0.07 0.15 - 0.65	5.8B	5B	0.2A	0.08	0.04	0.11			0.43D	
0.15 - 0.65	6.9H 5.8B 6.9H	5B	0.2A	0.08	0.04	0.11			0.43D	
0.15 - 0.65	5.8B 6.9H	5B	0.2A	0.08	0.04	0.11			0.43D	
0.35 - 0.4										
0.65 - 0.85	6.7B 7.8H	5B	0.22A	0.19	0.06	0.14			0.61D	
0.65 - 0.85	6.7B 7.8H	5B	0.22A	0.19	0.06	0.14			0.61D	
0.65 - 0.85	6.7B 7.8H	5B	0.22A	0.19	0.06	0.14		0.45	0.61D	05.00
0.85 - 1.25	8.2B 9.3H	47B	6.27E	15.12	0.89	11.91		34B	34.19D	35.03
0.85 - 1.25	8.2B 9.3H	47B	6.27E	15.12	0.89	11.91		34B	34.19D	35.03
0.85 - 1.25	8.2B 9.3H	47B	6.27E	15.12	0.89	11.91		34B	34.19D	35.03
0.98 - 1.03										
1.25 - 2	8.5B 10H	74B	1.72E	5.84	80.0	4.42		13B	12.06D	34.00
1.25 - 2	8.5B 10H	74B	1.72E	5.84	0.08	4.42		13B	12.06D	34.00
1.25 - 2	8.5B 10H	74B	1.72E	5.84	0.08	4.42		13B	12.06D	34.00
1.55 - 1.6	0 7D	11D	25	E 90	0.06	2.61		12D	11 ECD	30.08
2 - 2.4	8.7B 10.1H	44B	2E	5.89	0.06	3.61		12B	11.56D	
2 - 2.4	8.7B 10.1H	44B	2E	5.89	0.06	3.61		12B	11.56D	30.08
2 - 2.4	8.7B 10.1H	44B	2E	5.89	0.06	3.61		12B	11.56D	30.08
Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Tot K			ticle Size Ana S FS	alysis Silt
m	%	Clay %	mg/kg	%	%	%	Mg/m3		%	
0 - 0.15		1.87D		110B	0.13	37E				1.2
1.4 0 - 0.15		1.87D		110B	0.13	37E				1.2
1.4 0 - 0.15 1.4		1.87D		110B	0.13	37E				1.2
0.02 - 0.07 0.15 - 0.65		0.06D		28B	<0.0	05E	1.30			0.4
0.8 0.15 - 0.65		0.06D		28B	<0.0	05E				0.4
0.8										

Project Name Project Code: Agency Name	C	HT	l resources s Site ID: estern Austra	1110	Observation	1	
0.15 - 0.65 0.8		0.06D	28B	<0.005E			0.4
0.35 - 0.4 0.65 - 0.85		0.05D	63B	<0.005E	1.50		0.9
0.9		0.002	552	10.0002			0.0
0.65 - 0.85 0.9		0.05D	63B	<0.005E			0.9
0.65 - 0.85 0.9		0.05D	63B	<0.005E			0.9
0.85 - 1.25 39.6		0.12D	22B	0.028E			1
0.85 - 1.25 39.6		0.12D	22B	0.028E			1
0.85 - 1.25 39.6		0.12D	22B	0.028E			1
0.98 - 1.03					1.20		
1.25 - 2 23.8	69C	0.16D	21B	0.022E	1.20		22.7
1.25 - 2	69C	0.16D	21B	0.022E			22.7
23.8 1.25 - 2	69C	0.16D	21B	0.022E			22.7
23.8 1.55 - 1.6					1.40		
2 - 2.4	5C	0.04D	11B	0.01E	1.40		3
15.3	00	0.046	110	0.012			Ü
2 - 2.4	5C	0.04D	11B	0.01E			3
15.3		-					
2 - 2.4 15.3	5C	0.04D	11B	0.01E			3

Laboratory Analyses Completed for this profile

15_NR_BSa 15_NR_CMR 15A1_CA for soluble	Exchangeable bases (Ca++) - meq per 100g of soil - Auto calculated from available Exchangeable bases (Ca/Mg ratio) - Not recorded Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment salts
15A1_CEC 15A1_K for soluble	Exchangeable bases (CEC) - 1M ammonium chloride at pH 7.0, no pretreatment for soluble salts Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment
15A1_MG for soluble	salts Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment salts
15A1_NA for soluble	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment
15C1_CA pretreatment for	salts Exchangeable bases (Ca2+,Mg2+,Na+,K+) - alcoholic 1M ammonium chloride at pH 8.5,
15C1_CEC 15C1_K soluble salts	soluble salts CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for
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 15E1_CA	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 15E1_MG 15E1_MN 15E1_NA	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts Exchangeable bases (Mn2+) by compulsive exchange, no pretreatment for soluble salts Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts

15J_BASES Sum of Bases 15L1_a Sum of Cations Exchangeable bases Base saturation percentage (BSP) - Auto calculated from available using and measured clay Exchangeable sodium percentage (ESP) - Auto calculated from available using CEC Exchangeable sodium percentage (ESP) - Auto calculated from available using Sum of Cations Calcium Carbonate (CaCO3) - Not recorded 15N1_a 15N1_b 19B_NR 3_NR Electrical conductivity or soluble salts - Not recorded pH of soil - Not recorded 4_NR 4B_AL_NR 4B1 Aluminium in 1:5 soil/0.01M calcium chloride extract - method not recorded pH of 1:5 soil/0.01M calcium chloride extract - direct Organic carbon (%) - Uncorrected Walkley and Black method 6A1_UC Total nitrogen - semimicro Kjeldahl, steam distillation 7A1 9A3 Total Phosphorus (ppm) - semimicro kjeldahl, automated colour Anion storage capacity
20 to 100u particle size analysis, (method not recorded) 9H1 P10_20_100

Project Name: Chittering land resources survey

Project Code: Agency Name: CHT Site ID: 1110 Observation 1

Agriculture Western Australia

> 2mm particle size analysis, (method not recorded) Clay (%) - Not recorded Sand (%) - Not recorded arithmetic difference, auto generated

P10_gt2m P10_NR_C P10_NR_Saa P10_NR_Z P10100_200 P10200_600 Sand (%) - Not recorded annimetic difference, auto general Silt (%) - Not recorded 100 to 200u particle size analysis, (method not recorded) 200 to 600u particle size analysis, (method not recorded) 600 to 2000u particle size analysis, (method not recorded) Bulk density - Not recorded P106002000

P3A_NR