Project Name: Dandaragan land resources survey

Project Code: DAN Site ID: 0855 Observation ID: 1

Agency Name: Agriculture Western Australia

Site Information

Desc. By: B. Purdie Locality:

Date Desc.:17/05/96Elevation:No DataMap Ref.:Rainfall:No DataNorthing/Long.:6607676 AMG zone: 50Runoff:No Data

Northing/Long.: 6607676 AMG zone: 50 Runoff: No Data
Easting/Lat.: 380013 Datum: AGD84 Drainage: Rapidly drained

Geology

 Exposure Type:
 Soil pit
 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:Mid-slopeRelief:No DataElem. Type:HillslopeSlope Category:No DataSlope:6 %Aspect:0 degrees

Surface Soil Condition Soft

Erosion:

Soil Classification

Australian Soil Classification:Mapping Unit:N/ABasic Petroferric Leptic TenosolPrincipal Profile Form:N/AASC Confidence:Great Soil Group:N/A

All necessary analytical data are available.

<u>Site</u> Complete clearing. Pasture, native or improved, cultivated at some stage

Vegetation: Surface Coarse

Profile

A11p 0 - 0.1 m Dark brown (7.5YR3/3-Moist); ; Loamy fine sand; Single grain grade of structure; Very weak consistence:

Field pH 5.4 (pH meter); Clear, Smooth change to -

A12 0.1 - 0.25 m

Very weak

 $\hbox{Dark reddish brown (2.5YR3/4-Moist); ; Clayey fine sand; Single grain grade of structure; } \\$

 $consistence; 0-2\%, fine\ gravelly, 2-6mm,\ subrounded,\ Ironstone,\ coarse\ fragments;\ 0-2\%,$

medium

gravelly, 6-20mm, subrounded, Ironstone, coarse fragments; 20-50%, stony, 200-600mm,

subrounded,

Ironstone, coarse fragments; Field pH 6 (pH meter); Gradual, Wavy change to -

2B21cm 0.25 - 0.8 m

10%, fine

20mm.

 $Reddish\ brown\ (2.5YR4/4-Moist);\ ;\ Single\ grain\ grade\ of\ structure;\ Rigid\ consistence;\ 2-thermal consistence;\ 2-t$

gravelly, 2-6mm, subrounded, Ironstone, coarse fragments; 20-50%, medium gravelly, 6-

.

subrounded, Ironstone, coarse fragments; 50-90%, stony, 200-600mm, subrounded,

Ironstone, coarse

fragments; Field pH 6.1 (pH meter); Clear, Wavy change to -

3B22c 0.8 - 1 m

gravelly, 2subrounded. Red (2.5YR4/6-Moist);; Single grain grade of structure; Weak consistence; 50-90%, fine

6mm, subrounded, Ironstone, coarse fragments; 20-50%, medium gravelly, 6-20mm,

Ironstone, coarse fragments; Field pH 6.6 (pH meter); Clear, Irregular change to -

3B23c 1 - 2.2 m

20-50%, fine

20mm,

Strong brown (7.5YR5/6-Moist); ; Single grain grade of structure; Very firm consistence;

gravelly, 2-6mm, subrounded, Ironstone, coarse fragments; 10-20%, medium gravelly, 6-

subrounded, Ironstone, coarse fragments; 2-10%, coarse gravelly, 20-60mm,

subrounded, Ironstone,

coarse fragments; Field pH 6.8 (pH meter);

Morphological Notes

2B21cm Weakly clayey fine sandy gravel--horizon consists of 80% cemented ironstone
3B22c Weakly clayey fine sandy gravel
3B23c Weakly clayey fine sandy gravel

Observation Notes

Site Notes

all gravel is smooth-faced

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Laboratory Test Results:

Depth	1:5 EC	Exchangeable Cations				Exchangeable	CEC	ECEC	ESP	
			Ca	Mg	K	Na	Acidity			
m		dS/m				Cmol	(+)/kg			%
0 - 0.1	5B 5.6H	12B	3.6H	0.47	0.11	0.08	0.12J		4.26D	
0 - 0.1	5B 5.6H	12B	3.6H	0.47	0.11	0.08	0.12J		4.26D	
0.1 - 0.25	5B 5.8H	3B	1.34H	0.22	0.05	0.02	0.16J		1.63D	
0.1 - 0.25	5B 5.8H	3B	1.34H	0.22	0.05	0.02	0.16J		1.63D	
0.25 - 0.8	5.3B 6.3H	2B	0.82H	0.27	0.08	0.04	0.03J		1.21D	
0.25 - 0.8	5.3B 6.3H	2B	0.82H	0.27	0.08	0.04	0.03J		1.21D	
0.8 - 1 1 - 1.6										
1.6 - 2.2	5.7B 6.5H	1B	0.37A	0.34	<0.02	0.03			0.75D	
1.6 - 2.2	5.7B 6.5H	1B	0.37A	0.34	<0.02	0.03			0.75D	

Depth	CaCO3	Organic C Clay	Avail. P	Total P	Total N	Total K	Bulk Density	GV	Particle CS	Size FS	Analysis Silt
m	%	%	mg/kg	%	%	%	Mg/m3			%	
0 - 0.1 4.1		1.47D		370B	0.107E						1.8
0 - 0.1 4.1		1.47D		370B	0.107E						1.8
0.1 - 0.25 5.1		0.57D		300B	0.038E						1.3
0.1 - 0.25 5.1		0.57D		300B	0.038E						1.3
0.25 - 0.8 6.6		0.24D		233B	0.021E						1.3
0.25 - 0.8 6.6 0.8 - 1 1 - 1.6		0.24D		233B	0.021E						1.3
1.6 - 2.2 5.9		0.11D		291B	0.01E						1.6
1.6 - 2.2 5.9		0.11D		291B	0.01E						1.6

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	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 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	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

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Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts 15E1 NA

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

18A1_NR Bicarbonate-extractable potassium (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

Total Phosphorus (ppm) - semimicro kjeldahl, automated colour Bicarbonate-extractable phosphorus (not recorded) 9A3

9B_NR

Anion storage capacity 9H1

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)

Clay (%) - Not recorded
Sand (%) - Not recorded arithmetic difference, auto generated P10_NR_C P10_NR_Saa

P10_NR_Z Silt (%) - Not recorded

P10106_150 P10150_180 106 to 150u particle size analysis, (method not recorded) 150 to 180u particle size analysis, (method not recorded) 180 to 300u particle size analysis, (method not recorded) P10180_300 P10300_600 300 to 600u particle size analysis, (method not recorded) P106001000 600 to 1000u particle size analysis, (method not recorded)