

**Project Name:** CAS      **Site ID:** NT79      **Observation ID:** 1  
**Project Code:** CAS      **Agency Name:** CSIRO Division of Soils (NT)

#### Site Information

Desc. By:	W.H. Litchfield	Locality:	
Date Desc.:	18/10/60	Elevation:	No Data
Map Ref.:		Rainfall:	0
Northing/Long.:		Runoff:	No Data
Easting/Lat.:		Drainage:	No Data

#### Geology

Exposure Type:	No Data	Conf. Sub. is Parent. Mat.:	No Data
Geol. Ref.:	No Data	Substrate Material:	No Data

#### Land Form

Rel/Slope Class:	No Data	Pattern Type:	No Data
Morph. Type:	No Data	Relief:	No Data
Elem. Type:	No Data	Slope Category:	No Data
Slope:	%	Aspect:	No Data

#### Surface Soil Condition (dry):

##### Erosion:

##### Soil Classification

Australian Soil Classification:		Mapping Unit:	N/A
N/A		Principal Profile Form:	N/A
<b>ASC Confidence:</b>		<b>Great Soil Group:</b>	N/A
Confidence level not specified			

##### Site Disturbance:

##### Vegetation:

##### Surface Coarse Fragments:

##### Profile Morphology

A1	0 - 0.15 m	Yellowish red (5YR3/6-Moist); Red (2.5YR5/6-Dry); ; Loamy sand; Single grain grade of structure; Weak consistence; Very plastic; 0-2%, fine gravelly, 2-6mm, angular, Other, coarse fragments; Field pH 6 (pH meter);
A1	0.15 - 0.23 m	Reddish brown (5YR4/4-Moist); Reddish brown (2.5YR5/4-Dry); ; Clay loam, sandy; Single grain grade of structure; Firm consistence; Very plastic; 2-10%, fine gravelly, 2-6mm, Other, coarse fragments; Field pH 6 (pH meter); Few, fine (1-2mm) roots; Sharp change to -
A2	0.23 - 0.25 m	; Single grain grade of structure; Very firm consistence; Field pH 6.5 (pH meter); Sharp change to -
AB	0.25 - 0.28 m	; Sandy clay loam; Single grain grade of structure; Strong consistence; Slightly plastic; 10-20%, fine gravelly, 2-6mm, Other, coarse fragments; Field pH 7.5 (pH meter);
B2	0.28 - 0.34 m	Red (2.5YR4/6-Moist); Red (2.5YR4/6-Dry); ; Medium clay; Weak grade of structure, Polyhedral; Strong consistence; 10-20%, fine gravelly, 2-6mm, Gravel, coarse fragments; Field pH 7.5 (pH meter); Sharp change to -
B2	0.34 - 0.4 m	Red (2.5YR4/6-Moist); Red (2.5YR4/6-Dry); ; Clayey sand; Weak grade of structure, 20-50 mm, Angular blocky; Strong consistence; Field pH 8 (pH meter);
B2	0.4 - 0.51 m	Red (2.5YR4/6-Moist); Red (2.5YR4/6-Dry); ; Clayey sand; Weak grade of structure, Subangular blocky; Strong consistence; Field pH 8 (pH meter);
B2	0.51 - 0.56 m	Red (2.5YR4/6-Moist); , 2.5YR56, 2-10% ; , 2-10% ; Clayey sand; Single grain grade of structure; Strong consistence; Very few (0 - 2 %), Calcareous, , Soft segregations; Field pH 8 (pH meter);
2D	0.56 - 0.64 m	Red (2.5YR4/6-Moist); Red (2.5YR4/6-Dry); ; Strong consistence; Slightly plastic; Very few (0 - 2 %), Calcareous, , Soft segregations; Field pH 8.5 (pH meter);
2D	0.64 - 0.71 m	Red (2.5YR4/6-Moist); Red (2.5YR4/6-Dry); ; Clay loam; Strong consistence; Very few (0 - 2 %), Calcareous, , Soft segregations; Field pH 8.5 (pH meter); Sharp change to -
2D	0.71 - 0.91 m	Dark red (2.5YR3/6-Moist); Yellowish red (5YR5/6-Dry); ; Clay loam; Weak grade of structure; Strong consistence; Slightly plastic; Field pH 8.5 (pH meter);

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2D	0.96 - 1.07 m	Dark red (2.5YR3/6-Moist); Yellowish red (5YR5/6-Dry); ; Sandy loam; Strong grade of structure, 10-20 mm, Polyhedral; Field pH 8 (pH meter);
3D	1.07 - 1.15 m	Dark red (2.5YR3/6-Moist); Reddish brown (2.5YR5/4-Dry); ; Clay loam; Single grain grade of structure; Strong consistence; Slightly plastic; Field pH 8 (pH meter); Sharp change to -
3A	1.15 - 1.19 m	Reddish brown (2.5YR4/4-Moist); , 5YR54; , 5YR74; Clay loam, sandy; Single grain grade of structure; Strong consistence; Field pH 8 (pH meter); Sharp change to -
3B2	1.19 - 1.29 m	Red (2.5YR4/8-Moist); Red (2.5YR4/6-Dry); ; Light medium clay; Strong grade of structure, Angular blocky; Strong consistence; 0-2%, Gravel, coarse fragments; Very few (0 - 2 %), Calcareous, Medium (2 - 6 mm), Concretions; Field pH 8 (pH meter); Gradual change to -
3B2	1.29 - 1.42 m	Red (2.5YR4/8-Moist); Red (2.5YR4/6-Dry); ; Light medium clay; Moderate grade of structure, Angular blocky; Strong consistence; 0-2%, Gravel, coarse fragments; Very few (0 - 2 %), Calcareous, Medium (2 - 6 mm), Concretions; Field pH 9 (pH meter);
3B2	1.42 - 1.57 m	Red (2.5YR4/8-Moist); Red (2.5YR4/6-Dry); ; Light medium clay; Moderate grade of structure, Angular blocky; Strong consistence; 0-2%, Gravel, coarse fragments; Very few (0 - 2 %), Gypseous, , ; Field pH 9 (pH meter);
3B2	1.65 - 1.91 m	Red (2.5YR4/8-Moist); Red (2.5YR4/6-Dry); ; Light medium clay; Moderate grade of structure, Angular blocky; Strong consistence; 0-2%, Gravel, coarse fragments; Very few (0 - 2 %), Calcareous, Medium (2 - 6 mm), Concretions; Very few (0 - 2 %), Gypseous, , ; Field pH 9 (pH meter);
3B2	1.91 - 2.16 m	Red (2.5YR4/8-Moist); Red (2.5YR4/6-Dry); ; Light medium clay; Moderate grade of structure, Angular blocky; Strong consistence; 0-2%, Gravel, coarse fragments; Few (2 - 10 %), Calcareous, Coarse (6 - 20 mm), Soft segregations; Very few (0 - 2 %), Gypseous, , ; Field pH 9 (pH meter);
3B2	2.16 - 2.89 m	Red (2.5YR4/8-Moist); Red (2.5YR4/6-Dry); ; Light medium clay; Moderate grade of structure, Angular blocky; Strong consistence; 0-2%, Gravel, coarse fragments; Few (2 - 10 %), Calcareous, Coarse (6 - 20 mm), Soft segregations; Very few (0 - 2 %), Gypseous, , ; Field pH 9 (pH meter);

#### Morphological Notes

A1	K1
B2	K1
2D	K1K2
2D	K1K2
2D	K2
2D	K2
3D	K2K3
3A	K3

#### Observation Notes

#### Site Notes

HARRY CREEK 1

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**Laboratory Test Results:**

Depth m	pH	1:5 EC dS/m	Exchangeable Cations			Na Cmol (+)/kg	Exchangeable Acidity	CEC	ECEC	ESP %
			Ca	Mg	K					
0 - 0.15	7H	0.009C								
0.15 - 0.23	7.4H	0.005C								
0.23 - 0.25										
0.25 - 0.28	8.6H	0.012C								
0.28 - 0.34	8.7H	0.025C								
0.34 - 0.4	8.8H	0.026C								
0.4 - 0.51	8.8H	0.03C								
0.51 - 0.56	8.9H	0.035C								
0.56 - 0.64	8.9H	0.062C								
0.64 - 0.71	9H	0.1C								
0.71 - 0.91	8.8H	0.14C								
0.96 - 1.07	8.4H	0.197C								
1.07 - 1.15	8.4H	0.17C								
1.15 - 1.19	8.9H	0.072C								
1.19 - 1.29	8.7H	0.23C								
1.29 - 1.42	8.9H	0.24C								
1.42 - 1.57	8.8H	0.27C								
1.65 - 1.91	9.2H	0.25C								
1.91 - 2.16	8.7H	0.35C								
2.16 - 2.29	8.5H	0.48C								

Depth m	CaCO3 %	Organic C %	Avail. P mg/kg	Total P %	Total N %	Total K %	Bulk Density Mg/m3	Particle GV	Size CS %	Analysis FS % Silt Clay
0 - 0.15	0.01C	0.2E			0.018B			46C	40	9 5
0.15 - 0.23	0.01C				0.014B		5	46C	42	7 5
0.23 - 0.25					0.013B		12	47C	41	8 4
0.25 - 0.28	0.01C	0.09E			0.018B		13	34C	41	8 17
0.28 - 0.34	0.01C	0.15E			0.026B		31	31C	30	8 31
0.34 - 0.4	0.01C	0.14E			0.023B		7	41C	28	5 26
0.4 - 0.51	0.01C				0.017B		7	37C	35	7 20
0.51 - 0.56	0C				0.013B		8	38C	33	8 21
0.56 - 0.64	0.01C	0.14E			0.017B			29C	34	14 23
0.64 - 0.71	0.01C				0.018B		16C	31	40	12
0.71 - 0.91	0.01C	0.16E			0.023B		9C	31	50	10
0.96 - 1.07	0.01C				0.025B		6C	18	58	18
1.07 - 1.15	0.01C	0.18E			0.012B			17C	20	41 22
1.15 - 1.19	0.01C				0.01B			42C	31	15 12
1.19 - 1.29	0.04C	0.07E			0.017B			25C	23	21 31
1.29 - 1.42	0.17C				0.014B			39C	35	16 10
1.42 - 1.57	0.17C				0.01B		4	36C	22	11 31
1.65 - 1.91	0.57C	0.04E			0.01B		6	37C	26	8 29
1.91 - 2.16	0.61C				0.011B		4	37C	22	6 35
2.16 - 2.29	0.35C	0.04E			0.013B		5	41C	19	2 38

Depth m	COLE	Gravimetric/Volumetric Water Contents						K sat	K unsat
		Sat.	0.05 Bar	0.1 Bar	0.5 Bar	1 Bar	5 Bar		
0 - 0.15								mm/h	mm/h

0 - 0.15

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0.15 - 0.23  
0.23 - 0.25  
0.25 - 0.28  
0.28 - 0.34  
0.34 - 0.4  
0.4 - 0.51  
0.51 - 0.56  
0.56 - 0.64  
0.64 - 0.71  
0.71 - 0.91  
0.96 - 1.07  
1.07 - 1.15  
1.15 - 1.19  
1.19 - 1.29  
1.29 - 1.42  
1.42 - 1.57  
1.65 - 1.91  
1.91 - 2.16  
2.16 - 2.29

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**Laboratory Analyses Completed for this profile**

19B_NR	Calcium Carbonate (CaCO <sub>3</sub> ) - Not recorded
2_LOI	Loss on Ignition (%)
2A1	Air-dry moisture content
3A_TSS	Electrical conductivity or soluble salts - Total soluble salts %
4_NR	pH of soil - Not recorded
5_NR	Water soluble Chloride - Cl(%) - Not recorded
6Z	Organic carbon (%) - Not recorded
7_NR	Total nitrogen (%) - Not recorded
P10_GRAV	Gravel (%)
P10_NR_C	Clay (%) - Not recorded
P10_NR_CS	Coarse sand (%) - Not recorded
P10_NR_FS	Fine sand (%) - Not recorded
P10_NR_Z	Silt (%) - Not recorded