Project Name: **Chittering land resources survey**
Project Code: **CHT** **Site ID:** **0938** **Observation ID:** **1**
Agency Name: **Agriculture Western Australia**

Site Information

Desc. By:	John Bessell-Browne	**Locality:**	
Date Desc.:	13/05/97	**Elevation:**	190 metres
Map Ref.:		**Rainfall:**	No Data
Northing/Long.:	6507166 AMG zone: 50	**Runoff:**	No Data
Easting/Lat.:	408223 Datum: AGD84	**Drainage:**	Well drained

Geology

ExposureType:	Existing vertical exposure	**Conf. Sub. is Parent. Mat.:**	No Data
Geol. Ref.:	No Data	**Substrate Material:**	No Data

Land Form

Rel/Slope Class:	Undulating low hills 30-90m 3-10%	**Pattern Type:**	Low hills
Morph. Type:	Upper-slope	**Relief:**	No Data
Elem. Type:	Hillslope	**Slope Category:**	No Data
Slope:	%	**Aspect:**	No Data

Surface Soil Condition

Erosion:

Soil Classification

Australian Soil Classification:
Ferric Petroferric Brown Chromosol
ASC Confidence:
Confidence level not specified

Mapping Unit: N/A
Principal Profile Form: K-Dy5.11
Great Soil Group: N/A

Site

Vegetation:

Surface Coarse

Profile

A1c 0 - 0.05 m Very dark greyish brown (10YR3/2-Moist); ; Moderate grade of structure, 2-5 mm, ; Dry; Very weak consistence; 50-90%, coarse fragments; Very many (50 - 100 %), Ferromanganiferous, , ; Field pH 5.6 (pH meter); Many, fine (1-2mm) roots; Clear, Smooth change to -

B21wc 0.05 - 0.14 m Brown (10YR4/3-Moist); ; Sandy (grains prominent) fabric; Moderately moist; Very weak consistence; 20-50%, angular, Ironstone, coarse fragments; Very many (50 - 100 %), Ferromanganiferous, , ; Field pH 6.2 (pH meter); Common, medium (2-5mm) roots; Clear, Smooth change to -

B22wc 0.14 - 0.35 m Yellowish brown (10YR5/4-Moist); ; Moderately moist; Weak consistence; 50-90%, subangular, Ironstone, coarse fragments; Very many (50 - 100 %), Ferruginous, , Nodules; Field pH 6.4 (pH meter); Many, medium (2-5mm) roots; Gradual, Smooth change to -

B23wc 0.35 - 0.63 m Yellowish brown (10YR5/4-Moist); ; Earthy fabric; Moderately moist; Very weak consistence; 50-90%, subangular, Ironstone, coarse fragments; Very many (50 - 100 %), Ferruginous, , Nodules; Field pH 6.4 (pH meter); Clear, Irregular change to -

B24tc 0.63 - 1 m Strong brown (7.5YR5/6-Moist); ; Sandy clay loam; Moderately moist; 20-50%, Ironstone, coarse fragments; Many (20 - 50 %), Ferruginous, , Nodules; Field pH 6.1 (pH meter);

B25tc 1 - 1.5 m Strong brown (7.5YR5/8-Moist); , 2.5YR48, 10-20% , 15-30mm, Distinct; Sandy clay loam; Moderate grade of structure, 20-50 mm, Angular blocky; Smooth-ped fabric; Moderately moist; Strong consistence; Clear, Wavy change to -

B26tc 1.5 - 1.95 m Brownish yellow (10YR6/8-Moist); Mottles, 2.5YR46, 2-10% , 5-15mm, Distinct; Mottles, 10YR64, 2-10% , 5-15mm, Faint; Light clay; Moderate grade of structure, 20-50 mm, Angular blocky; Smooth-ped fabric;

Moderately moist; Strong consistence; 20-50%, Ironstone, coarse fragments; Field pH 6 (pH meter);

Abrupt, Irregular change to -

Morphological Notes

A1c	LFS
B21wc	FSL
B22wc	CS
B23wc	CS

Observation Notes

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Project Code: CHT **Site ID:** 0938 **Observation ID:** 1
Agency Name: Agriculture Western Australia

Site Notes

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Laboratory Test Results:

Depth	pH	1:5 EC	Exchangeable Cations Ca	Mg	K	Na	Exchangeable Acidity	CEC	ECEC	ESP
m		dS/m				Cmol (+)/kg				%
0 - 0.05	4.8B 5.6H	8B	5.93H	1	0.12	0.17	0.41J		7.22D	
0 - 0.05	4.8B 5.6H	8B	5.93H	1	0.12	0.17	0.41J		7.22D	
0 - 0.05	4.8B 5.6H	8B	5.93H	1	0.12	0.17	0.41J		7.22D	
0.05 - 0.14	5.1B 6.3H	1B	2.25H	0.36	<0.02	0.03	0.1J		2.65D	
0.05 - 0.14	5.1B 6.3H	1B	2.25H	0.36	<0.02	0.03	0.1J		2.65D	
0.05 - 0.14	5.1B 6.3H	1B	2.25H	0.36	<0.02	0.03	0.1J		2.65D	
0.14 - 0.35	5B 6.3H	1B	1.15H	0.27	0.02	0.02	0.08J		1.46D	
0.14 - 0.35	5B 6.3H	1B	1.15H	0.27	0.02	0.02	0.08J		1.46D	
0.14 - 0.35	5B 6.3H	1B	1.15H	0.27	0.02	0.02	0.08J		1.46D	
0.35 - 0.63	5.2B 6.4H	1B	1.25A	0.59	0.04	0.06			1.94D	
0.35 - 0.63	5.2B 6.4H	1B	1.25A	0.59	0.04	0.06			1.94D	
0.35 - 0.63	5.2B 6.4H	1B	1.25A	0.59	0.04	0.06			1.94D	
0.63 - 1	5.9B 6.4H	3B	1.06H	1.62	0.07	0.11			2.86D	
0.63 - 1	5.9B 6.4H	3B	1.06H	1.62	0.07	0.11			2.86D	
0.63 - 1	5.9B 6.4H	3B	1.06H	1.62	0.07	0.11			2.86D	
1 - 1.5	5.9B 6.2H	2B	0.97H	1.75	0.06	0.1	0.05J		2.88D	
1 - 1.5	5.9B 6.2H	2B	0.97H	1.75	0.06	0.1	0.05J		2.88D	
1 - 1.5	5.9B 6.2H	2B	0.97H	1.75	0.06	0.1	0.05J		2.88D	
0.99 - 0.99										
1.5 - 1.95	5.5B 5.7H	2B	0.54H	1.77	<0.02	0.08	0.02J		2.4D	
1.5 - 1.95	5.5B 5.7H	2B	0.54H	1.77	<0.02	0.08	0.02J		2.4D	

Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Particle Size Analysis GV	CS	FS	Silt
m	%	Clay %	mg/kg	%	%	%	Mg/m3			%	
0 - 0.05		4.9D		270B	0.32E						4.4
3.9											
0 - 0.05		4.9D		270B	0.32E						4.4
3.9											
0 - 0.05		4.9D		270B	0.32E						4.4
3.9											
0.05 - 0.14		1.06D		71B	0.049E						4.4

6.5				
0.05 - 0.14	1.06D	71B	0.049E	4.4
6.5				

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0.05 - 0.14	1.06D	71B	0.049E		4.4
6.5					
0.14 - 0.35	0.52D	58B	0.027E		3.9
7.1					
0.14 - 0.35	0.52D	58B	0.027E		3.9
7.1					
0.14 - 0.35	0.52D	58B	0.027E		3.9
7.1					
0.35 - 0.63	0.54D	64B	0.026E		4.6
10.8					
0.35 - 0.63	0.54D	64B	0.026E		4.6
10.8					
0.35 - 0.63	0.54D	64B	0.026E		4.6
10.8					
0.63 - 1	0.21D	77B	0.01E		7
29.2					
0.63 - 1	0.21D	77B	0.01E		7
29.2					
0.63 - 1	0.21D	77B	0.01E		7
29.2					
1 - 1.5	0.19D	78B	0.01E		6
31.8					
1 - 1.5	0.19D	78B	0.01E		6
31.8					
1 - 1.5	0.19D	78B	0.01E		6
31.8					
0.99 - 0.99					
1.5 - 1.95	0.13D	79B	0.009E		9
43.2					
1.5 - 1.95	0.13D	79B	0.009E		9
43.2					

Laboratory Analyses Completed for this profile

13B1_AL	Pyrophosphate-extractable aluminium
13B1_FE	Pyrophosphate-extractable iron
15_NR_AL	Aluminium Cation - meq per 100g of soil - Not recorded
15_NR_BSa	Exchangeable bases (Ca++) - meq per 100g of soil - Auto calculated from available
15_NR_CMR	Exchangeable bases (Ca/Mg ratio) - Not recorded
15_NR_K	Exch. basic cations (K++) - meq per 100g of soil - Not recorded
15_NR_MN	Exchangeable bases (Mn++) - meq per 100g of soil - 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
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
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

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_gt2m	> 2mm 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

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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)