Regional **Project Name:** 

**Project Code:** REG Site ID: T280 Observation ID: 1

**Agency Name: CSIRO Division of Soils (QLD)** 

**Site Information** 

Locality: G.G. Murtha At south end of Mundoo air strip:

Desc. By: Date Desc.: Elevation: 02/07/80 15 metres Sheet No.: 8162 1:100000 Map Ref.: Rainfall: 3500 Northing/Long.: 146.016666666667 Runoff: No runoff Easting/Lat.: -17.5666666666667 Drainage: Well drained

Geology

ExposureType: Undisturbed soil core Conf. Sub. is Parent. Mat.: No Data

Geol. Ref.: **Substrate Material:** Undisturbed soil core, Unconsolidated QΑ

material (unidentified)

**Land Form** 

Rel/Slope Class: Gently undulating plains <9m Pattern Type: Alluvial fan

1-3%

Morph. Type: Upper-slope Relief: 3 metres

Slope Category: Very gently sloped Elem. Type: Fan

Slope: 1 % Aspect: No Data

Surface Soil Condition (dry):

**Erosion:** 

**Soil Classification** 

**Australian Soil Classification:** N/A **Mapping Unit:** Haplic Dystrophic Red Ferrosol Principal Profile Form: Gn3.11 **ASC Confidence: Great Soil Group:** Krasnozem

All necessary analytical data are available.

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

**Vegetation:** 

Surface Coarse Fragments: No surface coarse fragments

Pr	ofile	Morp	hol	loav

1 101110	MO PHOLOGY	
A11	0 - 0.1 m	Dark reddish brown (5YR3/4-Moist); ; Clay loam; Strong grade of structure, 5-10 mm, Cast; Moist; Weak consistence; Few (2 - 10 %), Ferromanganiferous, Coarse (6 - 20 mm), Nodules; Gradual change to -
A12	0.1 - 0.2 m	Reddish brown (5YR4/4-Moist); ; Clay loam; Strong grade of structure, 5-10 mm, Cast; Moist; Weak consistence; Few (2 - 10 %), Ferromanganiferous, Coarse (6 - 20 mm), Nodules; Diffuse change to -
B11	0.2 - 0.3 m	Yellowish red (5YR4/6-Moist); ; Clay loam; Massive grade of structure; Moist; Weak consistence; Few (2 - 10 %), Ferromanganiferous, Medium (2 -6 mm), Nodules;
B11	0.3 - 0.6 m	Dark red (2.5YR3/5-Moist); ; Light clay (Light); Massive grade of structure; Moist; Weak consistence; Few (2 - 10 %), Ferromanganiferous, Medium (2 -6 mm), Nodules; Diffuse change to -
B12	0.6 - 0.9 m	Dark red (2.5YR3/6-Moist); ; Light clay; Massive grade of structure; Moist; Weak consistence; Few (2 - 10 %), Ferromanganiferous, Medium (2 -6 mm), Nodules;
B12	0.9 - 1.2 m	Dark red (2.5YR3/6-Moist); ; Light clay; Massive grade of structure; Moist; Weak consistence; Few (2 - 10 %), Ferromanganiferous, Medium (2 -6 mm), Nodules; Diffuse change to -
B21	1.2 - 1.5 m	Dark red (2.5YR3/6-Moist); , 7.5YR54, 2-10% , 5-15mm, Distinct; , 2-10% , 5-15mm, Distinct; Light medium clay; Moderate grade of structure, 5-10 mm, Angular blocky; Moist; Weak consistence; 2-10%, coarse gravelly, 20-60mm, subrounded, Metamorphic rock (unidentified), coarse fragments; Few (2 - 10 %), Ferromanganiferous, Coarse (6 - 20 mm), Nodules;
B21	1.5 - 1.8 m	Dark red (2.5YR3/6-Moist); , 7.5YR54, 2-10% , 5-15mm, Distinct; , 2-10% , 5-15mm, Distinct; Light medium clay; Moderate grade of structure, 5-10 mm, Angular blocky; Moist; Weak consistence; 2-10%, coarse gravelly, 20-60mm, subrounded, Metamorphic rock (unidentified), coarse fragments; Few (2 - 10 %), Ferromanganiferous, Coarse (6 - 20 mm), Nodules;
	1.8 - 2.1 m	Yellowish red (5YR4/6-Moist); ; Medium clay; Moderate grade of structure, 5-10 mm, Angular blocky; Weak consistence;

**Project Name:** Regional

**Project Code:** REG Site ID: T280 Observation ID: 1

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> Brown (7.5YR4/4-Moist); , 5YR44, 10-20% , 5-15mm, Faint; , 10-20% , 5-15mm, Faint; Medium clay; Moderate grade of structure, 5-10 mm, Angular blocky; Very firm consistence; Very few (0 -2.1 - 2.5 m

2 %), Ferromanganiferous, Coarse (6 - 20 mm), Nodules;

2.5 - 3 m Brown (7.5YR4/4-Moist); , 5YR44, 10-20% , 5-15mm, Faint; , 10-20% , 5-15mm, Faint; Medium clay; Moderate grade of structure, 5-10 mm, Angular blocky; Very firm consistence; Very few (0 -

2 %), Ferromanganiferous, Coarse (6 - 20 mm), Nodules;

Strong brown (7.5YR5/6-Moist); , 2.5YR46, 2-10% , 5-15mm, Distinct; , 2-10% , 5-15mm, Distinct; Medium clay; Moderate grade of structure, 5-10 mm, Angular blocky; Very firm 3 - 3.5 m

consistence;

Strong brown (7.5YR5/6-Moist); , 2.5YR46, 2-10% , 5-15mm, Distinct; , 2-10% , 5-15mm, 3.5 - 4 m

Distinct; Medium clay; Moderate grade of structure, 5-10 mm, Angular blocky; Very firm

consistence;

## **Morphological Notes**

## **Observation Notes**

FINE QZ VISIBLE THROUGHOUT MOST OF PROFILE

## **Site Notes**

MUNDOO

Site ID: T280 Observation ID: 1

Project Name: Project Code: Agency Name: Regional
REG Site ID: T28
CSIRO Division of Soils (QLD)

Depth	рН	1:5 EC		hangeable				angeable	CEC		ECEC	E	SP
m		dS/m	Ca	Mg	K	Na Cmol		cidity				%	, 0
0 - 0.1	4.9A	0.113A	0.31H	0.16	0.1	0.06		1.8F	2.4A 5.3C		2.4F		50 13
0.1 - 0.2 0.2 - 0.3	5.4A 5.5A	0.05A 0.041A	0.17H	<0.01	0.08	0.05		0.8F	1.8A	<b>L</b>	1.1F		78
0.3 - 0.6	5.8A	0.041A							1C			5.	00
0.6 - 0.9 0.9 - 1.2	5.5A 5.5A	0.029A 0.023A		<0.01	0.05	0.03		0.4F	2.80	;	0.7F	1.	07
1.2 - 1.5 1.5 - 1.8	5.5A 5.7A	0.02A 0.032A											
1.8 - 2.1 2.1 - 2.5	5.5A 5.9A	0.017A 0.023A											
2.5 - 3 3 - 3.5 3.5 - 4	5.7A 5.6A 5.6A	0.029A 0.017A 0.02A											
Donath	0-000	0	Accell	Tatal	Tatal	<b>T</b> -4		DII-	D	-4:-1-	O: A		
Depth m	CaCO3	Organic C %	Avail. P mg/kg	Total P %	Total N %	Tot K %		Bulk Density Mg/m3	GV	CS	Size A FS %	Silt C	Clay
0 - 0.1		3.59D	21B	0.24A	0.3		04A		2	34A	15	10	41
0.1 - 0.2 0.2 - 0.3 0.3 - 0.6		2.67D 1.74D	19B	0.27A	0.25 0.15		05A		<2 <2 <2	31A 32A 28A	17 16 16	11 10 11	42 42 45
0.6 - 0.9 0.9 - 1.2		0.37D	19B	0.22A	0.32	2A 0.	03A		4	28A	16	12	45
1.2 - 1.5 1.5 - 1.8									10	35A	15	10	39
1.8 - 2.1 2.1 - 2.5 2.5 - 3									2	26A 29A	14 16	23 24	38 31
3 - 3.5 3.5 - 4									2	23A	10	21	46
Depth	COLE Gravimetric/Volumetric Water Contents							K sa	ıt İ	K unsat			
m	<u>-</u>	Sat.	0.05 Bar	0.1 Bar	0.5 Bar g - m3/m3	1 Bar			Bar	mm/		mm/h	

<sup>0 - 0.1</sup> 0.1 - 0.2 0.2 - 0.3

<sup>0.2 - 0.3</sup> 0.3 - 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 3 - 3.5 3.5 - 4

Project Name: Project Code: Agency Name: Regional
REG Site ID: T28
CSIRO Division of Soils (QLD) T280 Observation ID: 1

Project Name: Regional

Project Code: REG Site ID: T280 Observation ID: 1

Agency Name: CSIRO Division of Soils (QLD)

## **Laboratory Analyses Completed for this profile**

10A1 Total sulfur - X-ray fluorescence

13C1\_FE Citrate/dithionite-extractable iron, aluminium, Manganese and Silicon

15A2\_CEC Exchangeable bases- 1M ammonium chloride at pH 7.0, pretreatment for soluble salts 15D1\_CEC CEC - 1M ammonium acetate at pH 7.0, pretreatment for soluble salts; manual leach

15E1\_CA
15E1\_K
15E1\_MG
15E1\_MG
15E1\_NA
15E1\_NA
15E1\_NA
15E2\_C
Exchangeable bases (Ca2+,Mg2+,Na+,K+) by compulsive exchange, no pretreatment for soluble salts
15E1\_NA
Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15E1\_NA
Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15G\_C
Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15G\_C
Exchangeable bases (Ca2+,Mg2+,Na+,K+) by compulsive exchange, no pretreatment for soluble salts
15E1\_NA
Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15E1\_NA
Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15E1\_NA
Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15E1\_NA
Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15E1\_NA
Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15E1\_NA
Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15E1\_NA
Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15E1\_NA
Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts

titration to pH 8.4

15J1 Effective CEC

17A1 Total potassium - X-ray fluorescence

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 TA2 Total nitrogen - semimicro Kjeldahl , automated colour

9A1 Total phosphorus - X-ray fluorescence

9G\_BSES Available P (mg/kg) - Acid P - 0.005M H2SO4 (BSES)

MIN\_EC Exchange Capacity - Minerology

P10\_CF\_C Clay (%) - Coventry and Fett pipette method

P10\_CF\_CS
P10\_CF\_FS
P10\_CF\_Z
Coarse sand (%) - Coventry and Fett pipette method
P10\_CF\_Z
Silt (%) - Coventry and Fett pipette method
Silt (%) - Coventry and Fett pipette method

P10\_GRAV Gravel (%)

XRD\_C\_Gb Gibbsite - X-Ray Diffraction XRD\_C\_Gt Geothite - X-Ray Diffraction

XRD\_C\_K2O K2O - X-Ray Diffraction or Clay Fraction (air dry)

XRD\_C\_Ka Kaolin - X-Ray Diffraction