**Project Name: Rhynie Soil Survey** 

Observation ID: 1 **Project Code:** Rhvnie Site ID: A1267

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

**Site Information** 

Locality: Desc. By: N.J. McKenzie

Elevation: Date Desc.: 01/11/88 No Data Sheet No.: 6629-18 1:10000 Map Ref.: Rainfall: No Data Northing/Long.: 6216860 AMG zone: 54 Runoff: No Data 290210 Datum: AGD66 Easting/Lat.: Drainage: No Data

Geology

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

**Land Form** 

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

Surface Soil Condition (dry):

**Erosion:** 

**Soil Classification** 

**Australian Soil Classification: Mapping Unit:** N/A **Principal Profile Form:** N/A ASC Confidence: **Great Soil Group:** N/A

Confidence level not specified

**Site Disturbance:** 

**Vegetation:** 

**Surface Coarse Fragments:** 

**Profile Morphology** 

0 - 0.1 m Dark reddish brown (5YR3/3-Moist); ; Sandy clay loam, fine sandy; Weak grade of structure, 5-10 mm, Subangular blocky; Rough-ped fabric; Dry; Very firm consistence; Field pH 6.5 (Raupach); Clear change to -

A21 0.1 - 0.2 m Reddish brown (5YR5/4-Moist); Pink (5YR7/3-Dry); ; Sandy clay loam, fine sandy; Weak grade of structure, 10-20 mm, Subangular blocky; Rough-ped fabric; Dry; Strong consistence; Field pH 7

(Raupach); Clear change to -

Light reddish brown (2.5YR6/4-Moist); , 2.5YR74, 20-50% , 30-mm, Distinct; Clay loam, sandy; A22 0.2 - 0.3 m Weak grade of structure, 10-20 mm, Subangular blocky; Rough-ped fabric; Dry; Very strong

consistence; Field pH 7 (Raupach); Clear change to -

Red (2.5YR5/6-Moist); , 2.5YR54, 20-50% , 30-mm, Distinct; Clay loam, fine sandy; Weak grade A3 0.3 - 0.4 m of structure, 20-50 mm, Angular blocky; Rough-ped fabric; Dry; Very strong consistence; 10-

20%, medium gravelly, 6-20mm, subrounded, dispersed, coarse fragments; Few cutans, <10%

of ped faces or walls coated, distinct; Field pH 7 (Raupach); Clear change to -

Red (2.5YR4/6-Moist); , 2.5YR44, 20-50% , 30-mm, Faint; Medium heavy clay; Moderate grade of B2 0.4 - 0.46 m structure, 20-50 mm, Angular blocky; Rough-ped fabric; Dry; Very strong consistence; Common

cutans, 10-50% of ped faces or walls coated, distinct; Field pH 7 (Raupach); Sharp change to -

C<sub>1</sub> 0.46 - 0.7 m Light reddish brown (2.5YR7/3-Moist); , 2.5YR46; Field pH 8.5 (Raupach);

C2 0.7 - 0.88 m ; Very few (0 - 2 %), Calcareous, Fine (0 - 2 mm), Soft segregations; Field pH 8.5 (Raupach);

C3 0.88 - 1.4 m ; Many (20 - 50 %), Calcareous, Fine (0 - 2 mm), Soft segregations; Field pH 8.5 (Raupach);

**Morphological Notes** 

A strange soil: The A1, A2 and A3 appear to be transportational and the A3 (B!?) is

weakly cemented and has gravel.

The A2 appears to become quite wet. A21

The lithology of the coarse fragments is as per surface gravels, except rounded - Fe rich. **A3** 

The thin B2 is a heavy red tough neutral clay. B<sub>2</sub>

C<sub>1</sub> Like A1268, the C is very weathered and has some remnant rock fabric. Some of the

lower white layers have a lot of carbonate. The C is very soft and thick. The mottling

appears down the crack.

Project Name: Project Code: Agency Name:

Rhynie Soil Survey Rhynie Site ID: A1267 CSIRO Division of Soils (SA) Observation ID: 1

## Site Notes

## **Observation Notes**

Project Name: Project Code: Agency Name:

Rhynie Soil Survey Rhynie Site ID: A1267 CSIRO Division of Soils (SA) Observation ID: 1

## **Laboratory Test Results:**

Laboratory	I CSL IVC	<del>Juits.</del>								
Depth	рН	1:5 EC		hangeable Mg	Cations K	Na Ex	changeable Acidity	CEC	ECEC	ESP
m		dS/m	ou	····g		Cmol (+)/				%
0 - 0.1	5.4C 5.93A	0.12A								
0.1 - 0.2	0.007									
0.2 - 0.3	5.74C 6.28A	0.06A								
0.3 - 0.4	5.65C 6.3A	0.06A								
0.4 - 0.46	5.67C 6.29A	0.07A								
0.46 - 0.7										
0.7 - 0.88										
0.88 - 1.4										
Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Particl GV CS		Analysis Silt Clay
m	%	%	mg/kg	%	%	%	Mg/m3		%	•
0 - 0.1 0.1 - 0.2 0.2 - 0.3 0.3 - 0.4 0.4 - 0.46 0.46 - 0.7 0.7 - 0.88 0.88 - 1.4										
Depth	COLE		Grav	/imetric/Vo	lumetric W	ater Conte	ents	ĸ	sat	K unsat
		Sat.	0.05 Bar	0.1 Bar	0.5 Bar	1 Bar	5 Bar 15 l			
m				g/s	g - m3/m3	1		m	m/h	mm/h
0 - 0.1 0.1 - 0.2 0.2 - 0.3 0.3 - 0.4 0.4 - 0.46 0.46 - 0.7 0.7 - 0.88 0.88 - 1.4										

**Project Name: Rhynie Soil Survey** 

Project Code: Agency Name: Rhynie Site ID: A CSIRO Division of Soils (SA) A1267 Observation ID: 1

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

12C2 Calcium chloride extractable boron - ICPAES

3A1 EC of 1:5 soil/water extract 4A1 pH of 1:5 soil/water suspension

4B2 pH of 1:5 soil/0.01M calcium chloride extract - following Method 4A1

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