Rhynie Soil Survey Project Name:

Project Code: Rhynie Site ID: A1253 Observation ID: 1

Agency Name: CSIRO Division of Soils (SA)

Site Information

N.J. McKenzie

Desc. By: Date Desc.: Locality: Elevation: 01/11/88 No Data Sheet No.: 6629-18 1:10000 Map Ref.: Rainfall: No Data Northing/Long.: 6216580 AMG zone: 54 Runoff: No Data Easting/Lat.: 289280 Datum: AGD66 Drainage: No Data

Geology

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

Land Form

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

I TOTTIC	Wildipilology	
A11	0 - 0.1 m	Dark reddish brown (5YR2/4-Moist); ; Loam; Moderate grade of structure, 10-20 mm, Subangular blocky; Rough-ped fabric; Dry; Firm consistence; Field pH 6.5 (Raupach);
A12	0.1 - 0.2 m	Dark reddish brown (5YR2/4-Moist); ; Sandy clay loam, fine sandy; Weak grade of structure, 10-20 mm, Subangular blocky; Earthy fabric; Dry; Strong consistence; Field pH 6.5 (Raupach);
A12	0.2 - 0.3 m	Dark reddish brown (5YR2/4-Moist); ; Sandy clay loam, fine sandy; Weak grade of structure, 10-20 mm, Subangular blocky; Earthy fabric; Dry; Strong consistence; Field pH 6.5 (Raupach); Gradual change to -
A2	0.3 - 0.4 m	Red (2.5YR4/6-Moist); Yellowish red (5YR5/6-Dry); ; Sandy clay loam, fine sandy; Massive grade of structure; Earthy fabric; Dry; Very firm consistence; Field pH 7 (Raupach);
A2	0.4 - 0.45 m	Red (2.5YR4/6-Moist); Yellowish red (5YR5/6-Moist); ; Sandy clay loam, fine sandy; Massive grade of structure; Earthy fabric; Dry; Very firm consistence; Field pH 7 (Raupach); Abrupt change to -
B21	0.45 - 0.5 m	Reddish brown (2.5YR4/4-Moist); ; Medium heavy clay; Strong grade of structure, Angular blocky; Smooth-ped fabric; Dry; Strong consistence; Many cutans, >50% of ped faces or walls coated, prominent; Field pH 7.5 (Raupach);
B21	0.5 - 0.6 m	Reddish brown (2.5YR4/4-Moist); ; Medium heavy clay; Strong grade of structure, 20-50 mm, Angular blocky; Smooth-ped fabric; Dry; Strong consistence; Many cutans, >50% of ped faces or walls coated, prominent; Field pH 7.5 (Raupach); Clear change to -
B22	0.6 - 0.7 m	Red (2.5YR4/6-Moist); ; Medium heavy clay; Strong grade of structure, 20-50 mm, Polyhedral; Rough-ped fabric; Dry; Strong consistence; Common cutans, 10-50% of ped faces or walls coated, distinct; Field pH 8 (Raupach); Clear change to -
B31	0.7 - 0.9 m	Yellowish red (5YR4/6-Moist); ; Medium heavy clay; Moderate grade of structure, 10-20 mm, Polyhedral; Rough-ped fabric; Dry; Strong consistence; Common cutans, 10-50% of ped faces or walls coated, distinct; Many (20 - 50 %), Calcareous, Coarse (6 - 20 mm), Soft segregations; Field pH 8 (Raupach); Clear change to -
B31	0.9 - 1.1 m	Yellowish red (5YR4/6-Moist); ; Medium heavy clay; Moderate grade of structure, 10-20 mm, Polyhedral; Rough-ped fabric; Dry; Strong consistence; Common cutans, 10-50% of ped faces or walls coated, distinct; Many (20 - 50 %), Calcareous, Coarse (6 - 20 mm), Soft segregations; Field pH 8 (Raupach);

Project Name: Rhynie Soil Survey

Project Code: Rhynie Site ID: A1253 Observation ID: 1

Agency Name: CSIRO Division of Soils (SA)

B32 1.1 - 1.3 m Yellowish red (5YR4/6-Moist); , 10YR62, 10-20% , 15-30mm, Distinct; Medium heavy clay;

Moderate grade of structure, 10-20 mm, Polyhedral; Rough-ped fabric; Dry; Strong consistence; Common cutans, 10-50% of ped faces or walls coated, distinct; Many (20 - 50%), Calcareous,

Coarse (6 - 20 mm), Soft segregations; Field pH 8.5 (Raupach);

B32 1.3 - 1.4 m Yellowish red (5YR4/6-Moist); , 10YR62, 20-50% , 15-30mm, Distinct; Medium heavy clay;

Moderate grade of structure, 10-20 mm, Polyhedral; Rough-ped fabric; Dry; Strong consistence; Common cutans, 10-50% of ped faces or walls coated, distinct; Many (20 - 50 %), Calcareous,

Coarse (6 - 20 mm), Soft segregations; Field pH 8.5 (Raupach); Clear change to -

; Moderate grade of structure, 10-20 mm, Polyhedral; Rough-ped fabric; Dry; Strong consistence;

Field pH 8.5 (Raupach);

Morphological Notes

1.4 - 1.6 m

A11 A relatively thick A horizon with a weak A2.

A12 The A12/Á2 is dilatant - very small water content between plastic and liquid limit.

B21 The B2 does not appear to absorb water readily - Moderate sorptivity (dark red).

B31 The B3 shows weak mottling (relict?) with an abundance of fine carbonate - the carbonate is in soft segregations unlike previous profile. White carbonates present.

B31 White carbonate present.

The very top of the C has no carbonate, pressure drill rig was on to the unweathered

(carbonate free) shale.

Observation Notes

Site Notes

С

Project Name: Rhynie Soil Survey
Project Code: Rhynie Site ID: A1253
Agency Name: CSIRO Division of Soils (SA) Observation ID: 1

Laboratory Test Results:

Laboratory			Evelo	mmaabla C	ations.	-		CEC	FCFC	ESP
Depth	рН	1:5 EC	Ca Mo	ingeable C	K	Na	changeable Acidity	CEC	ECEC	. ESP
m		dS/m				Cmol (+)/k	g			%
0 - 0.1 0.1 - 0.2 0.2 - 0.3 0.3 - 0.4 0.4 - 0.45 0.45 - 0.5 0.5 - 0.6 0.6 - 0.7 0.7 - 0.9 0.9 - 1.1 1.1 - 1.3 1.3 - 1.4 1.4 - 1.6										
Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Particle GV CS	e Size FS	Analysis Silt Clay
m	%	%	mg/kg	%	%	%	Mg/m3	GV C3	%	Silt Clay
0 - 0.1 0.1 - 0.2 0.2 - 0.3 0.3 - 0.4 0.4 - 0.45 0.45 - 0.5 0.5 - 0.6 0.6 - 0.7 0.7 - 0.9 0.9 - 1.1 1.1 - 1.3 1.3 - 1.4 1.4 - 1.6										
Depth	COLE	Sat.			ımetric W 0.5 Bar	ater Conter 1 Bar		K Bar	sat	K unsat
m					- m3/m3				m/h	mm/h
0 - 0.1 0.1 - 0.2 0.2 - 0.3 0.3 - 0.4 0.4 - 0.45 0.45 - 0.5 0.5 - 0.6 0.6 - 0.7 0.7 - 0.9 0.9 - 1.1 1.1 - 1.3 1.3 - 1.4 1.4 - 1.6										

Project Name: Project Code: Agency Name:

Rhynie Soil Survey Rhynie Site ID: A1253 CSIRO Division of Soils (SA) Observation ID: 1

Laboratory Analyses Completed for this profile