

Project: P2REEF **Site:** 71 **Observation:** 1

Soil Name: Bg - Bulgun(V1)

Location:	GDA 94	ZONE	55	399345mE	8037670mN	Lat: -17.74592	Long: 146.05058
Location:	AGD 84	ZONE	55	399115mE	8037323mN	Lat: -17.74899	Long: 146.04839
Location:	AGD 66	ZONE	55	399231mE	8037494mN	Lat: -17.74745	Long: 146.0495

Described By: Neil Enderlin (ENDN)

Date: 18-SEP-14

Landscape:

Geology: No record

Landform Pattern: alluvial plain

Runoff: Slow

Microrelief: Zero or none

Drainage: Poorly drained

Depth to Water: No record

Rock Outcrops: No bedrock exposed

Surface Coarse Fragments: No coarse fragments 0%

Surface Condition: Recently cultivated, Loose

Disturbances: Cultivation - Irrigated, past or present

Substrate Lithology: No record

Element: No record

Permeability: Slowly permeable 5-50mm/day

Microrelief Component: No record

Slope: .8 %

Classifications:

ASC: Humose-Acidic, Dermosolic, Redoxic, Hydrosol, thick, non-gravelly, clay loamy, clayey, very deep

Confidence: No analytical data are available but confidence is fair.

GSG:

PPF: Gn3.91

Vegetation:

Profile Morphology:

Horizon	Depth (m)	Description
A11p	0 to .2	Grey (10YR51) dry; black (10YR21) moist; silty clay loam; no coarse fragments 0%; granular weak 2-5mm structure; no segregations; firm dry; abrupt to
A12p	.2 to .32	Black (10YR21) dry; black (10YR21) moist; silty clay loam; no coarse fragments 0%; polyhedral moderate 5-10mm structure; no segregations; very firm dry; clear to
A3?p	.32 to .45	Heavy silty clay loam; no coarse fragments 0%; angular blocky moderate 5-10mm structure; no segregations; very firm moderately moist; abrupt to
B1	.45 to .65	Grey (10YR51) moist; few 2-10% medium 5-15mm distinct yellow mottles, few 2-10% medium 5-15mm distinct red mottles; silty light clay; no coarse fragments 0%; angular blocky strong 5-10mm structure; no segregations; strong moderately moist; gradual to
B21	.65 to 1.2	Grey (10YR61) moist; common 10-20% coarse 15-30mm distinct yellow mottles, common 10-20% coarse 15-30mm distinct orange mottles, common 10-20% medium 5-15mm distinct red mottles; light medium clay; no coarse fragments 0%; angular blocky strong 10-20mm structure; polyhedral strong 2-5mm structure; no segregations; strong moderately moist; sharp to
B22	1.2 to 1.75	Brownish yellow (10YR66) moist; many 20-50% medium 5-15mm distinct red mottles, many 20-50% coarse 15-30mm distinct grey mottles; medium clay; no coarse fragments 0%; angular blocky strong 10-20mm structure; no segregations; strong moderately moist

Field Tests:

Depth	EC-1	PH-1	PH-4
.1	0.09	4.5	4.92
.3	0.02	4.5	5.18
.6	0.01	4.3	4.88
.9	0.008	4.3	4.87
1.2	0.01	4.5	5.0
1.5	0.01	4.5	4.95
1.75	0.02	4.5	4.83

EC-1: Field EC 1:5 Soil/Water

PH-1: pH by Raupach and Tucker method

Project: P2REEF Site: 71 Observation: 1

Soil Name: Bg - Bulgun(V1)

PH-4: pH of 1:5 soil/water suspension

Site Notes:

- Land Use Sugarcane (plant cane, recently re-planted).
- Site P2R2 Silkwood monitoring site, soil description adjacent to monitoring stations - soil characterisation site 1.
- Site Slope of paddock around site is <1% but >0.5%. Furrow slope is <0.5, furrows are perpendicular to landform slope.

Observation Notes:

- Australian Soil Classification O.C. = 5.7% (recent P2REEF sampling at site), otherwise it is Melanic-Acidic
- Soil Profile contiues deeper than 1.75m. No standing water encountered.
Location mapped as Silkwod (CTI) and UMA contains Jaffa (40%) and Bulgun (10%). Site corresponds to Bulgun SPC (alluvial, dark A over mottled, structured grey 2.5Y-10YR4/1-6/1clay B to 1.2m+). This site has a mottled brown (10YR6/6) B underlying not described in nearby sites.
- Soil B horizons slake rapidly and are dispersive (observations from 1:5 pH & EC tests)

Horizon Notes:

- Horizon A11p Colour of A1 horizons is blacker than 10YR2/1
- Horizon A3?p This appears to be a mixing zone of A1 above and B1 below rather than being a distinct horizon, colour of soil mass is a fairly even mix of the two horizons (black and grey streaking) rather than being a grey with black mottles or black with grey mottles.
- Texture B1 Some fine sands present
- Horizon B22 Horizon continues deeper.
Grey (Gley1 6/N) mottles increase in size and abundance with depth (abund 4, size >30mm to >50mm)

Lab Results No record

Component Sites:

Project Code Site Id

Site Photos:

Photo No Type Title

Project: P2REEF **Site:** 72 **Observation:** 1

Soil Name: Bg - Bulgun(V1)

Location:	GDA 94	ZONE	55	399148mE	8037720mN	Lat: -17.74546	Long: 146.04872
Location:	AGD 84	ZONE	55	398918mE	8037373mN	Lat: -17.74853	Long: 146.04654
Location:	AGD 66	ZONE	55	399034mE	8037544mN	Lat: -17.74699	Long: 146.04764

Described By: Neil Enderlin (ENDN)

Date: 18-SEP-14

Landscape:

Geology: No record

Landform Pattern: alluvial plain

Runoff: Slow

Microrelief: Zero or none

Drainage: Poorly drained

Depth to Water: No record

Rock Outcrops: No bedrock exposed

Surface Coarse Fragments: No coarse fragments 0%

Surface Condition: Recently cultivated, Loose

Disturbances: Cultivation - Irrigated, past or present

Substrate Lithology: No record

Element: No record

Permeability: Slowly permeable 5-50mm/day

Microrelief Component: No record

Slope: .8 %

Classifications:

ASC: Humose-Acidic, Dermosolic, Redoxic, Hydrosol, thick, non-gravelly, clay loamy, clayey, very deep

Confidence: No analytical data are available but confidence is fair.

GSG:

PPF: Gn3.91

Vegetation:

Profile Morphology:

Horizon	Depth (m)	Description
A11p	0 to .2	Black (10YR21) moist; silty clay loam; no coarse fragments 0%; granular moderate 2-5mm structure; no segregations; firm dry; clear to
A12p	.2 to .38	Black (10YR21) moist; silty clay loam; no coarse fragments 0%; polyhedral moderate 5-10mm structure; no segregations; very firm moderately moist; clear to
B1	.38 to .8	Dark grey (2.5Y41) moist; few 2-10% medium 5-15mm faint yellow mottles; silty light medium clay; no coarse fragments 0%; polyhedral moderate 5-10mm structure; no segregations; very firm moist; gradual to
B21	.8 to 1.35	Grey (2.5Y61) moist; few 2-10% medium 5-15mm distinct yellow mottles; light medium clay; no coarse fragments 0%; angular blocky strong 5-10mm structure; no segregations; very firm moist; abrupt to
B22	1.35 to 1.47	Brownish yellow (10YR66) moist; few 2-10% medium 5-15mm distinct red mottles, many 20-50% coarse 15-30mm distinct grey mottles; medium clay; no coarse fragments 0%; angular blocky strong 5-10mm structure; no segregations; very firm moist

Field Tests:

Depth	EC-1	PH-1	PH-4
.1	0.02	4.8	5.12
.3	0.02	4.8	5.03
.6	0.01	4.5	5.15
.9	0.01	4.5	5.16
1.2	0.01	4.5	5.2
1.47	0.004	4.5	5.14

EC-1: Field EC 1:5 Soil/Water

PH-1: pH by Raupach and Tucker method

PH-4: pH of 1:5 soil/water suspension

Site Notes:

Land Use Sugarcane

Project: P2REEF Site: 72 Observation: 1

Soil Name: Bg - Bulgun(V1)

Site Notes:

Site P2R2 Silkwood monitoring site, soil characterisation site 2; located opposite end of paddock to to P2REEF Site 71

Observation Notes:

Soil Subsoil slakes rapidly and are dispersive

Horizon Notes:

Texture B1 Some fine sands present

Horizon B22 Horizon continues deeper.

Lab Results No record

Component Sites:

Project Code Site Id

Site Photos:

Photo No Type Title

Project: P2REEF **Site:** 74 **Observation:** 1

Soil Name: Bg - Bulgun(V1)

Location:	GDA 94	ZONE	55	399323mE	8037622mN	Lat: -17.74636	Long: 146.05037
Location:	AGD 84	ZONE	55	399096mE	8037279mN	Lat: -17.74938	Long: 146.04821
Location:	AGD 66	ZONE	55	399209mE	8037448mN	Lat: -17.74786	Long: 146.04929

Described By: Neil Enderlin (ENDN)

Date: 02-DEC-15

Landscape:

Geology: No record

Substrate Lithology: No record

Landform Pattern: No record

Element: No record

Runoff: Slow

Permeability: Slowly permeable 5-50mm/day

Microrelief: Zero or none

Microrelief Component: No record

Drainage: Poorly drained

Slope: No record

Depth to Water: No record

Rock Outcrops: No bedrock exposed

Surface Coarse Fragments: No coarse fragments 0%

Surface Condition: Recently cultivated

Disturbances: Cultivation - Rainfed

Classifications:

ASC: Redoxic, Hydrosol

Confidence:

GSG:

PPF:

Vegetation:

Profile Morphology:

Horizon	Depth (m)	Description
Ap	0 to .43	Black (7.5YR2.5/1) moist; silty clay loam; very few <2% subangular quartz small pebbles 2-6 mm; polyhedral weak 5-10mm structure; no segregations; abrupt to
B1	.43 to .55	Dark grey (10YR41) moist; heavy clay loam; fine sandy; silty; very few <2% subangular quartz small pebbles 2-6 mm; subangular blocky moderate 5-10mm structure; few 2-10% fine <2mm manganiferous nodules; abrupt to
B21	.55 to .9	Dark grey (10YR41) moist; few 2-10% medium 5-15mm faint pale mottles; silty light clay; few 2-10% subangular quartz small pebbles 2-6 mm; subangular blocky moderate 10-20mm structure; polyhedral moderate 2-5mm structure; few 2-10% fine <2mm manganiferous nodules; diffuse to
B22	.9 to 1.25	Grey (2.5Y61) moist; common 10-20% medium 5-15mm distinct yellow mottles, few 2-10% medium 5-15mm distinct orange mottles; light medium clay; common 10-20% subangular quartz small pebbles 2-6 mm; angular blocky moderate 10-20mm structure; polyhedral strong 2-5mm structure; no segregations; diffuse to
B23	1.25 to 1.5	Brownish yellow (10YR66) moist; many 20-50% very coarse >30mm distinct grey mottles, common 10-20% coarse 15-30mm distinct orange mottles; medium clay; common 10-20% subangular quartz small pebbles 2-6 mm; angular blocky strong 10-20mm structure; polyhedral strong 2-5mm structure; no segregations

Field Tests:

Depth	EC-1	PH-4
.1	0.12	5.0
.3	0.024	5.4
.6	0.015	4.7
.9	0.014	1.7
1.2	0.014	4.7
1.5	0.018	4.6

EC-1: Field EC 1:5 Soil/Water
PH-4: pH of 1:5 soil/water suspension

Site Notes:

Project: P2REEF Site: 74 Observation: 1

Soil Name: Bg - Bulgun(V1)

Site Notes:

Site Silkwood P2R monitoring paddock, soil characterisation site 3

Observation Notes:

Horizon Notes:

Horizon	B21	Some fine sands present
Horizon	B23	Grey (2.5Y6/1) mottles appear to be soil matrix colour, proportion and size decreasing with depth.
Horizon	B23	Horizon continues deeper

Lab Results No record

Component Sites:

Project Code	Site Id
--------------	---------

Site Photos:

Photo No	Type	Title
----------	------	-------

Project: P2REEF **Site:** 75 **Observation:** 1

Soil Name: Bg - Bulgun(V1)

Location:	GDA 94	ZONE	55	399232mE	8037642mN	Lat: -17.74617	Long: 146.04951
Location:	AGD 84	ZONE	55	399005mE	8037299mN	Lat: -17.7492	Long: 146.04735
Location:	AGD 66	ZONE	55	399118mE	8037468mN	Lat: -17.74768	Long: 146.04844

Described By: Neil Enderlin (ENDN)

Date: 02-DEC-15

Landscape:

Geology: No record

Substrate Lithology: No record

Landform Pattern: No record

Element: No record

Runoff: Slow

Permeability: Slowly permeable 5-50mm/day

Microrelief: Zero or none

Microrelief Component: No record

Drainage: Poorly drained

Slope: No record

Depth to Water: No record

Rock Outcrops: No bedrock exposed

Surface Coarse Fragments: No coarse fragments 0%

Surface Condition: Recently cultivated

Disturbances: Cultivation - Rainfed

Classifications:

ASC: Redoxic, Hydrosol

Confidence:

GSG:

PPF:

Vegetation:

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .33	Black (7.5YR2.5/1) moist; silty clay loam; no coarse fragments 0%; polyhedral weak 2-5mm structure; no segregations; abrupt to
A3	.33 to .52	Very dark grey (10YR31) moist; silty light clay; no coarse fragments 0%; angular blocky moderate 10-20mm structure; polyhedral moderate 2-5mm structure; no segregations; gradual to
B1	.52 to .75	Grey (10YR51) moist; light clay; silty; no coarse fragments 0%; angular blocky moderate 5-10mm structure; no segregations; gradual to
B21	.75 to 1.05	Grey (2.5Y61) moist; common 10-20% coarse 15-30mm distinct yellow mottles, few 2-10% medium 5-15mm distinct orange mottles; light medium clay; no coarse fragments 0%; angular blocky moderate 20-50mm structure; polyhedral strong 5-10mm structure; no segregations; diffuse to
B22	1.05 to 1.53	Brownish yellow (10YR66) moist; grey (2.5Y61) moist; common 10-20% very coarse >30mm distinct grey mottles, common 10-20% medium 5-15mm distinct orange mottles, few 2-10% very coarse >30mm distinct red mottles; medium heavy clay; very few <2% subangular quartz medium pebbles 6-20 mm; few 2-10% subangular quartz small pebbles 2-6 mm; angular blocky moderate 20-50mm structure; polyhedral strong 5-10mm structure; no segregations

Field Tests:

Depth	EC-1	PH-4
.3	0.031	5.3
.9	0.017	5.0
1.5	0.018	4.8

EC-1: Field EC 1:5 Soil/Water
PH-4: pH of 1:5 soil/water suspension

Site Notes:

Site Silkwood P2R monitoring site - soil characterisation site 4

Observation Notes:

Horizon Notes:

Project: P2REEF Site: 75 Observation: 1

Soil Name: Bg - Bulgun(V1)

Horizon Notes:

Horizon	B22	Horizon continues deeper
Horizon	B22	Grey (2.5YR6/1) mottles appear to be soil matrix colour (as per B21 above), decreases in proportion with depth. Brown, orange and red mottles becoming larger and more abundant with depth.

Lab Results No record

Component Sites:

Project Code	Site Id
--------------	---------

Site Photos:

Photo No	Type	Title
----------	------	-------

Project: P2REEF

Site: 76

Observation: 1

Soil Name: Bg - Bulgun(V1)

Location: GDA 94

ZONE

55

399149mE

8037661mN

Lat: -17.746

Long: 146.04873

Location: AGD 84

ZONE

55

398922mE

8037318mN

Lat: -17.74902

Long: 146.04657

Location: AGD 66

ZONE

55

399035mE

8037487mN

Lat: -17.7475

Long: 146.04765

Described By: Neil Enderlin (ENDN)

Date: 02-DEC-15

Landscape:

Geology: No record

Landform Pattern: No record

Runoff: Slow

Microrelief: Zero or none

Drainage: Poorly drained

Depth to Water: No record

Rock Outcrops: No bedrock exposed

Surface Coarse Fragments: No coarse fragments 0%

Surface Condition: Recently cultivated

Disturbances: Cultivation - Rainfed

Substrate Lithology: No record

Element: No record

Permeability: Slowly permeable 5-50mm/day

Microrelief Component: No record

Slope: No record

Classifications:

ASC: Redoxic, Hydrosol

GSG:

Confidence:

PPF:

Vegetation:

Profile Morphology:

Horizon

Depth (m)

Description

Field Tests:

Depth

Site Notes:

Site

Silkwood P2R monitoring paddock - soil charcaterisation site 5

Observation Notes:

Soil

Black silty clay loam (heavy) to 0.23m changing to dark grey structured light clay with a few fine gravels to 0.50m, grading to strongly structured grey light clay to light medium clay with some yellow mottles and a few fine gravels to 1.1 over brownish-yellow strongly structured medium-heavy clay with coarse grey mottles and some fine gravels to 1.2m+

Soil

Field pH & EC (1:5 soil:water): 0.3m = 5.2 & 0.026d/S/m; 0.7m = 5.0 & 0.016dS/m; 1.2m = 5.0 & 0.016dS/m

Horizon Notes:

Lab Results

No record

Component Sites:

Project Code

Site Id

Site Photos:

Photo No

Type

Title

Project: P2REEF

Site: 77

Observation: 1

Soil Name: Bg - Bulgun(V1)

Location: GDA 94

ZONE

55

399155mE

8037690mN

Lat: -17.74573

Long: 146.04879

Location: AGD 84

ZONE

55

398928mE

8037347mN

Lat: -17.74876

Long: 146.04663

Location: AGD 66

ZONE

55

399041mE

8037516mN

Lat: -17.74724

Long: 146.04771

Described By: Neil Enderlin (ENDN)

Date: 02-DEC-15

Landscape:

Geology: No record

Landform Pattern: No record

Runoff: Slow

Microrelief: Zero or none

Drainage: Poorly drained

Depth to Water: No record

Rock Outcrops: No bedrock exposed

Surface Coarse Fragments: No coarse fragments 0%

Surface Condition: Recently cultivated

Disturbances: Cultivation - Rainfed

Substrate Lithology: No record

Element: No record

Permeability: Slowly permeable 5-50mm/day

Microrelief Component: No record

Slope: No record

Classifications:

ASC: Redoxic, Hydrosol

GSG:

Confidence:

PPF:

Vegetation:

Profile Morphology:

Horizon

Depth (m)

Description

Field Tests:

Depth

Site Notes:

Site

Silkwood P2REEF monitoring paddock, soil characterisation site 6

Observation Notes:

Soil

Black silty clay loam to 0.4m over dark-grey structured silty light clay with a few fine gravels to 0.65m changing to grey strongly structured light-medium clay to light-medium clay (sandy) with yellow-brown mottles (increasing with depth) and a few fine gravels to 1.2m over brownish-yellow strongly structured medium clay with coares grey mottles and some fine gravels to 1.7m+

Soil

Field PH & EC (1:5 soil:water): 0.3m = 5.4 & 0.019dS/m; 0.9m = 4.8 & 0.014dS/m; 1.5m = 4.5 & 0.015dS/m

Horizon Notes:

Lab Results

No record

Component Sites:

Project Code

Site Id

Site Photos:

Photo No

Type

Title

Project: P2REEF **Site:** 78 **Observation:** 1

Soil Name: Bg - Bulgun(V1)

Location:	GDA 94	ZONE	55	399226mE	8037676mN	Lat: -17.74586	Long: 146.04946
Location:	AGD 84	ZONE	55	398999mE	8037333mN	Lat: -17.74889	Long: 146.0473
Location:	AGD 66	ZONE	55	399112mE	8037502mN	Lat: -17.74737	Long: 146.04838

Described By: Neil Enderlin (ENDN) **Date:** 02-DEC-15

Landscape:

Geology: No record	Substrate Lithology: No record
Landform Pattern: No record	Element: No record
Runoff: Slow	Permeability: Slowly permeable 5-50mm/day
Microrelief: Zero or none	Microrelief Component: No record
Drainage: Poorly drained	Slope: No record
Depth to Water: No record	
Rock Outcrops: No bedrock exposed	
Surface Coarse Fragments: No coarse fragments 0%	
Surface Condition: Recently cultivated	
Disturbances: Cultivation - Rainfed	

Classifications:

ASC: Redoxic, Hydrosol	Confidence:
GSG:	PPF:

Vegetation:

Profile Morphology:

Horizon	Depth (m)	Description
A11p	0 to .2	Black (7.5YR2.5/1) moist; silty light clay; no coarse fragments 0%; polyhedral weak 5-10mm structure; no segregations; clear to
A12p	.2 to .5	Very dark grey (7.5YR31) moist; silty light clay; no coarse fragments 0%; polyhedral moderate 5-10mm structure; no segregations; clear to
B21	.5 to .7	Dark grey (10YR41) moist; very few <2% medium 5-15mm faint pale mottles; fine sandy light clay; no coarse fragments 0%; angular blocky moderate 5-10mm structure; no segregations; diffuse to
B22	.7 to 1.05	Grey (10YR51) moist; few 2-10% very coarse >30mm distinct pale mottles, few 2-10% coarse 15-30mm faint yellow mottles; fine sandy light clay; no coarse fragments 0%; angular blocky moderate 5-10mm structure; no segregations; diffuse to
B23	1.05 to 1.6	Light grey (10YR71) moist; many 20-50% coarse 15-30mm distinct yellow mottles, common 10-20% coarse 15-30mm distinct orange mottles; medium clay; no coarse fragments 0%; angular blocky moderate 10-20mm structure; no segregations; clear to
B24	1.6 to 1.65	Brownish yellow (10YR66) moist; common 10-20% coarse 15-30mm distinct grey mottles, common 10-20% very coarse >30mm distinct orange mottles; medium clay; no coarse fragments 0%; polyhedral strong 5-10mm structure; no segregations

Field Tests:

Depth	EC-1	PH-4
.1	0.022	5.2
.3	0.017	5.1
.6	0.015	4.6
.9	0.014	4.5
1.2	0.019	4.5
1.5	0.023	4.3
	EC-1:	Field EC 1:5 Soil/Water
	PH-4:	pH of 1:5 soil/water suspension

Site Notes:

Project: P2REEF Site: 78 Observation: 1

Soil Name: Bg - Bulgun(V1)

Site Notes:

Site Silkwood P2R monitoring paddock, soil characterisation site 7

Observation Notes:

Horizon Notes:

Horizon	B22	0.7 to 1.2m appears to have had some mixing of overlying darker topsoil material, perhaps this was part of an old large crack
Horizon	B23	1.05-1.20m - fine sands present.
Horizon	B24	Horizon continues deeper

Lab Results No record

Component Sites:

Project Code	Site Id
--------------	---------

Site Photos:

Photo No	Type	Title
----------	------	-------

Project: P2REEF **Site:** 79 **Observation:** 1

Soil Name: Bg - Bulgun(V1)

Location:	GDA 94	ZONE	55	399316mE	8037658mN	Lat: -17.74603	Long: 146.0503
Location:	AGD 84	ZONE	55	399089mE	8037315mN	Lat: -17.74905	Long: 146.04815
Location:	AGD 66	ZONE	55	399202mE	8037484mN	Lat: -17.74754	Long: 146.04923

Described By: Neil Enderlin (ENDN)

Date: 08-DEC-15

Landscape:

Geology: No record

Landform Pattern: No record

Runoff: Slow

Microrelief: Zero or none

Drainage: Poorly drained

Depth to Water: No record

Rock Outcrops: No bedrock exposed

Surface Coarse Fragments: No coarse fragments 0%

Surface Condition: Recently cultivated

Disturbances: Cultivation - Rainfed

Substrate Lithology: No record

Element: No record

Permeability: Slowly permeable 5-50mm/day

Microrelief Component: No record

Slope: No record

Classifications:

ASC: Redoxic, Hydrosol

GSG:

Confidence:

PPF:

Vegetation:

Profile Morphology:

Horizon	Depth (m)	Description
Ap	0 to .3	Gradual to

Field Tests:

Depth

Site Notes:

Site Silkwood P2R monitoring paddock, soil characterisation site 8

Observation Notes:

Soil	Black silty light clay to 0.32m over light brownish-grey structured light-medium clay with a few fine yellow mottles and a few fine gravels to 0.8m, over grey strongly structured light-medium clay with yellow and red mottles to 1.13m, changing to a yellow strongly structured medium clay with red and coarse grey mottles to 1.63m+
Soil	Field pH & EC (1:5 soil:water): 0.1m = 4.2 & 0.049dS/m, 0.3m = 4.6 & 0.014dS/m, 0.6m = 4.4 & 0.018dS/m, 0.9m = 4.3 & 0.025dS/m, 1.2m = 4.3 & 0.025dS/m, 1.5m = 3.7 & 0.025dS/m

Horizon Notes:

Lab Results **No record**

Component Sites:

Project Code	Site Id
--------------	---------

Site Photos:

Photo No	Type	Title
----------	------	-------

Project: P2REEF

Site: 80

Observation: 1

Soil Name: Bg - Bulgun(V1)

Location: GDA 94

ZONE

55

399187mE

8037711mN

Lat: -17.74555

Long: 146.04909

Location: AGD 84

ZONE

55

398960mE

8037368mN

Lat: -17.74857

Long: 146.04693

Location: AGD 66

ZONE

55

399073mE

8037537mN

Lat: -17.74705

Long: 146.04801

Described By: Neil Enderlin (ENDN)

Date: 08-DEC-15

Landscape:

Geology: No record

Substrate Lithology: No record

Landform Pattern: No record

Element: No record

Runoff: Slow

Permeability: Slowly permeable 5-50mm/day

Microrelief: Zero or none

Microrelief Component: No record

Drainage: Poorly drained

Slope: No record

Depth to Water: No record

Rock Outcrops: No bedrock exposed

Surface Coarse Fragments: No coarse fragments 0%

Surface Condition: Recently cultivated

Disturbances: Cultivation - Rainfed

Classifications:

ASC: Redoxic, Hydrosol

Confidence:

GSG:

PPF:

Vegetation:

Profile Morphology:

Horizon	Depth (m)	Description
---------	-----------	-------------

Field Tests:

Depth

Site Notes:

Site	Silkwood P2R monitoring paddock, soil characteristaion site 9
------	---

Observation Notes:

Soil	Black silty clay loam (heavy) to 0.32m over dark brownish-grey structured light clay (silty with some fine sand) grading to light clay with a few fine pale mottles to 0.82m, over structured light yellowish-grey light clay (fine sandy) with a few fine yellow mottles to 1.15m, grading to greyish-yellow strongly structured light-medium clay with many coarse mottles and a few fine to medium manganiferous nodules to 1.5m+
Soil	Field pH & EC (1:5 soil:water): 0.1m = 5.2 & 0.022dS/m, 0.3m = 4.6 & 0.017dS/m, 0.6m = 4.4 & 0.018dS/m, 0.9m = 4.7 & 0.015dS/m, 1.2m = 4.4 & 0.016dS/m, 1.5m = 4.5 & 0.016dS/m

Horizon Notes:

Lab Results

No record

Component Sites:

Project Code	Site Id
--------------	---------

Site Photos:

Photo No	Type	Title
----------	------	-------

Project: P2REEF **Site:** 81 **Observation:** 1

Soil Name: Bg - Bulgun(V1)

Location:	GDA 94	ZONE	55	399255mE	8037697mN	Lat: -17.74567	Long: 146.04973
Location:	AGD 84	ZONE	55	399028mE	8037354mN	Lat: -17.7487	Long: 146.04757
Location:	AGD 66	ZONE	55	399141mE	8037523mN	Lat: -17.74718	Long: 146.04865

Described By: Neil Enderlin (ENDN)

Date: 08-DEC-15

Landscape:

Geology: No record

Landform Pattern: No record

Runoff: Slow

Microrelief: Zero or none

Drainage: Poorly drained

Depth to Water: 1.6

Rock Outcrops: No bedrock exposed

Surface Coarse Fragments: No coarse fragments 0%

Surface Condition: Recently cultivated

Disturbances: Cultivation - Rainfed

Substrate Lithology: No record

Element: No record

Permeability: Slowly permeable 5-50mm/day

Microrelief Component: No record

Slope: No record

Classifications:

ASC: Redoxic, Hydrosol

GSG:

Confidence:

PPF:

Vegetation:

Profile Morphology:

Horizon	Depth (m)	Description
---------	-----------	-------------

Field Tests:

Depth

Site Notes:

Site	Silkwood P2R monitoring paddock, soil characterisation site 10
------	--

Observation Notes:

Soil	Black silty light clay to 0.38m over dark-grey structured light clay (silty) to 0.74m over black clay loam to 0.82m grading to grey structured clay loam fine sandy with a few fine mottles and a few fine quartz graveles to 1.1m, grading to brownish-yellow strongly structured light-medium clay with coarse greyish and reddish mottles to 1.75m+; thin dark-grey clayey band present at 1.6-1.65m
Soil	Field pH and EC (1:5 soil:water): 0.1m = 5.4 & 0.018dS/m, 0.3m = 4.9 & 0.012dS/m, 0.6m = 4.9 & 0.025dS/m, 0.9m = 4.8 & 0.013dS/m, 1.2m = 4.4 & 0.014dS/m, 1.5m = 4.2 & 0.025dS/m

Horizon Notes:

Lab Results **No record**

Component Sites:

Project Code	Site Id
--------------	---------

Site Photos:

Photo No	Type	Title
----------	------	-------

Project: P2REEF

Site: 82

Observation: 1

Soil Name: Bg - Bulgun(V1)

Location: GDA 94

ZONE

55

399335mE

8037700mN

Lat: -17.74565

Long: 146.05049

Location: AGD 84

ZONE

55

399108mE

8037357mN

Lat: -17.74868

Long: 146.04833

Location: AGD 66

ZONE

55

399221mE

8037526mN

Lat: -17.74716

Long: 146.04941

Described By: Neil Enderlin (ENDN)

Date: 08-DEC-15

Landscape:

Geology: No record

Substrate Lithology: No record

Landform Pattern: No record

Element: No record

Runoff: Slow

Permeability: Slowly permeable 5-50mm/day

Microrelief: Zero or none

Microrelief Component: No record

Drainage: Poorly drained

Slope: No record

Depth to Water: 1.33

Rock Outcrops: No bedrock exposed

Surface Coarse Fragments: No coarse fragments 0%

Surface Condition: Recently cultivated

Disturbances: Cultivation - Rainfed

Classifications:

ASC: Redoxic, Hydrosol

Confidence:

GSG:

PPF:

Vegetation:

Profile Morphology:

Horizon

Depth (m)

Description

Field Tests:

Depth

Site Notes:

Site

Silkwood P2R moniroing paddock, soil characterisation site 11

Observation Notes:

Soil

Black silty light clay to 0.35m grading to grey structured light-medium clay with a few pale or yellow mottles to 0.67m over a dark-grey structured light-medium clay (silty) witha few mottles to 0.8m over grey strongly structured medium clay (silty with some fine sand) with a few yellow and orange mottles to 1.15m grading to brownish yellow strongly structured medium clay (becoming medium-heavy clay with depth) with many coarse grey mottles to 1.5m+

Soil

Field pH & EC (1:5 soil:water): 0.1m = 4.6 & 0.032dS/m, 0.3m = 4.7 & 0.015dS/m, 0.6m = 4.3 & 0.016dS/m, 0.9m = 4.3 & 0.019dS/m, 1.2m = 4.2 & 0.015dS/m, 1.5m = 4.3 & 0.018dS/m

Horizon Notes:

Lab Results

No record

Component Sites:

Project Code

Site Id

Site Photos:

Photo No

Type

Title

Project: P2REEF

Site: 83

Observation: 1

Soil Name: Bg - Bulgun(V1)

Location: GDA 94

ZONE

55

399277mE

8037713mN

Lat: -17.74553

Long: 146.04994

Location: AGD 84

ZONE

55

399050mE

8037370mN

Lat: -17.74856

Long: 146.04778

Location: AGD 66

ZONE

55

399163mE

8037539mN

Lat: -17.74704

Long: 146.04886

Described By: Neil Enderlin (ENDN)

Date: 08-DEC-15

Landscape:

Geology: No record

Substrate Lithology: No record

Landform Pattern: No record

Element: No record

Runoff: Slow

Permeability: Slowly permeable 5-50mm/day

Microrelief: Zero or none

Microrelief Component: No record

Drainage: Poorly drained

Slope: No record

Depth to Water: 1.4

Rock Outcrops: No bedrock exposed

Surface Coarse Fragments: No coarse fragments 0%

Surface Condition: Recently cultivated

Disturbances: Cultivation - Rainfed

Classifications:

ASC: Redoxic, Hydrosol

Confidence:

GSG:

PPF:

Vegetation:

Profile Morphology:

Horizon	Depth (m)	Description
---------	-----------	-------------

Field Tests:

Depth

Site Notes:

Site	Silkwood P2R monitoring paddock, soil characterisation site 12
------	--

Observation Notes:

Soil	Black silty clay loam to 0.42m grading to dark olive-grey structure light clay witha few pale mottles to 0.65m over olive grey structured light-medium clay to 0.71m over dark grey strcutured light-medium clay (fine sandy) with a few yellow mottles grading to grey strongly structured medium clay (some fine sand) with yellow and orange mottles top 1.4m+
Soil	Field Ph & EC (1:5 soil:water): 0.1m = 4.2 & 0.025dS/m, 0.3m = 4.6 & 0.018dS/m, 0.6m = 4.4 & 0.023dS/m, 0.9m= 4.5 & 0.015dS/m, 1.2m = 4.7 & 0.017dS/m

Horizon Notes:

Lab Results

No record

Component Sites:

Project Code	Site Id
--------------	---------

Site Photos:

Photo No	Type	Title
----------	------	-------

Project: P2REEF

Site: 84

Observation: 1

Soil Name: Bg - Bulgun(V1)

Location: GDA 94

ZONE

55

399192mE

8037730mN

Lat: -17.74537

Long: 146.04914

Location: AGD 84

ZONE

55

398965mE

8037387mN

Lat: -17.7484

Long: 146.04698

Location: AGD 66

ZONE

55

399078mE

8037556mN

Lat: -17.74688

Long: 146.04806

Described By: Neil Enderlin (ENDN)

Date: 08-DEC-15

Landscape:

Geology: No record

Landform Pattern: No record

Runoff: Slow

Microrelief: Zero or none

Drainage: Poorly drained

Depth to Water: No record

Rock Outcrops: No bedrock exposed

Surface Coarse Fragments: No coarse fragments 0%

Surface Condition: Recently cultivated

Disturbances: Cultivation - Rainfed

Substrate Lithology: No record

Element: No record

Permeability: Slowly permeable 5-50mm/day

Microrelief Component: No record

Slope: No record

Classifications:

ASC: Redoxic, Hydrosol

GSG:

Confidence:

PPF:

Vegetation:

Profile Morphology:

Horizon

Depth (m)

Description

Field Tests:

Depth

Site Notes:

Site

Silkwood P2R monitoring paddock, soil characterisation site 13

Observation Notes:

Soil

Black silty light clay to 0.35m, grading to dark-grey strcutured light clay with some black motles to 0.65m, grading to grey structured light clay (silty) with few fine yellow mottles to 0.85m, grading to bluish-grey strongly structured light-medium clay with some yellow and orange mottles to 1.3m grading to brownish-yellow strongly structured medium clay with coarse bluish-grey and orange mottles and some fine quertz gravels to 1.57m+

Soil

Field pH & EC (1:5 soil:water): 0.1m = 5.1 & 0.024dS/m, 0.3m = 5.0 & 0.02dS/m, 0..6m = 4.7 & 0.019dS/m, 0.9m = 4.7 & 0.022dS/m, 1.2m = 4.7 & 0.017dS/m, 1.5m = 4.8 & 0.042dS/m

Horizon Notes:

Lab Results

No record

Component Sites:

Project Code

Site Id

Site Photos:

Photo No

Type

Title

User Licence and Conditions

Disclaimer

Based on or contains data provided by the State of Queensland 2018. The State makes no representations or warranties in relation to the supplied data, and you agree that, to the extent permitted by law, all warranties relating to accuracy, reliability, completeness, currency or suitability for any particular purpose and all liability for any loss, damage or costs (including consequential damage) incurred in any way (including but not limited to that arising from negligence) in connection with any use of or reliance on the supplied data are excluded or limited. You agree to continually indemnify the State (including its officers and employees) against any loss, cost, expense, damage and liability of any kind (including consequential damage and liability in negligence) arising directly or indirectly from or related to any claim relating to your use of the supplied data or any product made from the supplied data.



This work is licensed under the Creative Commons Attribution 3.0 Australia License. To view a copy of this license, visit <http://creativecommons.org/licenses/by/3.0/au/>.