Project Name: FLI

Project Code: FLI Site ID: H57 Observation ID: 1

Agency Name: CSIRO Division of Soils (TAS)

**Site Information** 

Desc. By: K.D. Nicholls Locality: 4km ENE of Ranga near site of hole 64:on dune crest

with east west trend:

Easting/Lat.: -40.15 Drainage: Imperfectly drained

Geology

 Exposure Type:
 Soil pit
 Conf. Sub. is Parent. Mat.:
 No Data

 Geol. Ref.:
 No Data
 Substrate Material:
 Sand

**Land Form** 

Rel/Slope Class:Undulating rises 9-30m 3-10%Pattern Type:DunefieldMorph. Type:CrestRelief:No DataElem. Type:DuneSlope Category:No DataSlope:0 %Aspect:0 degrees

Surface Soil Condition (dry):

**Erosion:** 

**Soil Classification** 

Australian Soil Classification:Mapping Unit:N/AParapanic Humosequic Aquic PodosolPrincipal Profile Form:Uc2.33ASC Confidence:Great Soil Group:Humus podzol

Analytical data are incomplete but reasonable confidence. <u>Site Disturbance:</u> No effective disturbance. Natural

Vegetation: Low Strata - Fern, 0.26-0.5m, Mid-dense. \*Species includes - Pteridium esculentum

Tall Strata - Tree, 3.01-6m, Isolated clumps. \*Species includes - None Recorded

## **Surface Coarse Fragments:**

Profile Morphology

PIOIII	e worphology	
A1	0 - 0.15 m	Dark greyish brown (10YR4/2-Moist); ; Sand (Fibric); Single grain grade of structure; Moderately moist; Weak consistence; Abundant
A1	0.15 - 0.28 m	Dark greyish brown (10YR4/2-Moist); ; Sand (Fibric); Single grain grade of structure; Moderately moist; Very weak consistence; Sharp, Wavy change to -
A2	0.34 - 0.58 m	Light grey (2.5Y7/1-Moist); , 10YR62; Sand; Single grain grade of structure; Moderately moist; Loose consistence; Few
B1	0.69 - 0.84 m	Very dark brown (10YR2/2-Moist); , 10YR56; Sandy loam (Fibric); Massive grade of structure; Moderately moist; Organic pan, Strongly cemented, Continuous, Massive; Diffuse change to -
B1	0.96 - 1.27 m	Yellowish brown (10YR5/6-Moist); , 10YR22; Massive grade of structure; Moist; Ortstein, Weakly cemented, Massive;
B2	1.73 - 1.88 m	Pale brown (10YR6/3-Moist); ; Coarse sand; Wet; Loose consistence; 0-2%, Gravel, coarse fragments;
	3.35 - 3.45 m	Greenish grey (5G6/1-Moist); , 10YR52; , 10YR54; Heavy clay; Slightly plastic; Normal plasticity; 2-10%, Gravel, coarse fragments;

## **Morphological Notes**

**Observation Notes** 

**Site Notes** 

**METTA** 

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## **Laboratory Test Results:**

Depth	рН	1:5 EC		nangeable			Exchangeable	CEC		ECEC		ESP
m		dS/m	Ca I	Mg K		Na Acidity Cmol (+)/kg						%
0 - 0.15	4.4A		1.6H	2.2	0.16	0.35	16.3H 22.3E					
0.15 - 0.28	4.1A											
0.34 - 0.58	4.3A											
0.69 - 0.84	4.7A		0.12H	0.15	0.14	0.02	10.9H 16.2E					
0.96 - 1.27	4.6A						-					
1.73 - 1.88	5.6A											
3.35 - 3.45	6.6A						1.4H					
Depth	CaCO3	Organic	Avail.	Total	Total	Total	Bulk	Pa	article	Size	Analysi	s
		C	Р	Р	N	K	Density	GV	CS	FS	•	Clay
m	%	%	mg/kg	%	%	%	Mg/m3			%		
0 - 0.15 0.15 - 0.28		3.75C 1.38C		0.001	0.19	-		0	31B	59	1	4
0.34 - 0.58		0.11C		0.001	0.00	)2A		0	31B	66	<1	3
0.69 - 0.84		0.8C		0.003	)			0	36B	52	<1	10
0.96 - 1.27		0.45C										
1.73 - 1.88								2	73B	24	<1	3
3.35 - 3.45												
Depth	COLE	0.7	Gravimetric/Volumetric Water Contents K sat K unsat 0.05 Bar 0.1 Bar 0.5 Bar 1 Bar 5 Bar 15 Bar									ıt
m		Sat.	0.05 Bar	0.1 Bar g/	0.5 Bar g - m3/m	1 Bar 3	5 Bar 15	вar	mm	/h	mm/h	

0 - 0.15 0.15 - 0.28 0.34 - 0.58 0.69 - 0.84 0.96 - 1.27 1.73 - 1.88 3.35 - 3.45

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

12\_HCL\_FE Total element - Fe(%) - Total acid(HCl) extractable Fe

13C\_C\_FE Extractable Fe(Free) % - Method recorded as C

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

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

15G\_C\_H1 Exchangeable hydrogen - meq per 100g of soil - Hydrogen By back titration of A or B Hydrogen Cation - meq per 100g of soil - 1M KCl Exch. Acidity By titration to pH 8.0

2\_LOI Loss on Ignition (%)
2A1 Air-dry moisture content
4A1 pH of 1:5 soil/water suspension

5A2 Chloride - 1:5 soil/water extract, automated colour

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

7A2 Total nitrogen - semimicro Kjeldahl , automated colour

9A\_HCL Total element - P(%) - By boiling HCl

P10\_GRAV Gravel (%) P10A1\_C Clay (%) - Pipette

P10A1\_CS Coarse sand (%) - Pipette
P10A1\_FS Fine sand (%) - Pipette
P10A1\_Z Silt (%) - Pipette