**Project Name:** Regional

**Project Code:** REG Site ID: T381 Observation ID: 1

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

**Site Information** 

M.D. Laffan Locality:

Desc. By: Date Desc.: Elevation: 320 metres 26/09/83 Sheet No.: 8063 1:100000 Map Ref.: Rainfall: 1800 Northing/Long.: 145.7133333333333 Runoff: No Data Easting/Lat.: -17.15833333333333 Drainage: Rapidly drained

**Geology** 

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

**Land Form** 

Rel/Slope Class: Very steep hills 90-300m 56-Pattern Type: No Data

100%

Mid-slope Morph. Type: Relief: No Data Slope Category: Elem. Type: Hillslope No Data Slope: 60 % Aspect: 90 degrees

Surface Soil Condition (dry):

**Erosion:** 

**Soil Classification** 

**Australian Soil Classification: Mapping Unit:** N/A Basic Paralithic Bleached Tenosol Uc2.21 Principal Profile Form: **ASC Confidence: Great Soil Group:** Siliceous sand

All necessary analytical data are available.

Site Disturbance: No effective disturbance. Natural

Vegetation:

Tall Strata - Tree, , . \*Species includes - None Recorded

#### **Surface Coarse Fragments:**

Profile	Morphology	
Ā	0 - 0.1 m	Very dark brown (10YR2/2-Moist); Mottles; Mottles; Loamy sand; Weak grade of structure, 2-5 mm, Subangular blocky; Sandy (grains prominent) fabric; Dry; Very weak consistence; 20-50%, fine gravelly, 2-6mm, angular, reoriented, Sand, coarse fragments; Common, fine (1-2mm) roots; Gradual change to -
AB	0.1 - 0.2 m	Dark brown (10YR3/3-Moist); Very pale brown (10YR7/3-Dry); Mottles; Mottles; Loamy coarse sand; Weak grade of structure, 2-5 mm, Subangular blocky; Sandy (grains prominent) fabric; Dry; Very weak consistence; 10-20%, fine gravelly, 2-6mm, angular, reoriented, Sand, coarse fragments; Common, fine (1-2mm) roots; Gradual change to -
B1	0.2 - 0.3 m	Yellowish brown (10YR5/4-Moist); Mottles; Mottles; Loamy sand; Weak grade of structure, 2-5 mm, Subangular blocky; Sandy (grains prominent) fabric; Dry; Very weak consistence; 10-20%, fine gravelly, 2-6mm, angular, reoriented, Sand, coarse fragments; Few, fine (1-2mm) roots;
B1	0.3 - 0.6 m	Yellowish brown (10YR5/4-Moist); Mottles; Mottles; Loamy sand; Weak grade of structure, 2-5 mm, Subangular blocky; Sandy (grains prominent) fabric; Dry; Very weak consistence; 10-20%, fine gravelly, 2-6mm, angular, reoriented, Sand, coarse fragments; Few, fine (1-2mm) roots; Diffuse change to -
C11	0.6 - 0.9 m	Light yellowish brown (2.5Y6/4-Moist); Mottles; Mottles; Loamy sand; Single grain grade of structure; Sandy (grains prominent) fabric; Dry; Loose consistence; 20-50%, fine gravelly, 2-6mm, angular, reoriented, Sand, coarse fragments; Diffuse change to -
C12	0.9 - 1.2 m	Pale yellow (2.5Y7/4-Moist); Mottles; Mottles; Loamy sand; Single grain grade of structure; Sandy (grains prominent) fabric; Dry; Loose consistence; 20-50%, fine gravelly, 2-6mm, angular, reoriented, Sand, coarse fragments; Few cutans, <10% of ped faces or walls coated, faint;
C12	1.2 - 1.5 m	Pale yellow (2.5Y7/4-Moist); Mottles; Mottles; Loamy sand; Single grain grade of structure; Sandy (grains prominent) fabric; Dry; Loose consistence; 20-50%, fine gravelly, 2-6mm, angular, reoriented, Sand, coarse fragments; Few cutans, <10% of ped faces or walls coated, faint;

### **Morphological Notes**

# **Observation Notes**

RAINFOREST 16F:PARENT MATERIAL WEAKLY WEATHERED GRANITE:85-100CM APPEARS DISAGGREGATED **GRANITE ROCK:** 

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Site Notes

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# **Laboratory Test Results:**

Depth	рН	1:5 EC		hangeable			changeable	CEC	EC	CEC	ESP
m		dS/m	Ca	Mg K		Na Acidity Cmol (+)/kg					%
0 - 0.1 0.1 - 0.2	6.5A 6.3A	0.04A 0.044A	6.4H	1.1	0.3	0.09	<0.05F	5.2A	7	.9F	1.73
0.2 - 0.3 0.3 - 0.6 0.6 - 0.9 0.9 - 1.2 1.2 - 1.5	6.1A 6.5A 6.4A 6.3A 6.2A	0.035A 0.011A 0.008A 0.008A 0.014A	0.89H	1.2	0.28	0.07	<0.05F	2.3A	2	.5F	3.04
Depth m	CaCO3	Organic C %	Avail. P mg/kg	Total P %	Total N %	Total K %	Bulk Density Mg/m3	Par GV	CS F	ze Ana S S	lysis ilt Clay
0 - 0.1 0.1 - 0.2		2.53C	4B	0.012A	0.1	A 4.48A	<b>\</b>	55	50A	21	16 13
0.2 - 0.3 0.3 - 0.6 0.6 - 0.9		0.24C		0.006A	0.03	3A 5.28A	1	35	55A	21	16 8
0.9 - 1.2 1.2 - 1.5								42	60A	21	13 7
Depth	COLE										
m		Sat.	0.05 Bar	0.1 Bar g/g	0.5 Bar j - m3/m3	1 Bar 3	5 Bar 15	Dai	mm/h	m	m/h

0 - 0.1 0.1 - 0.2 0.2 - 0.3 0.3 - 0.6 0.6 - 0.9 0.9 - 1.2 1.2 - 1.5

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

10A1 Total sulfur - X-ray fluorescence

Total element - Cu(mg/kg) - HF/HClO4 Digest 12\_HF\_CU 12\_HF\_FE 12\_HF\_MN Total element - Fe(%) - HF/HClO4 Digest Total element - Mn(mg/kg) - HF/HCIO4 Digest 12\_HF\_ZN 15A2\_CEC Total element - Zn(mg/kg) - HF/HClO4 Digest

Exchangeable bases- 1M ammonium chloride at pH 7.0, pretreatment for soluble salts

15E1\_CA Exchangeable bases (Ca2+,Mg2+,Na+,K+) by compulsive exchange, no pretreatment for soluble 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\_NA Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts 15G\_C Exchange acidity (hydrogen and aluminium) - meq per 100g of soil - By 1M KCl exch. acidity by

titration to pH 8.4

Effective CEC 15J1

17A1 Total potassium - X-ray fluorescence

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

6B3 Total organic carbon - high frequency induction furnace, infrared

7A2 Total nitrogen - semimicro Kjeldahl , automated colour 9A1 Total phosphorus - X-ray fluorescence 9G BSES Available P (mg/kg) - Acid P - 0.005M H2SO4 (BSES)

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

P10\_GRAV Gravel (%)