Project Name: Corrigin land resources survey

Project Code: COR Site ID: 0180 Observation ID: 1

Agency Name: Agriculture Western Australia

Site Information

Desc. By: Bill Verboom Locality:

Date Desc.:10/05/96Elevation:No DataMap Ref.:Rainfall:No DataNorthing/Long.:6418214 AMG zone: 50Runoff:No Data

Northing/Long.: 6418214 AMG zone: 50 Runoff: No Data
Easting/Lat.: 607801 Datum: AGD84 Drainage: Imperfectly drained

Geology

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

Land Form

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

Morph. Type:Simple-slopeRelief:8 metresElem. Type:No DataSlope Category:No DataSlope:1 %Aspect:225 degrees

Surface Soil Condition Firm

Erosion: (wind); (scald) (sheet) (rill) (gully)

Soil Classification

Australian Soil Classification: Mapping Unit: N/A N/A Principal Profile Form: N/A ASC Confidence: Great Soil Group: N/A

Confidence level not specified

<u>Site</u> Extensive clearing, for example poisoning, ringbarking

Vegetation: Surface Coarse

0-2%, medium gravelly, 6-20mm, subrounded, Calcrete; No surface coarse

fragments

Profile

A1 0 - 0.07 m Brown (7.5YR4/2-Moist); , 0-0%; Fine sandy clay loam; Massive grade of structure;

Moderately moist;

Very weak consistence; , Calcareous, , Soft segregations; Very few (0 - 2 %), Calcareous,

Medium (2 -6

mm), Concretions; Soil matrix is Slightly calcareous; ManyClear, Wavy change to -

A2 0.07 - 0.25 m

10-20 mm,

 $Yellowish\ red\ (5YR4/6-Moist);\ ,\ 0-0\%\ ;\ Fine\ sandy\ clay\ loam;\ Weak\ grade\ of\ structure,$

segregations; Few (2 - 10

Subangular blocky; Moderately moist; Firm consistence; , Calcareous, , Soft

%), Calcareous, Medium (2 -6 mm), Concretions; Soil matrix is Very highly calcareous;

Many

B1k 0.25 - 0.5 m

Subangular

Yellowish red (5YR4/6-Moist); , 0-0%; Light clay; Moderate grade of structure, 20-50 mm,

blocky; Dry; Strong consistence; , Calcareous, , Soft segregations; Many (20 - 50 %),

Calcareous,

Medium (2 -6 mm), Concretions; Soil matrix is Very highly calcareous; FewAbrupt, Wavy

change to -

B2k 0.5 - 0.75 m

Subangular

Yellowish red (5YR4/6-Moist); , 0-0%; Medium clay; Strong grade of structure, 5-10 mm,

blocky; Dry; Very strong consistence; , Calcareous, , Soft segregations; Very many (50 -

100 %),

Calcareous, Very coarse (20 - 60 mm), Concretions; Soil matrix is Very highly calcareous;

FewClear,

Smooth change to -

B2k 0.75 - 1.02 m

mm, Subangular

Yellowish red (5YR4/6-Moist); , 0-0%; Medium clay; Moderate grade of structure, 5-10

blocky; Dry; Strong consistence; Very many (50 - 100 %), Calcareous, Very coarse (20 - 60 mm),

Concretions; Soil matrix is Very highly calcareous;

B2km 1.02 - 1.1 m ; Dry; , Calcareous, , ; Calcrete, Massive;

Morphological Notes
A1 Termite activity.
A2 Soft CaCO3 segs---termite activity
B1k CaCO3 segs harder than above layer (still soft)---termite activity.
B2k Soft and hard concretions.
B2k Seperated from above horizon for lab analysis. Segs harder with depth B2km Massive and indurated calcrete

Observation Notes

Site Notes

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Agency Name: **Agriculture Western Australia**

Roadside verge at base of valley floor. Small salt lake 100m to SE. Free CaCO3 nodules in isolated patches on surface (ie variable distribution).

Observation ID: 1

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Agency Name: Agriculture Western Australia

Laboratory Test Results:

Depth	рН	1:5 EC	Exc Ca	hangeab Mg	le Cations K	Exchangeable Na Acidity	CEC	ECEC	ESP
m		dS/m	J			Cmol (+)/kg			%
0 - 0.07	7.2B 7.8H	14B	18.62A	4.46	2.94	0.22		26.24D	
0 - 0.07	7.2B 7.8H	14B	18.62A	4.46	2.94	0.22		26.24D	
0 - 0.04									
0.1 - 0.2	8.1B 8.6H	25B	12.19E	6.37	1.79	1.06	22B	21.41D	4.82
0.1 - 0.2	8.1B 8.6H	25B	12.19E	6.37	1.79	1.06	22B	21.41D	4.82
0.1 - 0.14									
0.3 - 0.4	8.2B 9H	31B	7.2E	8.53	1.9	2.15	21B	19.78D	10.24
0.3 - 0.4	8.2B 9H	31B	7.2E	8.53	1.9	2.15	21B	19.78D	10.24
0.5 - 0.54									
0.6 - 0.7	8.3B 9.3H	33B	5.28E	7.87	1.97	3.02	20B	18.14D	15.10
0.6 - 0.7	8.3B 9.3H	33B	5.28E	7.87	1.97	3.02	20B	18.14D	15.10
0.8 - 0.9	8.4B 9.6H	44B	3.06E	6.33	1.63	5.15	17B	16.17D	30.29
0.8 - 0.9	8.4B 9.6H	44B	3.06E	6.33	1.63	5.15	17B	16.17D	30.29

1

Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Partic GV CS		Analysis Silt
m	%	Clay %	mg/kg	%	%	%	Mg/m3		%	
0 - 0.07 12.6		1.5D		150B	0.14E					24.9
0 - 0.07 12.6		1.5D		150B	0.14E					24.9
0 - 0.04							1.49			
0.1 - 0.2 23.5	5C	0.56D		77B	0.048E					24
0.1 - 0.2	5C	0.56D		77B	0.048E					24
23.5							4.40			
0.1 - 0.14 0.3 - 0.4	9C			69B			1.12			23.4
27.6	30			030						25.4
0.3 - 0.4	9C			69B						23.4
27.6										
0.5 - 0.54							1.23			
0.6 - 0.7	16C			50B						20.9
29.8	400			50B						00.0
0.6 - 0.7 29.8	16C			50B						20.9
29.8 0.8 - 0.9	30C			37B						18.6
30.5	300			010						10.0
0.8 - 0.9 30.5	30C			37B						18.6

Laboratory Analyses Completed for this profile

Calcium chloride extractable boron - manual colour

15_NR_BSa

15_NR_CMR 15A1_CA

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

for soluble

salts
Exchangeable bases (CEC) - 1M ammonium chloride at pH 7.0, no pretreatment for soluble salts 15A1_CEC

Project Code: COR Site ID: 0180 Observation 1 **Agency Name:** Agriculture Western Australia 15A1 K Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment for soluble Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment 15A1_MG for soluble 15A1_NA Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment for soluble 15C1_CA Exchangeable bases (Ca2+,Mg2+,Na+,K+) - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for 15C1_CEC 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_K 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 Exchangeable bases Base saturation percentage (BSP) - Auto calculated from available using 15L1_a Sum of Cations and measured clay Exchangeable sodium percentage (ESP) - Auto calculated from available using CEC 15N1 a Exchangeable sodium percentage (ESP) - Auto calculated from available using Sum of Cations 15N1_b 19B_NR Calcium Carbonate (CaCO3) - Not recorded 3_NR Electrical conductivity or soluble salts - Not recorded 4 NR pH of soil - Not recorded 4B_AL_NR Aluminium in 1:5 soil/0.01M calcium chloride extract - method not recorded pH of 1:5 soil/0.01M calcium chloride extract - direct 4B1 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 1000 to 2000u particle size analysis, (method not recorded) P10_1m2m 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 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)

300 to 600u particle size analysis, (method not recorded)

Bulk density - Not recorded

600 to 1000u particle size analysis, (method not recorded)

Corrigin land resources survey

Project Name:

P10300 600

P106001000

P3A_NR