

Project Name: Rhynie Soil Survey
Project Code: Rhynie **Site ID:** A1236 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (SA)

Site Information

Desc. By:	N.J. McKenzie	Locality:	
Date Desc.:	31/10/88	Elevation:	283 metres
Map Ref.:	Sheet No. : 6629-18 1:10000	Rainfall:	No Data
Northing/Long.:	6216220 AMG zone: 54	Runoff:	No Data
Easting/Lat.:	289650 Datum: AGD66	Drainage:	No Data

Geology

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

Land Form

Rel/Slope Class:	No Data	Pattern Type:	No Data
Morph. Type:	Lower-slope	Relief:	No Data
Elem. Type:	No Data	Slope Category:	No Data
Slope:	1 %	Aspect:	No Data

Surface Soil Condition (dry): Cracking

Erosion:

Soil Classification

Australian Soil Classification:	N/A	Mapping Unit:	N/A
ASC Confidence:	Confidence level not specified	Principal Profile Form:	Uq5.11
Site Disturbance:	Cultivation. Rainfed	Great Soil Group:	N/A

Vegetation:

Surface Coarse Fragments: No surface coarse fragments

Profile Morphology

A1	0 - 0.1 m	Dark brown (7.5YR3/3-Moist); ; Light clay; Moderate grade of structure, 5-10 mm, Angular blocky; Earthy fabric; Dry; Very firm consistence; Field pH 7.5 (Raupach);
B21	0.1 - 0.2 m	Very dark grey (10YR3/1-Moist); ; 5YR33, 20-50% , 15-30mm, Distinct; Medium clay; Moderate grade of structure, 5-10 mm, Angular blocky; Smooth-ped fabric; Dry; Strong consistence; Common cutans, 10-50% of ped faces or walls coated, distinct; Very few (0 - 2 %), Calcareous, Fine (0 - 2 mm), Soft segregations; Field pH 8.5 (Raupach);
B22	0.2 - 0.3 m	Very dark grey (10YR3/1-Moist); ; 5YR33, 20-50% , 15-30mm, Distinct; Heavy clay; Strong grade of structure, 10-20 mm, Angular blocky; Smooth-ped fabric; Dry; Very strong consistence; Many cutans, >50% of ped faces or walls coated, distinct; Few (2 - 10 %), Calcareous, Fine (0 - 2 mm), Soft segregations; Field pH 8.5 (Raupach);
B22	0.3 - 0.4 m	Very dark grey (10YR3/1-Moist); ; 7.5YR43, 20-50% , 15-30mm, Distinct; Heavy clay; Strong grade of structure, 20-50 mm, Angular blocky; Smooth-ped fabric; Dry; Very strong consistence; Many cutans, >50% of ped faces or walls coated, distinct; Few (2 - 10 %), Calcareous, Fine (0 - 2 mm), Soft segregations; Field pH 8.5 (Raupach);
B22	0.4 - 0.5 m	Very dark grey (10YR3/1-Moist); ; Heavy clay; Strong grade of structure, 20-50 mm, Angular blocky; Smooth-ped fabric; Dry; Very strong consistence; Many cutans, >50% of ped faces or walls coated, distinct; Few (2 - 10 %), Calcareous, Fine (0 - 2 mm), Soft segregations; Field pH 8.5 (Raupach);
B23	0.5 - 0.7 m	Very dark grey (10YR3/1-Moist); ; Heavy clay; Strong grade of structure, 20-50 mm, Angular blocky; Smooth-ped fabric; Dry; Very strong consistence; Many cutans, >50% of ped faces or walls coated, distinct; Common (10 - 20 %), Calcareous, Fine (0 - 2 mm), Nodules; Field pH 9 (Raupach);
B23	0.7 - 0.9 m	Very dark grey (10YR3/1-Moist); ; Heavy clay; Moderate grade of structure, 20-50 mm, Angular blocky; Smooth-ped fabric; Dry; Very strong consistence; Many cutans, >50% of ped faces or walls coated, distinct; Common (10 - 20 %), Calcareous, Fine (0 - 2 mm), Nodules; Field pH 9 (Raupach);
B24	0.9 - 1.2 m	Dark grey (10YR4/1-Moist); ; 7.5YR33, 20-50% , 15-30mm, Distinct; Heavy clay; Moderate grade of structure, 10-20 mm, Angular blocky; Smooth-ped fabric; Dry; Many cutans, >50% of ped faces or walls coated, distinct; Common (10 - 20 %), Calcareous, Fine (0 - 2 mm), Nodules; Field pH 9 (Raupach);

Project Name: Rhynie Soil Survey
Project Code: Rhynie **Site ID:** A1236 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (SA)

B31k	1.2 - 1.6 m	Pale brown (10YR6/3-Moist); , 20-50% , 30-mm, Prominent; Heavy clay; Weak grade of structure, 10-20 mm, Angular blocky; Smooth-ped fabric; Dry; Very strong consistence; Many cutans, >50% of ped faces or walls coated, distinct; Many (20 - 50 %), Calcareous, Extremely coarse (> 60 mm), Soft segregations; Field pH 9 (Raupach);
B32	1.6 - 1.8 m	Brown (10YR5/3-Moist); , 5YR46, 20-50% , 30-mm, Prominent; Heavy clay; Moderate grade of structure, 10-20 mm, Angular blocky; Smooth-ped fabric; Dry; Very strong consistence; Many cutans, >50% of ped faces or walls coated, distinct; Very few (0 - 2 %), Manganiferous, Fine (0 - 2 mm), Nodules; Common (10 - 20 %), Calcareous, Fine (0 - 2 mm), Soft segregations; , Calcareous, Fine (0 - 2 mm), Nodules; Field pH 9 (Raupach);
C	1.8 - m	;

Morphological Notes

Observation Notes

Strong cracking clay.

Site Notes

Barley grass/subclover pasture.

Observation ID: 1

Agency Name: CSIRO Division of Soils (SA)

Laboratory Test Results:

Depth	pH	1:5 EC	Exchangeable Cations			Exchangeable	CEC	ECEC	ESP
m		dS/m	Ca	Mg	K	Na	Acidity		%
						Cmol (+)/kg			

0 - 0.1
0.1 - 0.2
0.2 - 0.3
0.3 - 0.4
0.4 - 0.5
0.5 - 0.7
0.7 - 0.9
0.9 - 1.2
1.2 - 1.6
1.6 - 1.8
1.8 -

Depth	CaCO3	Organic	Avail.	Total	Total	Total	Bulk	Particle		Size	Analysis	
		C	P	P	N	K	Density	GV	CS	FS	Silt	Clay
m	%	%	mg/kg	%	%	%	Mg/m3			%		

0 - 0.1
0.1 - 0.2
0.2 - 0.3
0.3 - 0.4
0.4 - 0.5
0.5 - 0.7
0.7 - 0.9
0.9 - 1.2
1.2 - 1.6
1.6 - 1.8
1.8 -

Depth	COLE	Gravimetric/Volumetric Water Contents							K sat	K unsat
		Sat.	0.05 Bar	0.1 Bar	0.5 Bar	1 Bar	5 Bar	15 Bar		
m		g/g - m ³ /m ³							mm/h	mm/h

0 - 0.1
0.1 - 0.2
0.2 - 0.3
0.3 - 0.4
0.4 - 0.5
0.5 - 0.7
0.7 - 0.9
0.9 - 1.2
1.2 - 1.6
1.6 - 1.8
1.8 -

Project Name: Rhynie Soil Survey
Project Code: Rhynie Site ID: A1236 Observation ID: 1
Agency Name: CSIRO Division of Soils (SA)

Laboratory Analyses Completed for this profile