Project Name: Regional

Project Code: REG Site ID: T187 Observation ID: 1

Agency Name: CSIRO Division of Soils (QLD)

Site Information

Desc. By: G.G. Murtha Locality: On track into Gumlow holding .8KM west of Bohle

River from rubbish tip:

Date Desc.: 23/11/70 Elevation: 31 metres Map Ref.: Sheet No.: 8259 1:100000 Rainfall: 1020 Northing/Long.: 146.70222222222 Runoff: Slow Easting/Lat.: -19.340277777778 Drainage: Poorly drained

Geology

ExposureType: Undisturbed soil core Conf. Sub. is Parent. Mat.: No Data Geol. Ref.: Qa Substrate Material: No Data

Land Form

Rel/Slope Class:Level plain <9m <1%</th>Pattern Type:Alluvial plainMorph. Type:FlatRelief:0 metresElem. Type:PlainSlope Category:LevelSlope:0 %Aspect:No Data

Surface Soil Condition (dry): Hardsetting

Erosion:

Soil Classification

Australian Soil Classification:Mapping Unit:N/AVertic Subnatric Grey SodosolPrincipal Profile Form:Dy2.33ASC Confidence:Great Soil Group:Solodic soil

All necessary analytical data are available.

<u>Site Disturbance:</u> No effective disturbance other than grazing by hoofed animals

Vegetation: Low Strata - Tussock grass, 0.51-1m, Mid-dense. *Species includes - None recorded

Mid Strata - Tree, 1.01-3m, Very sparse. *Species includes - Grevillea striata

Tall Strata - Tree, 6.01-12m, Very sparse. *Species includes - Eucalyptus grandifolia, Eucalyptus alba,

Eucalyptus

drepanophylla

Surface Coarse Fragments: No surface coarse fragments

Profile Morphology

A1/A2	0 - 0.1 m	Dark grey (10YR4/1-Moist); , 10YR33; , 10YR71; Clay loam; Weak grade of structure, 5-10 mm, Angular blocky; Moderately moist; Firm consistence; 2-10%, Quartz, coarse fragments; Common, medium (2-5mm) roots;
A2	0.1 - 0.14 m	Dark grey (10YR4/1-Moist); , 10YR33; , 10YR71; Clay loam; Weak grade of structure, 5-10 mm, Angular blocky; Moderately moist; Firm consistence; 2-10%, Quartz, coarse fragments; Abrupt change to -
B2	0.14 - 0.2 m	Dark grey (10YR4/1-Moist); ; Heavy clay; Moderate grade of structure, 10-20 mm, Angular blocky; Dry; Very strong consistence; 2-10%, Quartz, coarse fragments; Very few (0 - 2 %), Ferromanganiferous, Fine (0 - 2 mm), Nodules;
B2	0.2 - 0.3 m	Dark grey (10YR4/1-Moist); ; Heavy clay; Strong grade of structure, 10-20 mm, Angular blocky; Dry; Very strong consistence; 2-10%, Quartz, coarse fragments; Very few (0 - 2 %), Ferromanganiferous, Fine (0 - 2 mm), Nodules; Very few (0 - 2 %), Calcareous, Coarse (6 - 20 mm), Concretions;
B2	0.3 - 0.45 m	Very dark greyish brown (10YR3/2-Moist); ; Heavy clay; Strong grade of structure, 20-50 mm, Angular blocky; Dry; Very strong consistence; 2-10%, Quartz, coarse fragments; Very few (0 - 2%), Ferromanganiferous, Fine (0 - 2 mm), Nodules; Very few (0 - 2%), Calcareous, Coarse (6 - 20 mm), Concretions;
B2	0.45 - 0.6 m	Dark grey (10YR4/1-Moist); ; Heavy clay; Strong grade of structure, 20-50 mm, Angular blocky; Dry; Very strong consistence; 2-10%, Quartz, coarse fragments; Very few (0 - 2%), Ferromanganiferous, Fine (0 - 2 mm), Nodules; Few (2 - 10%), Calcareous, Coarse (6 - 20 mm), Concretions;
B2	0.6 - 0.9 m	Dark grey (10YR4/1-Moist); ; Heavy clay; Strong grade of structure, 20-50 mm, Angular blocky; Dry; Very strong consistence; 2-10%, medium gravelly, 6-20mm, rounded, Quartz, coarse fragments; Very few (0 - 2 %), Ferromanganiferous, Fine (0 - 2 mm), Nodules; Very few (0 - 2 %),

Calcareous, Medium (2 -6 mm), Concretions; Diffuse change to -

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B2 0.9 - 1.2 m	Dark greyish brown (10YR4/2-Moist); ; Heavy clay; Moderate grade of structure, 20-50 mm, Angular blocky; Dry; Very strong consistence; 2-10%, medium gravelly, 6-20mm, rounded, Quartz, coarse fragments; Very few (0 - 2 %), Ferromanganiferous, Fine (0 - 2 mm), Nodules; Very few (0 - 2 %), Calcareous, Medium (2 -6 mm), Concretions; Diffuse change to -
BC 1.2 - 1.5 m	Pale brown (10YR6/3-Moist); ; Medium clay; Strong grade of structure, 2-5 mm, Angular blocky; Moderately moist; Firm consistence; 0-2%, medium gravelly, 6-20mm, Quartz, coarse fragments; Very few (0 - 2 %), Ferromanganiferous, Fine (0 - 2 mm), Nodules;
1.5 - 1.8 m	Greyish brown (2.5Y5/2-Moist); ; Medium clay; Strong grade of structure, 2-5 mm, Angular blocky; Firm consistence; 2-10%, Quartz, coarse fragments; Very few (0 - 2 %), Ferromanganiferous, Fine (0 - 2 mm), Nodules; Very few (0 - 2 %), Calcareous, Medium (2 -6 mm), Concretions;
1.8 - 2.1 m	Greyish brown (2.5Y5/2-Moist); ; Medium clay; Strong grade of structure, 2-5 mm, Angular blocky; Very firm consistence; 0-2%, Quartz, coarse fragments; Very few (0 - 2 %), Ferromanganiferous, Fine (0 - 2 mm), Nodules; Very few (0 - 2 %), Gypseous, Medium (2 -6 mm), Concretions;
2.1 - 2.5 m	Greyish brown (10YR5/2-Moist); , 7.5YR54, 10-20% , 0-5mm, Faint; , 10-20% , 0-5mm, Faint; Medium clay; Strong grade of structure, 5-10 mm, Angular blocky; Very firm consistence; 0-2%, Quartz, coarse fragments;
C 2.5 - 3 m	Greyish brown (10YR5/2-Moist); , 10YR58, 20-50%, , 5-15mm, Distinct; , 20-50%, , 5-15mm, Distinct; Sandy medium clay (Light); Weak grade of structure, 5-10 mm, Angular blocky; Moderately moist; Very firm consistence; 0-2%, Quartz, coarse fragments; Very few (0 - 2 %), Gypseous, Medium (2 -6 mm), Concretions;

Morphological Notes

<u>Observation Notes</u> 45-60CM SOME COARSE SLICKENSIDES:120-150CM SOME DIFFUSE MN:150-210CM MUCH DIFFUSE MN:

Site Notes

BOHLE RIVER

Regional REG Site ID: T187 CSIRO Division of Soils (QLD) Observation ID: 1

Project Name: Project Code: Agency Name:

Depth	pН	1:5 EC		hangeable	Cations K		changeable	CEC	ECEC	ESP
m		dS/m	Ca	Mg	N.	Na Cmol (+)/	Acidity kg			%
0 - 0.1 0.1 - 0.14 0.14 - 0.2 0.2 - 0.3 0.3 - 0.45 0.45 - 0.6 0.6 - 0.9 0.9 - 1.2 1.2 - 1.5 1.5 - 1.8 1.8 - 2.1 2.1 - 2.5 2.5 - 3	6A 6.3A 6.7A 7.5A 8.7A 9.2A 8.8A 8.3A 8.2A 8.1A 8.7A	0.032A 0.041A 0.053A 0.125A 0.214A 0.309A 0.541A 1.07A 0.86A 0.702A 0.75A 0.672A 0.8A	15.3B	8.2	0.15	1.6		21.9C		7.31
Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Partic GV C		Analysis Silt Clay
m	%	%	mg/kg	%	%	%	Mg/m3		%	,
0 - 0.1		0.89D	3A 6B		0.0	8A				
0.1 - 0.14 0.14 - 0.2 0.2 - 0.3 0.3 - 0.45 0.45 - 0.6 0.6 - 0.9 0.9 - 1.2 1.2 - 1.5 1.5 - 1.8 1.8 - 2.1 2.1 - 2.5 2.5 - 3		0.89D	6B		0.0	8A				
Depth COLE Gravimetric/Volumetric Water					K sat	K unsat				
m		Sat.	0.05 Bar		0.5 Bar g - m3/m	1 Bar 3	5 Bar 15	Bar ı	nm/h	mm/h
0 - 0.1 0.1 - 0.14 0.14 - 0.2 0.2 - 0.3 0.3 - 0.45 0.45 - 0.6 0.6 - 0.9 0.9 - 1.2 1.2 - 1.5 1.5 - 1.8 1.8 - 2.1 2.1 - 2.5 2.5 - 3										

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Laboratory Analyses Completed for this profile

13C1_AL Citrate/dithionite-extractable iron, aluminium, Manganese and Silicon

15A2_CA Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, pretreatment for

soluble salts

15A2_K

15A2_MG

15A2_MG

15A2_NA

15D1_CEC

Exchangeable bases- 1M ammonium chloride at pH 7.0, pretreatment for soluble salts
Exchangeable bases- 1M ammonium chloride at pH 7.0, pretreatment for soluble salts
Exchangeable bases- 1M ammonium chloride at pH 7.0, pretreatment for soluble salts
CEC - 1M ammonium acetate at pH 7.0, pretreatment for soluble salts; manual leach

2A1 Air-dry moisture content
3A1 EC of 1:5 soil/water extract
4A1 pH of 1:5 soil/water suspension

6A1_UC
Organic carbon (%) - Uncorrected Walkley and Black method
7A2
Total nitrogen - semimicro Kjeldahl , automated colour
9B_9C
Available P (mg/kg) - Bicarbonate P - 0.5M NaHCO3 extractable

9G_BSES Available P (mg/kg) - Acid P - 0.005M H2SO4 (BSES)