

Acid Sulfate Soils of Cairns, North Queensland

Volume 2

Appendix 3: Decoded Borehole Descriptions

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Published by Department of Environment and Resource Management, Indooroopilly, Queensland, Australia.

NQAS_3

ISBN: 978-1-7423-0018-4

Volume 2

Acid Sulfate Soils Cairns, North Queensland Volume 2 Appendix 3: Decoded Borehole Descriptions, accompanies the report “NQAS_3 Acid Sulfate Soils of Cairns, North Queensland Volume 1, ISBN 978 7423 0018 4”.

June, 2009

Material from this publication may be used providing both the author and the publishers are acknowledged.

Citation of this publication should take the form:

Manders J.A. O'Brien L.E. Morrison DW (2009). *Acid Sulfate Soils of Cairns, North Queensland* –. Department of Environment and Resource Management, Indooroopilly, Queensland, Australia.

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References for Decoded Borehole Descriptions

Location: measured by hand held GPS and recorded in GDA 94 Australian Map Grid (metric).
Accuracy of site location not determined.

Project: NQAS Site: 6 Observation: 1

Location: GDA 94 ZONE 55 367324mE 8122428mN Lat: -16.9782 Long: 145.75378

Described By: Justin Adams (ADAJ)

Landscape: (McDonald RC, Isbell RF, Speight JG, Walker J and Hopkins MS (1990). Australian Soil and Land Survey Field Handbook. 2nd Edition, Inkata Press Melbourne Australia)

Landscape:

Landform Pattern: tidal flat

Element: supratidal flat

Depth to Water: .8

Disturbances: No effective disturbance

Classifications: (Isbell RF (1996). The Australian Soil Classification. CSIRO Publishing, Collingwood, Victoria, Australia)

Classifications:

ASC: SULFIDIC, SUPRATIDAL, Hydrosol

Profile Morphology: Colour (Munsell (2000). Munsell Soil Colour Charts. Gretag Macbeth, Little Britain road, New Windsor, NY) **Colour Moisture; Mottles; Texture; Coarse Fragments; Structure; Segregations; Pans; Soil Water Status; Horizon Boundary Distinctness** (McDonald RC, Isbell RF, Speight JG, Walker J and Hopkins MS (1990). Australian Soil and Land Survey Field Handbook. 2nd Edition, Inkata Press Melbourne Australia)

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .15	Brown (10YR43) moist; clay loam; granular weak 2-5mm structure; moderately moist when sampled; clear to
B21	.15 to .4	Light yellowish brown (10YR64) moist; common 10-20% medium 5-15mm distinct orange mottles; clay loam, fine sandy; angular blocky weak 2-5mm structure; moist when sampled; gradual to
B22	.4 to .7	Grey (10YR51) moist; common 10-20% coarse 15-30mm distinct orange mottles; heavy clay loam, fine sandy; weak structure; moist when sampled; gradual to
2B22	.7 to 1.05	Greenish grey (5GY61) moist; few 2-10% fine <5mm faint orange mottles; light medium clay; massive structure; wet when sampled; gradual to

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	2	4.9	2.9
.3	1	5.1	3.5
.6	1	5.9	3.5
.8	2	6.3	1.4
1	2	7.6	2.2

Field Tests:

Depth **Depth at which pH test was conducted (m)**

H2O2- **Reaction of soil with Hydrogen Peroxide**

1 = Low

2 = Medium

3 = High

4 = Extremely High

pH-2 **pH Field (soil:water paste) using electrode probe**

pH-3 **pH Field (soil:hydrogen peroxide mix) using electrode probe**

Ahern CR, Ahern MR and Powell B (1998). Guidelines for Sampling and Analysis of Lowland Acid Sulfate Soils (ASS) in Queensland 1998. Department of Natural Resources, Indooroopilly, Queensland, Australia.

Project: NQAS **Site:** 1 **Observation:** 1

Location: GDA 94 ZONE 55 373457mE 8122657mN Lat: -16.97648 Long: 145.81139

Described By: Justin Adams (ADAJ)

Landscape:

Substrate Lithology: Granite

Landform Pattern: alluvial fan

Element: footslope

Slope: 5 %

Depth to Water: 1

Disturbances: Extensive clearing

Classifications:

ASC: GREY, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .1	Black (10YR21) moist; fine sandy clay loam; angular blocky moderate 2-5mm structure; moderately moist when sampled; clear to
A12	.1 to .25	Black (10YR21) moist; coarse sandy loam; granular weak 2-5mm structure; moderately moist when sampled; gradual to
A13	.25 to .4	Black (10YR21) moist; coarse sandy clay loam; weak structure; moderately moist when sampled; gradual to
A14	.4 to .5	Black (10YR21) moist; sandy clay loam; weak structure; moderately moist when sampled; abrupt to
2B21	.5 to .65	Grey (10YR51) moist; few 2-10% fine <5mm distinct orange mottles, few 2-10% fine <5mm distinct yellow mottles; coarse sandy loam; few 2-10% subrounded granite medium pebbles 6-20 mm; massive structure; moist when sampled; gradual to
3C1	.65 to .9	Grey (10YR51) moist; loamy sand; massive structure; moist when sampled; gradual to
3C2	.9 to 1.3	Grey (10YR51) moist; coarse sand; massive structure; wet when sampled; clear to
4C3	1.3 to 2	Grey (10YR51) moist; coarse sand; few 2-10% subangular granite large pebbles 20-60 mm; massive structure; wet when sampled

Field Tests:

Depth	PH-2	PH-3
.1	4.8	2.0
.3	5.3	4.0
.45	5.3	3.8
.6	5.4	4.1
.8	5.3	4.2
1	5.3	4.3
1.25	5.2	4.4
1.5	5.1	4.6
2	5.1	4.2

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 2 **Observation:** 1

Location: GDA 94 ZONE 55 373384mE 8121479mN Lat: -16.98712 Long: 145.81064

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial fan **Element:** plain

Depth to Water: .85

Disturbances: Cultivation - Rainfed

Classifications:

ASC: GREY, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .35	Very dark grey (10YR31) moist; coarse sandy loam; granular weak 2-5mm structure; moist when sampled; gradual to
B21	.35 to .75	Grey (10YR51) moist; few 2-10% fine <5mm faint red mottles, common 10-20% medium 5-15mm distinct orange mottles; coarse sandy clay loam; granular weak 2-5mm structure; moist when sampled; gradual to
B22	.75 to 1	Light grey (10YR71) moist; common 10-20% medium 5-15mm distinct orange mottles; coarse sandy light clay; very few <2% angular granite small pebbles 2-6 mm; massive structure; wet when sampled; clear to
B23	1 to 1.85	Light grey (N70) moist; few 2-10% medium 5-15mm distinct orange mottles; coarse sandy light clay; massive structure; wet when sampled; gradual to
2B21	1.85 to 2.05	Light grey (N70) moist; few 2-10% fine <5mm faint orange mottles; heavy clay; massive structure; moist when sampled; clear to
2B22	2.05 to 2.2	Grey (10YR61) moist; many 20-50% coarse 15-30mm prominent red mottles, few 2-10% medium 5-15mm distinct brown mottles; heavy clay; moist when sampled

Field Tests:

Depth	PH-2	PH-3
.1	4.6	3.1
.3	4.9	3.0
.6	4.6	3.5
.8	4.7	3.6
1	4.6	3.6
1.25	4.8	3.6
1.5	4.9	4.1
1.75	5.0	4.0
2	5.2	3.8

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 3 **Observation:** 1

Location: GDA 94 ZONE 55 373502mE 8121616mN Lat: -16.98589 Long: 145.81176

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: tidal flat **Element:** supratidal flat

Depth to Water: .2

Disturbances: No effective disturbance

Classifications:

ASC: SULFIDIC, SUPRATIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .1	Very dark greyish brown (10YR32) moist; clay loam, coarse sandy; many 2-5mm roots; wet when sampled; gradual to
A12	.1 to .2	Dark greyish brown (2.5Y42) moist; clay loam, fine sandy; wet when sampled; gradual to
A21	.2 to .35	Grey (10YR51) moist; sandy clay loam; wet when sampled; gradual to
2C1u	.35 to .6	Grey (10YR51) moist; coarse sandy clay loam; wet when sampled; clear to
2C2u	.6 to 1.1	Grey (10YR51) moist; coarse sandy clay loam; wet when sampled; gradual to
3D1	1.1 to 1.5	Light grey (N70) moist; common 10-20% coarse 15-30mm prominent orange mottles; coarse sandy light clay; very few <2% angular granite small pebbles 2-6 mm; wet when sampled; gradual to
3D2	1.5 to 1.9	Light grey (N70) moist; common 10-20% coarse 15-30mm prominent orange mottles; coarse sandy light medium clay; wet when sampled

Field Tests:

Depth	PH-2	PH-3
.1	4.9	3.7
.3	4.9	3.7
.6	5.1	1.7
.8	5.9	1.6
1	6.3	1.7
1.25	6.4	5.8
1.5	6.4	5.5
1.75	6.6	5.5

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon A12 Mangrove tubules

Project: NQAS **Site:** 4 **Observation:** 1

Location: GDA 94 ZONE 55 373111mE 8121471mN Lat: -16.98718 Long: 145.80808

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: tidal flat **Element:** intertidal flat

Depth to Water: .5

Disturbances: No effective disturbance

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
P1	0 to .15	Dark brown (10YR33) moist; fibric peat; granular weak 2-5mm structure; moist when sampled; clear to
A1	.15 to .35	Very dark greyish brown (10YR32) moist; sandy clay loam; massive structure; moist when sampled; gradual to
B21	.35 to .55	Greyish brown (10YR52) moist; few 2-10% medium 5-15mm distinct orange mottles, few 2-10% fine <5mm distinct dark mottles; silty clay loam; massive structure; wet when sampled; gradual to
2C1	.55 to .88	Greyish brown (10YR52) moist; silty light clay; massive structure; wet when sampled; clear to
2C2	.88 to 1.1	Dark grey (10YR41) moist; silty clay loam; massive structure; wet when sampled; gradual to
3C3	1.1 to 1.5	Greenish grey (5BG61) moist; coarse sandy clay loam; massive structure; wet when sampled; clear to
3C4	1.5 to 1.9	Light greenish grey (5BG71) moist; coarse sandy light clay; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.8	3.7
.3		5.4	4.1
.6		5.7	3.8
.8		5.7	3.2
1		5.8	2.1
1.25	4	5.4	1.3
1.5	4	5.6	1.5
1.75	4	5.7	1.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon	A1	Mangrove tubules
Horizon	B21	Mangrove tubules
Horizon	2C1	Mangrove roots
Horizon	2C2	Mangrove lining

Project: NQAS **Site:** 5 **Observation:** 1

Location: GDA 94 ZONE 55 373419mE 8120041mN Lat: -17.00012 Long: 145.81089

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial fan **Element:** supratidal flat

Depth to Water: .8

Disturbances: Cultivation - Rainfed

Classifications:

ASC: REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .15	Black (10YR20) moist; clay loam, sandy; granular moderate 2-5mm structure; moist when sampled; gradual to
A12	.15 to .45	Very dark grey (10YR31) moist; fine sandy light clay; subangular blocky moderate 2-5mm structure; moist when sampled; gradual to
2C1	.45 to .6	Grey (2.5Y61) moist; coarse sandy light clay
3C2	.6 to .8	Grey (2.5Y61) moist; coarse sand
4C3	.8 to 1	Grey (2.5Y61) moist; light medium clay; massive structure; wet when sampled; clear to
5C4	1 to 1.2	Grey (2.5Y61) moist; coarse sand; few 2-10% angular quartz small pebbles 2-6 mm; few 2-10% angular granite small pebbles 2-6 mm; single grain structure; clear to
6C5	1.2 to 1.5	Grey (2.5Y51) moist; light medium clay; massive structure; wet when sampled; clear to
7D1	1.5 to 1.9	Grey (2.5Y51) moist; few 2-10% medium 5-15mm distinct orange mottles, few 2-10% fine <5mm distinct dark mottles; light medium clay; massive structure; clear to
8D2	1.9 to 2.2	Dark grey (2.5Y41) moist; silty light medium clay; clear to
8D3	2.2 to 2.4	Dark grey (2.5Y41) moist; few 2-10% coarse 15-30mm prominent orange mottles; coarse sandy light medium clay

Field Tests:

Depth	PH-2	PH-3
.1	5.8	2.9
.3	6	2.7
.6	5.5	3.9
.8	5.6	3.9
1	5.8	2.7
1.25	5.8	3.3
1.5	5.9	3.5
1.75	6.3	3.5
2	6.2	3.7
2.25	6.1	4.2

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Observation Notes:

Vegetation Sedges

Project: NQAS **Site:** 6 **Observation:** 1

Location: GDA 94 ZONE 55 367324mE 8122428mN Lat: -16.9782 Long: 145.75378

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: tidal flat **Element:** supratidal flat

Depth to Water: .8

Disturbances: No effective disturbance

Classifications:

ASC: SULFIDIC, SUPRATIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .15	Brown (10YR43) moist; clay loam; granular weak 2-5mm structure; moderately moist when sampled; clear to
B21	.15 to .4	Light yellowish brown (10YR64) moist; common 10-20% medium 5-15mm distinct orange mottles; clay loam, fine sandy; angular blocky weak 2-5mm structure; moist when sampled; gradual to
B22	.4 to .7	Grey (10YR51) moist; common 10-20% coarse 15-30mm distinct orange mottles; heavy clay loam, fine sandy; weak structure; moist when sampled; gradual to
2B22	.7 to 1.05	Greenish grey (5GY61) moist; few 2-10% fine <5mm faint orange mottles; light medium clay; massive structure; wet when sampled; gradual to
3B22	1.05 to 1.8	Greenish grey (10G51) moist; common 10-20% medium 5-15mm prominent orange mottles, few 2-10% medium 5-15mm faint grey mottles; light medium clay; angular blocky weak 2-5mm structure; wet when sampled; gradual to
4B22	1.8 to 2.9	Light greenish grey (5GY71) moist; common 10-20% coarse 15-30mm prominent orange mottles; sandy light clay; very few <2% angular quartz large pebbles 20-60 mm; massive structure; wet when sampled; gradual to
4C1	2.9 to 3	Light greenish grey (5GY71) moist; few 2-10% coarse 15-30mm prominent orange mottles, very few <2% coarse 15-30mm prominent pale mottles; sandy light clay; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	2	4.9	2.9
.3	1	5.1	3.5
.6	1	5.9	3.5
.8	2	6.3	1.4
1	2	7.6	2.2
1.25	3	7.6	7.3
1.5	3	7.9	7.3
1.75	3	9.1	8.8
2	3	9.0	8.8
2.25	3	8.3	8.0
2.5	3	7.9	7.9
2.75	3	7.6	7.0
3	3	7.4	7.5

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon	2B22	Abundant root matter
Horizon	3B22	Abundant root matter, mangrove?

Project: NQAS **Site:** 7 **Observation:** 1

Location: GDA 94 ZONE 55 366851mE 8126027mN Lat: -16.94564 Long: 145.74956

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: tidal flat

Element: supratidal flat

Depth to Water: .6

Classifications:

ASC: SULFIDIC, SUPRATIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .1	Dark greyish brown (10YR42) moist; light clay; granular weak 2-5mm structure; moderately moist when sampled; gradual to
B21	.1 to .2	Dark greyish brown (10YR42) moist; few 2-10% fine <5mm faint orange mottles; light medium clay; subangular blocky weak 5-10mm structure; moderately moist when sampled; gradual to
B22	.2 to .9	Grey (10YR51) moist; common 10-20% coarse 15-30mm prominent orange mottles; light medium clay; subangular blocky weak 5-10mm structure; moist when sampled; gradual to
C1	.9 to 1.2	Dark grey (5Y41) moist; very few <2% fine <5mm faint orange mottles; silty light clay; massive structure; common 10-20% coarse 6-20mm organic (humified) tubules; wet when sampled; clear to
C2u	1.2 to 1.5	Dark grey (5Y41) moist; silty light clay; massive structure; wet when sampled; clear to
2D1	1.5 to 2	Greenish grey (10G61) moist; common 10-20% coarse 15-30mm distinct brown mottles; silty light medium clay; lenticular weak 2-5mm structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		5.8	4.1
.3		6.1	4.7
.6		6.0	4.6
.8		5.9	4.6
1		6.1	4.7
1.25	4	6.3	1.1
1.5	4	6.3	1.0
1.75		6.5	2.0
2	3	6.6	3.6

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Observation Notes:

Vegetation Mangroves and Melaleucas

Horizon Notes:

Horizon C1 Abundant organics

Project: NQAS **Site:** 8 **Observation:** 1

Location: GDA 94 ZONE 55 366903mE 8125545mN Lat: -16.95001 Long: 145.75002

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Depth to Water: 1.8

Disturbances: Complete clearing - pasture - cultivation at some stage

Classifications:

ASC: GREY, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .1	Dark greyish brown (10YR42) moist; light clay; granular weak 2-5mm structure; subangular blocky weak 2-5mm structure; dry when sampled; gradual to
A3	.1 to .45	Greyish brown (2.5Y52) moist; few 2-10% fine <5mm faint orange mottles; heavy clay loam; subangular blocky weak 5-10mm structure; dry when sampled; gradual to
B22	.45 to .75	Grey (5Y61) moist; few 2-10% fine <5mm faint orange mottles; fine sandy clay loam; subangular blocky weak 5-10mm structure; dry when sampled; gradual to
B23	.75 to 1.1	Light grey (5Y71) moist; common 10-20% medium 5-15mm distinct orange mottles; fine sandy light clay; angular blocky weak 5-10mm structure; moderately moist when sampled; gradual to
B24	1.1 to 1.8	Light greenish grey (5GY71) moist; many 20-50% coarse 15-30mm prominent orange mottles; medium heavy clay; subangular blocky moderate 2-5mm structure; moist when sampled; abrupt to
B/C	1.8 to 1.9	Grey (N60) moist; few 2-10% medium 5-15mm distinct orange mottles; medium heavy clay; few 2-10% angular quartz large pebbles 20-60 mm; wet when sampled

Field Tests:

Depth	PH-2	PH-3
.1	4.6	1.7
.3	4.4	2.4
.6	4.4	2.7
.8	4.6	3.6
1	4.8	3.7
1.25	5.2	3.7
1.5	5.5	3.9
1.75	5.6	4.1
1.9	5.6	4.0

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Site Notes:

Site Hit gravel at 1.9m could not penetrate

Project: NQAS **Site:** 9 **Observation:** 1

Location: GDA 94 ZONE 55 368892mE 8125532mN Lat: -16.95024 Long: 145.76869

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: tidal flat

Element: intertidal flat

Disturbances: No effective disturbance

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
B21ap	0 to .05	Brown (10YR5/3) moist; very few <2% fine <5mm faint yellow jarosite (from pyrite) mottles, common 10-20% medium 5-15mm distinct orange mottles; light clay; weak structure; dry when sampled
B22p	.05 to .25	Grey (5Y5/1) moist; common 10-20% coarse 15-30mm prominent orange mottles; silty light clay; weak structure; moist when sampled
B22p	.25 to .45	Grey (5Y5/1) moist; few 2-10% medium 5-15mm distinct orange mottles; silty clay loam; massive structure; moist when sampled
C1u	.45 to 1.5	Dark grey (5Y4/1) moist; silty clay loam; massive structure; many 20-50% coarse 6-20mm organic (humified) tubules; wet when sampled
C2u	1.5 to 2.25	Dark grey (5Y4/1) moist; silty clay loam; massive structure; common 10-20% coarse 6-20mm organic (humified) tubules; wet when sampled
C3u	2.25 to 3	Grey (5Y5/1) moist; silty light clay; few 2-10% angular shell small pebbles 2-6 mm; few 2-10% angular shell large pebbles 20-60 mm; massive structure; few 2-10% medium 2-6mm organic (humified) tubules; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	3	8.4	7.6
.3	4	7.8	1.7
.6	4	7.9	1.0
.8	4	7.6	1.0
1	4	7.6	1
1.25	4	7.7	1
1.5	4	7.3	0.9
1.75	4	7.4	0.8
2	4	7.4	0.9
2.25	4	7.3	1.0
2.5	4	7.3	1.4
2.75	4	7.4	1.6
3	4	7.5	2.2

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Observation Notes:

Location In mangroves at back of allotment, reclaimed land above 30cm or more fill.

Observation Very smelly, organic.

Project: NQAS **Site:** 10 **Observation:** 1

Location: GDA 94 ZONE 55 369730mE 8126983mN Lat: -16.93716 Long: 145.77665

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: tidal flat **Element:** supratidal flat

Disturbances: Extensive clearing

Classifications:

ASC: SULFIDIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .1	Grey (10YR51) moist; light clay; lenticular moderate 2-5mm structure; moderately moist when sampled; diffuse to
2B21	.1 to .5	Dark greyish brown (2.5Y42) moist; few 2-10% medium 5-15mm distinct orange mottles; light medium clay; subangular blocky moderate 2-5mm structure; moderately moist when sampled; gradual to
2B22	.5 to .9	Grey (2.5Y61) moist; few 2-10% coarse 15-30mm distinct orange mottles; silty light medium clay; angular blocky weak 2-5mm structure; few 2-10% medium 2-6mm organic (humified) tubules; moist when sampled; clear to
2C1u	.9 to 1.25	Dark grey (5Y41) moist; very few <2% medium 5-15mm distinct orange mottles; silty light clay; massive structure; wet when sampled; gradual to
2C2u	1.25 to 5.1	Dark grey (5Y41) moist; silty light clay; few 2-10% angular shell large pebbles 20-60 mm; common 10-20% angular shell small pebbles 2-6 mm; massive structure; few 2-10% medium 2- 6mm gypseous crystals; very few <2% medium 2-6mm organic (humified) tubules; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	2	8.9	8.8
.3	2	8.5	7.1
.6	2	7.8	8.1
.8	2	7.1	7.1
1	4	6.1	1.2
1.25	4	7.3	6.0
1.5	4	7.4	5.3
1.75	4	7.9	6.6
2	4	7.7	6.5
2.25	4	7.7	4.4
2.5	4	7.9	6.6
2.75	4	7.8	6.7
3	4	7.7	5.6
3.25	4	7.9	6.7
3.5	4	7.8	6.3
3.75	4	7.9	6.4
4	4	7.9	6
4.25	4	7.8	6.1
4.5	4	7.9	6.2
4.75	4	7.8	5.5
5	4	7.6	1.7

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 11 **Observation:** 1

Location: GDA 94 ZONE 55 366963mE 8130351mN Lat: -16.90657 Long: 145.75087

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: tidal flat **Element:** supratidal flat

Depth to Water: .5

Disturbances: No effective disturbance

Classifications:

ASC: MOTTLED, SUPRATIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .2	Black (10YR21) moist; few 2-10% fine <5mm faint orange mottles; light clay; subangular blocky moderate 2-5mm structure; granular moderate 2-5mm structure; moderately moist when sampled; clear to
B21	.2 to .6	Black (10YR21) moist; common 10-20% coarse 15-30mm prominent orange mottles; light medium clay; weak structure; moderately moist when sampled; gradual to
B22	.6 to .8	Light greenish grey (10Y71) moist; common 10-20% medium 5-15mm prominent orange mottles; medium clay; massive structure; moderately moist when sampled; gradual to
2B21	.8 to 1	Greenish grey (5GY61) moist; common 10-20% medium 5-15mm distinct orange mottles; sandy light medium clay; massive structure; moist when sampled; gradual to
3B22	1 to 1.5	Dark grey (5Y41) moist; common 10-20% medium 5-15mm distinct orange mottles; clay loam, sandy; few 2-10% angular shell small pebbles 2-6 mm; massive structure; wet when sampled; gradual to
4C1	1.5 to 2.25	Greenish grey (5GY51) moist; silty light clay; massive structure; wet when sampled; gradual to
5C2	2.25 to 2.5	Greenish grey (5GY51) moist; fine sandy light clay; massive structure; wet when sampled; clear to
6C3u	2.5 to 3	Olive grey (5Y42) moist; fibric clay loam; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	6.0	2.9
.3	2	6.8	7.7
.6	2	7.2	7.5
.8	2	7.4	7.3
1	2	7.5	7.2
1.25	2	7.6	7.9
1.5	2	8.0	7.2
1.75	2	7.8	7.4
2	2	8.2	7.1
2.25	2	8.0	6.7
2.5	2	7.9	5.6
2.75	4	7.4	1.4
3	4	7.3	1.5

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 12 **Observation:** 1

Location: GDA 94 ZONE 55 365110mE 8135560mN Lat: -16.85939 Long: 145.73379

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** supratidal flat

Disturbances: No effective disturbance except grazing by hoofed animals

Classifications:

ASC: SULFIDIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .1	Dark greyish brown (10YR42) moist; light clay; moderately moist when sampled; gradual to
B21	.1 to .35	Grey (10YR51) moist; many 20-50% coarse 15-30mm distinct red mottles; light medium clay; subangular blocky moderate 2-5mm structure; moderately moist when sampled; gradual to
B22	.35 to .65	Grey (2.5Y61) moist; common 10-20% coarse 15-30mm prominent orange mottles; light medium clay; subangular blocky weak 2-5mm structure; moist when sampled; abrupt to
C1u	.65 to 1.8	Dark grey (5Y41) moist; silty light clay; massive structure; common 10-20% coarse 6-20mm organic (humified) tubules; wet when sampled; diffuse to
C2u	1.8 to 3.8	Greenish grey (5GY51) moist; silty light clay; few 2-10% angular shell small pebbles 2-6 mm; massive structure; few 2-10% medium 2-6mm organic (humified) root linings; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	3	7.6	6.7
.3	2	7.1	5.8
.6	2	6.2	4.8
.8	4	6.0	2.5
1	4	6.5	1.3
1.25	4	6.9	1.6
1.5	4	6.9	1.4
1.75	4	6.9	1.5
2	4	7.0	1.5
2.25	4	7.1	1.5
2.5	4	7.1	1.5
2.75	4	7.1	1.5
3	4	7.2	2.4
3.25	4	7.2	1.7
3.5	4	7.2	1.7
3.75	4	7.2	2.7

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 13 **Observation:** 1

Location: GDA 94 ZONE 55 367971mE 8128285mN Lat: -16.9253 Long: 145.7602

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: chenier plain **Element:** tidal creek

Depth to Water: .6

Disturbances: Highly disturbed e.g. mining, urban

Classifications:

ASC: Anthrosol

Profile Morphology:

Horizon	Depth (m)	Description
A/B	0 to .5	Dark greyish brown (10YR42) moist; common 10-20% coarse 15-30mm prominent orange mottles; clay loam, sandy; moist when sampled; clear to
2A1	.5 to 1.1	Dark grey (5Y41) moist; silty light clay; massive structure; wet when sampled; clear to
2B2	1.1 to 1.85	Greenish grey (5GY51) moist; common 10-20% medium 5-15mm prominent orange mottles; medium clay; subangular blocky weak 2-5mm structure; wet when sampled; abrupt to
3C1	1.85 to 2.15	Greenish grey (5GY51) moist; coarse sandy clay loam; massive structure; wet when sampled; clear to
4C2	2.15 to 2.6	Dark grey (5Y41) moist; silty light clay; few 2-10% angular shell large pebbles 20-60 mm; massive structure; very few <2% fine <2mm gypseous crystals; wet when sampled

Field Tests:

Depth	PH-2	PH-3
.1	6.6	2.3
.3	6.7	4.5
.6	6.9	2.7
.8	7.2	5.9
1	7.6	3.9
1.25	7.6	8.0
1.5	7.6	8.2
1.75	8.3	8.0
2	7.6	7.2
2.25	7.4	6.6
2.5	7.5	6.9

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Observation Notes:

Location Mann rd, Adjacent Cairns J.R.L. ovals, site in drain approx 30cm below level of fields

Soil Top 0.5m fill

Vegetation Mangrove spp.

Project: NQAS **Site:** 14 **Observation:** 1

Location: GDA 94 ZONE 55 363305mE 8138791mN Lat: -16.83008 Long: 145.71704

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: tidal flat **Element:** supratidal flat

Disturbances: Complete clearing - pasture - but never cultivated

Classifications:

ASC: SULFURIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .15	Brown (10YR53) moist; few 2-10% fine <5mm faint orange mottles; light clay; granular weak 2- 5mm structure; dry when sampled; gradual to
B21	.15 to .4	Grey (10YR61) moist; few 2-10% medium 5-15mm distinct red mottles, common 10-20% medium 5-15mm distinct orange mottles; silty light medium clay; subangular blocky moderate 2- 5mm structure; dry when sampled; gradual to
B22ia	.4 to .6	Grey (10YR61) moist; few 2-10% medium 5-15mm distinct red mottles, common 10-20% coarse 15-30mm distinct orange mottles, very few <2% medium 5-15mm distinct yellow jarosite (from pyrite) mottles; medium clay; subangular blocky moderate 5-10mm structure; dry when sampled; clear to
B23ia	.6 to .8	Greyish brown (10YR52) moist; many 20-50% coarse 15-30mm distinct orange mottles, very few <2% fine <5mm faint yellow jarosite (from pyrite) mottles; medium clay; subangular blocky weak 5-10mm structure; moderately moist when sampled; clear to
C1	.8 to 1.25	Dark grey (10YR41) moist; silty light medium clay; massive structure; moist when sampled; gradual to
C2u	1.25 to 1.5	Grey (5Y51) moist; silty light clay; massive structure; common 10-20% coarse 6-20mm organic (humified) tubules; wet when sampled; gradual to
C3u	1.5 to 2.4	Dark grey (5Y41) moist; silty light medium clay; massive structure; very few <2% coarse 6-20mm organic (humified) tubules; few 2-10% medium 2-6mm organic (humified) root linings; wet when sampled; clear to
2C4u	2.4 to 3	Very dark grey (5Y31) moist; fibric clay loam, sandy; massive structure; common 10-20% medium 2-6mm organic (humified) root linings; wet when sampled; clear to
3C5u	3 to 3.2	Dark grey (5Y41) moist; coarse sandy clay loam; massive structure; few 2-10% fine <2mm organic (humified) root linings; wet when sampled; gradual to
3C6u	3.2 to 3.3	Grey (10YR51) moist; coarse sandy; clay; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.6	2.9
.3		4.7	3.3
.6		4.7	3.0
.8		4.3	2.4
1	4	3.9	2.0
1.25	4	3.9	0.9
1.5	4	5.4	1.1
1.75	4	5.6	1.1
2	4	5.9	1.1
2.25	4	6.2	1.3
2.5	4	6	1.3
2.75	4	6	1
3	4	6	1.1
3.25	4	6.1	1.1

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 15 **Observation:** 1

Location: GDA 94 ZONE 55 362821mE 8138172mN Lat: -16.83565 Long: 145.71246

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: LEPTIC, Tenosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .2	Very dark greyish brown (10YR32) moist; clay loam; granular moderate 2-5mm structure; dry when sampled; diffuse to
A2	.2 to .4	Brown (10YR43) moist; sandy clay loam; granular moderate 2-5mm structure; diffuse to
2C1	.4 to .75	Yellowish brown (10YR54) moist; sandy loam; granular moderate 2-5mm structure; moderately moist when sampled; diffuse to
2C2	.75 to 1.1	Yellowish brown (10YR56) moist; clayey sand; massive structure; moderately moist when sampled; gradual to
2C3	1.1 to 1.3	Olive yellow (2.5Y66) moist; sand; massive structure; moderately moist when sampled; gradual to
2D1	1.3 to 1.75	Olive yellow (2.5Y66) moist; few 2-10% medium 5-15mm distinct orange mottles; sand; massive structure; moderately moist when sampled; gradual to
3D2	1.75 to 2.15	Light greenish grey (10Y71) moist; common 10-20% medium 5-15mm prominent red mottles; clayey sand; massive structure; moderately moist when sampled; clear to
3D3	2.15 to 2.5	Light greenish grey (10Y71) moist; many 20-50% medium 5-15mm prominent orange mottles, few 2-10% medium 5-15mm distinct red mottles; fine sandy clay loam; massive structure; moist when sampled; gradual to
3D4	2.5 to 3	Light greenish grey (10Y71) moist; common 10-20% medium 5-15mm prominent orange mottles; heavy fine sandy clay loam; massive structure; moist when sampled; clear to
4C4u	3 to 3.5	Dark grey (5Y41) moist; heavy fine sandy clay loam; massive structure; wet when sampled; clear to
4C5u	3.5 to 5	Dark grey (5Y41) moist; sapric fine sandy clay loam; massive structure; few 2-10% coarse 6- 20mm organic (humified) tubules; wet when sampled; gradual to
5C6u	5 to 6	Dark grey (5Y41) moist; fine sandy light clay; massive structure; few 2-10% medium 2-6mm organic (humified) root linings; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1		4.4	2.8	3		6.8	3.6
.3		4.2	3.7	3.25	4	6.9	1.5
.6		4.0	3.9	3.5	4	7.2	1.3
.8		4.6	4.4	3.75	4	7.5	1.3
1		5.1	4.4	4	4	7.3	1.1
1.25		5.4	4.7	4.25	4	7.7	1.2
1.5		6.1	4.8	4.5	4	7.5	1.1
1.75		5.5	4.4	4.75	4	7.6	1.1
2		5.4	4.0	5	4	7.5	1.1
2.25		4.8	4.1	5.5	4	7.5	1.1
2.5		4.9	3.7	6	4	7.7	1.0
2.75		5.6	2.6				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon 2C1 Gravels

Project: NQAS **Site:** 16 **Observation:** 1

Location: GDA 94 ZONE 55 364723mE 8139203mN Lat: -16.82644 Long: 145.73037

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: beach ridge plain **Element:** beach ridge

Disturbances: Cultivation - Irrigated, past or present

Classifications:

ASC: ARENIC, Rudosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .25	Very dark grey (10YR31) moist; sand; single grain structure; dry when sampled; clear to
A21	.25 to .7	Yellow (10YR76) moist; sand; single grain structure; dry when sampled; gradual to
2C1	.7 to 1.1	Light grey (10YR72) moist; coarse sand; common 10-20% angular quartz medium pebbles 6-20 mm; single grain structure; dry when sampled; clear to
2C2	1.1 to 1.6	Light grey (10YR71) moist; coarse sand; single grain structure; moderately moist when sampled; clear to
2C3	1.6 to 2	Light grey (10YR71) moist; coarse sand; single grain structure; moist when sampled; clear to
2C4	2 to 2.5	Light grey (10YR71) moist; coarse sand; single grain structure; moist when sampled; gradual to
2C5u	2.5 to 3.45	Grey (10YR61) moist; coarse sand; single grain structure; moist when sampled; gradual to
3D6	3.45 to 3.75	Grey (2.5Y61) moist; few 2-10% medium 5-15mm distinct orange mottles, few 2-10% fine <5mm distinct dark mottles; fine sand; single grain structure; moist when sampled; clear to
4C7u	3.75 to 4.8	Grey (2.5Y51) moist; coarse sand; common 10-20% angular quartz small pebbles 2-6 mm; very few <2% angular quartz large pebbles 20-60 mm; single grain structure; very few <2% medium 2- 6mm organic (humified) root linings; moist when sampled; gradual to
5C8u	4.8 to 5	Dark grey (5Y41) moist; light medium clay; massive structure; few 2-10% medium 2-6mm organic (humified) root linings; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		5.4	4.5
.3		5.6	4.2
.6		5.5	5.4
.8		6.0	5.5
1		6.3	5.6
1.25		6.1	5.5
1.5		6.2	5.6
1.75		5.5	5.6
2		5.8	5.8
2.25		6.2	5.2
2.5		6.3	3.4
2.75	4	6.3	1.8
3	4	6.1	2.3
3.25	4	6.2	2.1
3.5	4	6.2	2.0
3.75	4	6.4	1.5
4	4	6.2	1.8
4.25	4	6.4	1.7
4.5	4	6.3	1.9
4.75	4	6.5	1.6
5	4	6.2	1.2

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 17 **Observation:** 1

Location: GDA 94 ZONE 55 363744mE 8139491mN Lat: -16.82378 Long: 145.7212

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: beach ridge plain

Element: beach ridge

Disturbances: Limited clearing

Classifications:

ASC: ARENIC, Rudosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .3	Very dark greyish brown (10YR32) moist; fine sand; single grain structure; dry when sampled; clear to
A21	.3 to .6	Light olive brown (2.5Y54) moist; fine sand; single grain structure; dry when sampled; gradual to
A22	.6 to 1.6	Pale olive (5Y63) moist; fine sand; single grain structure; dry when sampled; gradual to
B21	1.6 to 1.85	Light olive grey (5Y62) moist; few 2-10% medium 5-15mm distinct orange mottles; sand; single grain structure; dry when sampled; clear to
2A2e	1.85 to 2.15	Light grey (10YR71) moist; sand; single grain structure; moderately moist when sampled; gradual to
2C1	2.15 to 2.5	Grey (10YR61) moist; very few <2% fine <5mm faint orange mottles; clay loam, sandy; massive structure; moist when sampled; diffuse to
2C2	2.5 to 2.8	Grey (10YR51) moist; clay loam, sandy; few 2-10% medium 2-6mm organic (humified) root linings; moist when sampled; diffuse to
3C3u	2.8 to 3.6	Dark grey (5Y41) moist; clay loam, sandy; massive structure; moist when sampled; diffuse to
4C4u	3.6 to 4.9	Grey (5Y61) moist; few 2-10% fine <5mm distinct dark mottles; clayey sand; single grain structure; very few <2% medium 2-6mm organic (humified) root linings; moist when sampled; clear to
4C5u	4.9 to 5.3	Light grey (2.5Y71) moist; coarse sand; few 2-10% angular quartz medium pebbles 6-20 mm; single grain structure

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.3	4.0
.3		4.9	4.6
.6		5.3	5.3
.8		5.2	5.4
1		5.2	5.4
1.25		5.3	5.4
1.5		5.2	5.3
1.75		5.2	5.1
2		5.5	5.3
2.25		5.5	3.7
2.5		5.8	3.7
2.75		5.0	1.8
3	4	4.4	1.4
3.25	4	5.8	1.4
3.5	4	6.1	1.3
3.75	4	6.2	1.8
4	4	6.0	1.9
4.25	4	5.9	2.1
4.5	4	5.9	1.7
4.75	4	5.8	1.9
5	4	5.7	2.1

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 18 **Observation:** 1

Location: GDA 94 ZONE 55 361237mE 8135638mN Lat: -16.85845 Long: 145.69744

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** prior stream

Disturbances: Cultivation - Rainfed

Classifications:

ASC: ARENIC, Rudosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .45	Dark greyish brown (10YR42) moist; sandy loam; dry when sampled; gradual to
A21	.45 to 1.5	Dark yellowish brown (10YR44) moist; sand; dry when sampled; gradual to
A22	1.5 to 1.8	Dark yellowish brown (10YR44) moist; clayey sand; dry when sampled; gradual to
A3	1.8 to 2.1	Yellowish brown (10YR54) moist; heavy sandy clay loam; dry when sampled; gradual to
B21	2.1 to 2.9	Brown (7.5YR54) moist; few 2-10% fine <5mm faint orange mottles; sandy loam; dry when sampled; gradual to
2C1	2.9 to 4	Brownish yellow (10YR66) moist; coarse sand; dry when sampled; gradual to
2C2	4 to 4.5	Brownish yellow (10YR66) moist; coarse sand; common 10-20% angular granite large pebbles 20-60 mm; moderately moist when sampled

Field Tests:

Depth	PH-2	PH-3
.1	4.6	2.8
.3	4.7	3.2
.6	5.2	3.8
1	5	4.3
1.5	5.5	4.5
2	5.6	5.1
2.5	6.0	5.2
3	6.3	5.6
3.5	6.2	5.8
4	6.2	5.5
4.5	6.2	6.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Site Notes:

Site Hand auger., western side of freeway. Checking for upper extent, falling at 4.5m.

Project: NQAS **Site:** 19 **Observation:** 1

Location: GDA 94 ZONE 55 362789mE 8133822mN Lat: -16.87496 Long: 145.71189

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: BROWN, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .2	Dark brown (10YR33) moist; sandy clay loam; single grain structure; dry when sampled; gradual to
A21	.2 to .5	Dark yellowish brown (10YR44) moist; sand; single grain structure; dry when sampled; clear to
A22	.5 to .8	Yellowish brown (10YR54) moist; sand; single grain structure; dry when sampled; diffuse to
B21	.8 to 1.2	Brown (10YR53) moist; few 2-10% medium 5-15mm faint red mottles; light clay; moderate structure; moderately moist when sampled; diffuse to
B22	1.2 to 1.6	Brown (10YR53) moist; few 2-10% medium 5-15mm distinct orange mottles; light clay; moderate structure; few 2-10% medium 2-6mm manganiferous soft segregations; moderately moist when sampled; clear to
B23	1.6 to 2.1	Brown (10YR53) moist; common 10-20% medium 5-15mm distinct orange mottles; light clay; subangular blocky weak 2-5mm structure; few 2-10% medium 2-6mm manganiferous soft segregations; moist when sampled; clear to
B24	2.1 to 2.5	Light grey (5Y71) moist; common 10-20% coarse 15-30mm prominent orange mottles; clay loam, fine sandy; massive structure; few 2-10% medium 2-6mm manganiferous soft segregations; moist when sampled; diffuse to
B25	2.5 to 3.4	Light grey (5Y71) moist; many 20-50% medium 5-15mm prominent red mottles, few 2-10% medium 5-15mm distinct orange mottles; clay loam, fine sandy; massive structure; dry when sampled; diffuse to
B26	3.4 to 3.8	Grey (10YR61) moist; few 2-10% medium 5-15mm prominent red mottles, few 2-10% medium 5-15mm distinct orange mottles; light medium clay; massive structure; moist when sampled; clear to
B27	3.8 to 4	Grey (10YR51) moist; common 10-20% medium 5-15mm distinct red mottles, common 10-20% medium 5-15mm distinct orange mottles, very few <2% fine <5mm distinct yellow jarosite (from pyrite) mottles; fine sandy light clay; few 2-10% coarse 6-20mm ferruginous concretions; moist when sampled; clear to
B28	4 to 4.65	Greenish grey (5GY61) moist; common 10-20% coarse 15-30mm distinct orange mottles, few 2-10% medium 5-15mm distinct red mottles; medium clay; massive structure; moist when sampled; gradual to
B29	4.65 to 5	Grey (10YR61) moist; many 20-50% coarse 15-30mm distinct red mottles; medium clay; massive structure; moist when sampled

Field Tests:

Depth	PH-2	PH-3	Depth	PH-2	PH-3
.1	4.7	2.2	2.75	4.4	3.3
.3	4.8	3.2	3	4.2	3.0
.6	5	3.7	3.25	4.4	2.9
.8	5.1	3.2	3.5	4.4	2.2
1	5.1	4.1	3.75	4.7	2.5
1.25	4.6	4.6	4	4.5	2.7
1.5	4.5	3.3	4.25	4.5	3.0
1.75	4.3	3.6	4.5	4.5	3.1
2	4.0	3.7	4.75	4.5	3.0
2.25	4.4	3.1	5	4.5	3.3
2.5	4.5	3.4			

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 20 **Observation:** 1

Location: GDA 94 ZONE 55 363401mE 8134103mN Lat: -16.87245 Long: 145.71765

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain

Element: plain

Depth to Water: 1.4

Disturbances: Cultivation - Rainfed

Classifications:

ASC: SULFIDIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .3	Dark yellowish brown (10YR34) moist; few 2-10% fine <5mm faint orange mottles; light clay; granular moderate 2-5mm structure; angular blocky moderate 2-5mm structure; dry when sampled; gradual to
A3	.3 to .55	Brown (10YR43) moist; few 2-10% medium 5-15mm distinct orange mottles; heavy silty clay loam; angular blocky moderate 5-10mm structure; dry when sampled; gradual to
B21	.55 to 1.1	Grey (10YR51) moist; many 20-50% medium 5-15mm prominent orange mottles; light clay; subangular blocky moderate 2-5mm structure; few 2-10% medium 2-6mm manganiferous soft segregations; moderately moist when sampled; gradual to
B22	1.1 to 1.6	Grey (5Y61) moist; few 2-10% medium 5-15mm distinct red mottles, few 2-10% medium 5-15mm distinct orange mottles; light medium clay; massive structure; moderately moist when sampled; diffuse to
C1u	1.6 to 2	Dark grey (5Y41) moist; silty light medium clay; massive structure; moist when sampled; clear to
2C2u	2 to 2.7	Very dark grey (10YR31) moist; fibric clay loam; massive structure; common 10-20% medium 2- 6mm organic (humified) tubules; moist when sampled; clear to
2C3u	2.7 to 3.4	Greenish grey (5GY51) moist; silty light clay; massive structure; moderately moist when sampled; clear to
3C4u	3.4 to 3.8	Greenish grey (5GY61) moist; common 10-20% medium 5-15mm distinct orange mottles; silty medium clay; massive structure; few 2-10% medium 2-6mm organic (humified) root linings

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.4	2.0
.3		4.3	2.6
.6		5.1	2.6
.8		5.5	3.0
1		5.4	3.2
1.25		5.7	3.5
1.5		4.6	2.6
1.75	4	5.3	1.7
2	4	6.3	1.5
2.25	4	6.2	1.2
2.5	4	6.2	1.2
2.75	4	6.3	1.7
3	4	6.2	1.5
3.25	4	6.4	2
3.5	4	6.4	2.8
3.75	4	6.6	4.4

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 21 **Observation:** 1

Location: GDA 94 ZONE 55 364940mE 8135094mN Lat: -16.86359 Long: 145.73216

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: GREY, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .2	Brown (10YR43) moist; sandy clay loam; subangular blocky weak 2-5mm structure; dry when sampled; gradual to
A3	.2 to .45	Dark greyish brown (10YR42) moist; few 2-10% fine <5mm faint orange mottles; sandy clay loam; subangular blocky weak 2-5mm structure; dry when sampled; gradual to
B21	.45 to .75	Brown (10YR53) moist; few 2-10% medium 5-15mm distinct orange mottles; silty clay loam; subangular blocky moderate 5-10mm structure; dry when sampled; diffuse to
B22	.75 to 1.1	Greenish grey (10Y61) moist; common 10-20% coarse 15-30mm distinct orange mottles; sandy clay loam; subangular blocky moderate 2-5mm structure; moderately moist when sampled; gradual to
B23	1.1 to 1.5	Grey (5Y61) moist; common 10-20% medium 5-15mm distinct orange mottles, common 10-20% coarse 15-30mm prominent red mottles; clay loam, sandy; subangular blocky weak 5-10mm structure; moderately moist when sampled; gradual to
B24	1.5 to 2.1	Grey (5Y61) moist; few 2-10% medium 5-15mm distinct orange mottles; fine sandy light clay; subangular blocky weak 5-10mm structure; few 2-10% medium 2-6mm ferruginous soft segregations; moist when sampled; clear to
C1u	2.1 to 2.8	Dark grey (5Y41) moist; sandy clay loam; massive structure; few 2-10% medium 2-6mm organic (humified) root linings; moist when sampled; clear to
C2u	2.8 to 4.4	Dark grey (5Y41) moist; silty light clay; massive structure; few 2-10% medium 2-6mm organic (humified) root linings; moist when sampled; abrupt to
2C3u	4.4 to 4.8	Dark grey (5Y41) moist; coarse sand; single grain structure

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		5.2	2.7
.3		5.5	3.1
.6		5.5	3.6
.8		4.9	3.5
1		4.4	3.2
1.25		4.5	3.0
1.5		4.4	3.4
1.75		4.3	3.4
2		4.2	2.8
2.25	4	4.6	2.8
2.5	4	5.9	1.9
2.75	4	6.5	1.6
3	4	7	1.6
3.25	4	7.8	1.6
3.5	4	7.8	1.4
3.75	4	8	1.5
4	4	8.2	1.9
4.25	4	7.9	1.7
4.5		7.2	1.6

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Texture 2C3u KS with some clay lenses

Project: NQAS **Site:** 22 **Observation:** 1

Location: GDA 94 ZONE 55 364812mE 8136638mN Lat: -16.84963 Long: 145.73105

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain

Element: plain

Depth to Water: 1.75

Disturbances: Cultivation - Irrigated, past or present

Classifications:

ASC: GREY, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A11p	0 to .5	Dark greyish brown (10YR42) moist; few 2-10% fine <5mm distinct orange mottles; light clay; subangular blocky moderate 2-5mm structure; dry when sampled; gradual to
B21	.5 to .75	Grey (10YR61) moist; few 2-10% medium 5-15mm distinct orange mottles; light medium clay; subangular blocky weak 5-10mm structure; moderately moist when sampled; gradual to
B22	.75 to 1.25	Grey (5Y51) moist; many 20-50% medium 5-15mm prominent red mottles, few 2-10% medium 5- 15mm distinct orange mottles; medium clay; subangular blocky weak 5-10mm structure; moderately moist when sampled; gradual to
B23	1.25 to 1.75	Dark grey (5Y41) moist; few 2-10% medium 5-15mm distinct orange mottles; medium clay; massive structure; moist when sampled; clear to
2C1u	1.75 to 2.3	Dark grey (5Y41) moist; sandy clay loam; massive structure; wet when sampled; clear to
3C2u	2.3 to 4.25	Dark grey (5Y41) moist; coarse sand; single grain structure; wet when sampled; clear to
4C3u	4.25 to 4.5	Dark grey (5Y41) moist; silty light clay; massive structure; wet when sampled; clear to
5C4u	4.5 to 5	Dark grey (5Y41) moist; coarse sand; single grain structure; wet when sampled; clear to
6C5u	5 to 5.2	Dark grey (5Y41) moist; silty light clay; massive structure; wet when sampled
7C6u	5.2 to 5.3	Dark grey (5Y41) moist; coarse sand; few 2-10% angular quartz small pebbles 2-6 mm; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.4	2.3
.3		4.8	2.9
.6		4.9	2.9
.8		4.7	3.1
1		5.6	3.6
1.25		5.9	3.9
1.5		6.3	4.5
1.75		6.6	3.6
2	4	6.4	1.1
2.25	4	6.5	1.4
2.5	4	6.5	1.5
2.75	4	6.7	1.4
3	4	6.5	1.5
3.25	4	6.7	1.7
3.5	4	6.6	1.3
3.75	4	6.8	1.6
4	4	6.6	1.7
4.25	4	6.6	1.8
4.5	4	6.6	1.5
4.75	4	6.7	1.8
5	4	6.6	1.8
5.25	4	6.8	1.7

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 23 **Observation:** 1

Location: GDA 94 ZONE 55 364024mE 8136396mN Lat: -16.85177 Long: 145.72364

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Depth to Water: 2.7

Disturbances: Cultivation - Irrigated, past or present

Classifications:

ASC: BROWN, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .4	Very dark greyish brown (10YR32) moist; few 2-10% fine <5mm faint orange mottles; clay loam; subangular blocky moderate 2-5mm structure; dry when sampled; diffuse to
A2	.4 to .7	Brown (10YR43) moist; few 2-10% fine <5mm faint orange mottles; clay loam; subangular blocky moderate 2-5mm structure; dry when sampled; diffuse to
B21	.7 to 1.3	Brown (10YR53) moist; few 2-10% medium 5-15mm distinct orange mottles; light clay; subangular blocky moderate 2-5mm structure; dry when sampled; diffuse to
B22	1.3 to 2	Brown (10YR53) moist; common 10-20% medium 5-15mm distinct orange mottles; silty light clay; subangular blocky moderate 5-10mm structure; moderately moist when sampled; gradual to
2B22	2 to 2.3	Brown (10YR53) moist; common 10-20% medium 5-15mm distinct orange mottles; sandy loam; massive structure; moist when sampled; gradual to
2B23	2.3 to 2.7	Light grey (5Y71) moist; common 10-20% coarse 15-30mm prominent orange mottles; light sandy clay loam; massive structure; moist when sampled; gradual to
2B24	2.7 to 3.6	Greenish grey (5GY61) moist; many 20-50% coarse 15-30mm prominent orange mottles; sandy clay loam; massive structure; wet when sampled; diffuse to
3C1u	3.6 to 3.8	Very dark greyish brown (2.5Y32) moist; silty loam; massive structure; wet when sampled; clear to
4C2u	3.8 to 4.15	Very dark grey (N30) moist; fine sandy clay loam; massive structure; wet when sampled
5C3u	4.15 to 4.5	Dark grey (5Y41) moist; silty light clay; massive structure; common 10-20% coarse 6-20mm organic (humified) tubules; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	2	4.5	2.1
.3	2	5	3.3
.6	2	5.6	3.7
.8	2	5.5	3.6
1	2	5.4	3.7
1.25	2	5.4	4.1
1.5	2	5.4	5.5
1.75		5.6	4
2		5.6	4
2.25		5.6	4.4
2.5		5.7	4.3
2.75		5.7	4.1
3		5.3	3.9
3.25		4.6	3.3
3.5		4.9	2.9
3.75	4	5.5	1.8
4	4	6.2	1.8
4.25	4	6.7	1.4
4.5	4	7.1	1.2

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 24 **Observation:** 1

Location: GDA 94 ZONE 55 362376mE 8138609mN Lat: -16.83167 Long: 145.70831

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Irrigated, past or present

Classifications:

ASC: SULFIDIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A3	0 to .4	Grey (10YR51) moist; few 2-10% fine <5mm distinct orange mottles; light clay; granular moderate 2-5mm structure; subangular blocky moderate 2-5mm structure; dry when sampled; gradual to
B21	.4 to .7	Grey (10YR51) moist; common 10-20% medium 5-15mm distinct orange mottles; light medium clay; subangular blocky moderate 2-5mm structure; dry when sampled; clear to
B22	.7 to 1	Dark grey (2.5Y41) moist; few 2-10% fine <5mm distinct orange mottles; medium clay; massive structure; moist when sampled; gradual to
2C1u	1 to 1.3	Dark grey (5Y41) moist; silty light clay; massive structure; wet when sampled; abrupt to
3C2u	1.3 to 3.05	Dark grey (5Y41) moist; coarse sand; abundant 50-90% subangular quartz medium pebbles 6-20 mm; single grain structure; wet when sampled; abrupt to
4C3u	3.05 to 3.65	Dark grey (5Y41) moist; silty light clay; massive structure; few 2-10% medium 2-6mm organic (humified) root linings; wet when sampled; clear to
4C4u	3.65 to 4.1	Dark grey (5Y41) moist; silty light clay; massive structure; few 2-10% medium 2-6mm organic (humified) root linings; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.3	2.2
.3		4.5	2.3
.6		4.5	2.7
.8		4.4	2.5
1	4	5.5	1.4
1.25	4	6.2	1.5
1.5	4	6.1	1.2
1.75	4	6.5	1.6
2	4	6.9	1.7
2.25	4	7.0	1.6
2.5	4	6.9	1.6
2.75	4	7.1	1.5
3	4	7.3	1.5
3.25	4	7.1	1.4
3.5	4	7.0	1.3
3.75	4	7.2	1.3
4	4	7.3	1.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 25 **Observation:** 1

Location: GDA 94 ZONE 55 363339mE 8139846mN Lat: -16.82055 Long: 145.71742

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Complete clearing - pasture - cultivation at some stage

Classifications:

ASC: SULFIDIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A3	0 to .2	Dark greyish brown (10YR42) moist; few 2-10% medium 5-15mm distinct orange mottles; heavy clay loam, coarse sandy; subangular blocky weak 2-5mm structure; dry when sampled; clear to
B21	.2 to .5	Grey (10YR61) moist; common 10-20% medium 5-15mm distinct orange mottles; sandy medium clay; subangular blocky moderate 2-5mm structure; dry when sampled; gradual to
B22	.5 to .6	Grey (5Y61) moist; common 10-20% medium 5-15mm distinct orange mottles; sandy medium clay; subangular blocky weak 2-5mm structure; moderately moist when sampled; clear to
2C1u	.6 to .85	Grey (5Y51) moist; clay loam, coarse sandy; massive structure; moist when sampled; gradual to
3C2u	.85 to 1.5	Very dark grey (5Y31) moist; clayey sand; massive structure; wet when sampled; clear to
3C3u	1.5 to 2.4	Grey (5Y51) moist; clayey sand; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.8	2.7
.3		5.2	2.7
.6		6.9	5.1
.8		7.5	2.8
1		7.2	3.8
1.25	4	7	1.6
1.5	4	6.9	1.7
1.75	3	6.9	1.9
2	4	6.8	2
2.25	4	7	2.1

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon 3C2u Some organics

Project: NQAS **Site:** 26 **Observation:** 1

Location: GDA 94 ZONE 55 363809mE 8139909mN Lat: -16.82001 Long: 145.72184

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: GREY, Dermosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .4	Very dark greyish brown (10YR32) moist; few 2-10% fine <5mm faint orange mottles; clay loam, sandy; subangular blocky weak 2-5mm structure; dry when sampled; clear to
B21	.4 to .85	Grey (10YR61) moist; few 2-10% medium 5-15mm distinct red mottles, common 10-20% medium 5-15mm distinct orange mottles; medium clay; subangular blocky moderate 2-5mm structure; dry when sampled; gradual to
B22	.85 to 1.2	Grey (10YR61) moist; few 2-10% medium 5-15mm distinct orange mottles; sandy light clay; subangular blocky weak 2-5mm structure; moderately moist when sampled; clear to
2C1u	1.2 to 1.7	Grey (2.5Y51) moist; coarse sand; many 20-50% angular quartz small pebbles 2-6 mm; single grain structure; moist when sampled; clear to
2C2u	1.7 to 2.85	Dark grey (5Y41) moist; coarse sand; few 2-10% angular quartz medium pebbles 6-20 mm; single grain structure; moist when sampled; clear to
3C3u	2.85 to 3	Dark grey (5Y41) moist; silty light clay; massive structure; moist when sampled; clear to
4C4u	3 to 3.3	Grey (5Y51) moist; coarse sand; massive structure; moist when sampled; clear to
5C5u	3.3 to 3.75	Grey (5Y51) moist; clayey fine sand; massive structure; moist when sampled; clear to
6C6u	3.75 to 4.7	Light grey (2.5Y71) moist; sand; massive structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.2	1.9
.3		4.8	2.0
.6		5.1	3.3
.8		5.5	3.6
1		6.1	4.3
1.25		6	3.6
1.5		6.3	2.1
1.75	4	6.6	1.8
2	4	6.8	1.8
2.25	4	7	1.8
2.5	4	7	1.7
2.75	4	7.3	2
3	4	7.1	1.7
3.25	4	7.4	2.0
3.5	4	7.7	2.0
3.75	4	8	2
4	4	7.5	2.1
4.25	4	7.9	2.2
4.5	4	8.1	2.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 27 **Observation:** 1

Location: GDA 94 ZONE 55 364141mE 8139104mN Lat: -16.8273 Long: 145.7249

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain

Element: prior stream

Disturbances: Cultivation - Rainfed

Classifications:

ASC: LUTIC, Rudosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .35	Brown (10YR43) moist; sandy clay loam; subangular blocky weak 2-5mm structure; dry when sampled; clear to
2C1	.35 to .6	Brownish yellow (10YR66) moist; coarse sand; few 2-10% angular quartz small pebbles 2-6 mm; single grain structure; dry when sampled; clear to
3C3	.6 to 1.8	Brown (10YR53) moist; coarse sand; abundant 50-90% angular quartz medium pebbles 6-20 mm; single grain structure; moderately moist when sampled; gradual to
3C4	1.8 to 2.5	Grey (10YR61) moist; coarse sand; abundant 50-90% angular quartz medium pebbles 6-20 mm; single grain structure; moist when sampled; clear to
3C5u	2.5 to 3.4	Grey (10YR51) moist; coarse sand; abundant 50-90% angular quartz medium pebbles 6-20 mm; single grain structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		3.6	2.4
.3		3.3	2.0
.6		3.8	3.6
.8		4.1	3.1
1		5	4.4
1.25		4.5	4.1
1.5		5.1	4.3
1.75		5.5	4.5
2		5.6	4.6
2.25		6.1	3.6
2.5		6.3	2.7
2.75	4	6.2	2.4
3	4	5.8	2.2
3.25	4	5.8	2.2

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 28 **Observation:** 1

Location: GDA 94 ZONE 55 363164mE 8139207mN Lat: -16.82631 Long: 145.71574

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain

Element: prior stream

Disturbances: Cultivation - Rainfed

Classifications:

ASC: BROWN, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A11p	0 to .2	Very dark greyish brown (10YR32) moist; light clay; subangular blocky weak 2-5mm structure; granular weak 2-5mm structure; dry when sampled; gradual to
A12	.2 to .4	Very dark greyish brown (2.5Y32) moist; clay loam, fine sandy; subangular blocky weak 2-5mm structure; granular weak 2-5mm structure; dry when sampled; clear to
B21	.4 to .75	Light yellowish brown (2.5Y64) moist; common 10-20% coarse 15-30mm distinct orange mottles; light clay; subangular blocky weak 2-5mm structure; dry when sampled; gradual to
B22	.75 to 1.1	Light brownish grey (2.5Y62) moist; many 20-50% medium 5-15mm prominent orange mottles; fine sandy light clay; subangular blocky moderate 2-5mm structure; moderately moist when sampled; gradual to
2C1	1.1 to 1.3	Grey (10YR61) moist; common 10-20% medium 5-15mm distinct orange mottles; coarse sand; subangular blocky moderate 5-10mm structure; moderately moist when sampled; abrupt to
3B21	1.3 to 2	Grey (10YR61) moist; many 20-50% coarse 15-30mm distinct orange mottles; coarse sand; single grain structure; moist when sampled; clear to
4C3u	2 to 2.7	Grey (10YR51) moist; coarse sand; single grain structure; moist when sampled; gradual to
4C4u	2.7 to 3.3	Dark grey (5Y41) moist; coarse sand; single grain structure; moist when sampled; gradual to
4C5u	3.3 to 5	Grey (2.5Y61) moist; coarse sand; single grain structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.6	2.2
.3		4.3	2.3
.6		4.6	3.4
.8		4.7	3.5
1		4.7	3.3
1.25		4.8	3.1
1.5		5.3	3.6
1.75		5.3	2.4
2	4	5.5	2.3
2.25	4	5.9	2.2
2.5	4	6.2	2.2
2.75	4	6.1	2.1
3	4	5.9	1.5
3.25	4	5.7	1.9
3.5	4	5.4	2.2
3.75	4	5.4	2.4
4	4	5.3	2.1
4.25	4	5.3	2.1
4.5	4	5.3	2.1
4.75	4	5.5	2.1
5	4	5.9	1.9

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Texture 4C5u Clay lens at 4.4 to 4.5m

Project: NQAS **Site:** 29 **Observation:** 1

Location: GDA 94 ZONE 55 362456mE 8138808mN Lat: -16.82988 Long: 145.70908

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** prior stream

Depth to Water: 1.1

Disturbances: Complete clearing - pasture - cultivation at some stage

Classifications:

ASC: GREY, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .15	Very dark greyish brown (10YR32) moist; heavy clay loam, fine sandy; granular weak 2-5mm structure; dry when sampled; gradual to
B21	.15 to .35	Dark greyish brown (10YR42) moist; few 2-10% fine <5mm distinct orange mottles; heavy clay loam, fine sandy; subangular blocky weak 2-5mm structure; dry when sampled; gradual to
B2	.35 to .5	Grey (10YR61) moist; common 10-20% medium 5-15mm distinct orange mottles; light clay loam, fine sandy; subangular blocky moderate 2-5mm structure; dry when sampled; gradual to
B23	.5 to 1	Light grey (10YR71) moist; many 20-50% coarse 15-30mm prominent orange mottles; sandy clay loam; massive structure; moderately moist when sampled; gradual to
B24	1 to 1.35	Light grey (10YR71) moist; few 2-10% medium 5-15mm distinct orange mottles; sandy light clay; massive structure; moist when sampled; abrupt to
2C1u	1.35 to 2	Light grey (10YR71) moist; coarse sand; few 2-10% angular quartz small pebbles 2-6 mm; single grain structure; moist when sampled; gradual to
3C2u	2 to 3.9	Grey (2.5Y51) moist; coarse sand; few 2-10% angular quartz small pebbles 2-6 mm; single grain structure; moist when sampled; clear to
4C3u	3.9 to 4.5	Dark grey (5Y41) moist; coarse sand; few 2-10% angular quartz small pebbles 2-6 mm; massive structure; moist when sampled; clear to
5C4u	4.5 to 5.3	Dark grey (5Y41) moist; silty light clay; massive structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1		5	2.4	2.75	4	5.4	2.2
.3		4.9	2.2	3	4	5.5	2.2
.6		4.7	2.9	3.25	4	5.9	2.3
.8		4.4	3	3.5	4	6.1	2.3
1		4.6	3.1	3.75	4	6.4	2
1.25		4.5	3.1	4	4	6.8	1.9
1.5		5.0	2.9	4.25	4	6.9	1.8
1.75		5.2	2.3	4.5	4	7.1	1.8
2		5.0	2.1	4.75	4	7.8	1.9
2.25	4	5	1.8	5	4	8.2	2.1
2.5	4	5.2	2				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon 4C3u Clay layers interspersed throughout horizon 0.05m each

Project: NQAS **Site:** 30 **Observation:** 1

Location: GDA 94 ZONE 55 363967mE 8138332mN Lat: -16.83427 Long: 145.72322

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: GREY, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .25	Brown (10YR43) moist; light clay; subangular blocky moderate 2-5mm structure; dry when sampled; gradual to
B21	.25 to 1.05	Yellowish brown (10YR56) moist; clay loam, fine sandy; subangular blocky moderate 2-5mm structure; dry when sampled; gradual to
B22	1.05 to 1.3	Grey (10YR61) moist; common 10-20% medium 5-15mm distinct orange mottles, few 2-10% medium 5-15mm prominent red mottles; clay loam, fine sandy; subangular blocky moderate 2- 5mm structure; moderately moist when sampled; gradual to
B23	1.3 to 1.85	Grey (10YR61) moist; common 10-20% medium 5-15mm distinct orange mottles; clay loam, sandy; subangular blocky weak 2-5mm structure; moist when sampled; gradual to
2B21	1.85 to 2.1	Grey (10YR51) moist; few 2-10% fine <5mm faint orange mottles; coarse sandy light clay; massive structure; moist when sampled; clear to
3C1	2.1 to 2.7	Grey (10YR61) moist; coarse sand; abundant 50-90% angular quartz medium pebbles 6-20 mm; single grain structure; moist when sampled
3C2	2.7 to 4.4	Grey (2.5Y61) moist; coarse sand; abundant 50-90% angular quartz large pebbles 20-60 mm; single grain structure; moist when sampled
3C3u	4.4 to 4.9	Grey (2.5Y51) moist; coarse sand; abundant 50-90% angular quartz large pebbles 20-60 mm; single grain structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.6	2.4
.3		4.7	3.2
.6		4.7	3.2
.8		4.8	3.2
1		4.8	3.1
1.25		4.4	3.1
1.5		4.4	2.8
1.75		4.5	2.7
2		4.5	2.7
2.25		4.6	2.8
2.5		4.5	3
2.75		4.6	3.5
3		4.7	3.3
3.25		4.6	2.5
3.5		4.7	2.5
3.75		4.7	2.2
4		4.6	2.2
4.25		4.3	2
4.5	4	4.5	1.9
4.75	4	4.7	1.9
4.9	4	4.9	2

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 31 **Observation:** 1

Location: GDA 94 ZONE 55 363953mE 8138075mN Lat: -16.83659 Long: 145.72308

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** supratidal flat

Disturbances: Cultivation - Rainfed

Classifications:

ASC: GREY, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .4	Dark greyish brown (10YR42) moist; light clay; angular blocky moderate 2-5mm structure; dry when sampled; gradual to
B21	.4 to .7	Brown (10YR43) moist; few 2-10% medium 5-15mm distinct orange mottles; light clay; dry when sampled; gradual to
B22	.7 to 1	Brown (10YR53) moist; few 2-10% medium 5-15mm distinct orange mottles, few 2-10% fine <5mm faint red mottles; clay loam, fine sandy; angular blocky moderate 5-10mm structure; dry when sampled; clear to
B23	1 to 1.4	Light brownish grey (10YR62) moist; common 10-20% medium 5-15mm prominent red mottles; sandy clay loam; angular blocky weak 5-10mm structure; moderately moist when sampled; gradual to
B24	1.4 to 2	Grey (10YR61) moist; many 20-50% coarse 15-30mm prominent red mottles; sandy clay loam; weak structure; moderately moist when sampled; clear to
B25	2 to 2.3	Grey (10YR61) moist; common 10-20% medium 5-15mm distinct orange mottles; fine sandy clay loam; massive structure; moist when sampled; gradual to
2D1	2.3 to 2.7	Light brownish grey (10YR62) moist; few 2-10% medium 5-15mm distinct orange mottles; sandy loam; moist when sampled; clear to
2D2	2.7 to 3.15	Grey (2.5Y51) moist; very few <2% fine <5mm distinct orange mottles; sandy clay loam; massive structure; moist when sampled; clear to
3C3u	3.15 to 4.45	Dark grey (5Y41) moist; sand; massive structure; moist when sampled; gradual to
3C4u	4.45 to 5.3	Dark grey (5Y41) moist; silty light clay; massive structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1		4.8	2.1	2.75		4.1	2.7
.3		4.9	2.1	3		4.2	2.5
.6		4.8	3.5	3.25	4	4.0	1.3
.8		4.7	3.7	3.5	4	4.0	1.1
1		4.7	3.6	3.75	4	4.7	1.1
1.5		4.8	2.7	4	4	5.5	1.1
1.75		4.4	3.2	4.25	4	5.7	1.2
2		4.4	3.0	4.5	4	5.9	1.2
2.25		4.5	2.9	4.75	4	6.2	1.2
2.5		4.4	2.9	5	4	6.5	1.4

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Texture	2D1	Dilatent
Texture	2D2	Dilatent
Texture	3C3u	Coarse sand lenses
Texture	3C4u	Coarse sand lenses

Project: NQAS **Site:** 32 **Observation:** 1

Location: GDA 94 ZONE 55 363260mE 8138117mN Lat: -16.83617 Long: 145.71657

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: GREY, Dermosol

Confidence:

Profile Morphology:

Horizon	Depth (m)	Description
B1	0 to .15	Brown (10YR43) moist; light clay; granular weak 2-5mm structure; dry when sampled; gradual to
B21	.15 to .65	Brown (10YR43) moist; few 2-10% fine <5mm distinct orange mottles; light clay; subangular blocky moderate 2-5mm structure; granular weak 2-5mm structure; dry when sampled; diffuse to
B22	.65 to 1.3	Grey (5Y61) moist; many 20-50% medium 5-15mm prominent red mottles, few 2-10% medium 5- 15mm distinct orange mottles; light medium clay; subangular blocky moderate 5-10mm structure; gradual to
B23	1.3 to 1.8	Grey (5Y61) moist; few 2-10% medium 5-15mm distinct orange mottles; light medium clay; subangular blocky weak 2-5mm structure; moderately moist when sampled; clear to
2C1u	1.8 to 3.2	Dark grey (5Y41) moist; silty light clay; massive structure; moist when sampled; clear to
3C2u	3.2 to 3.5	Dark grey (5Y41) moist; coarse sand; massive structure; moist when sampled; clear to
4C3u	3.5 to 3.8	Dark grey (5Y41) moist; silty light clay; massive structure; moist when sampled; clear to
5C4u	3.8 to 4.4	Dark grey (5Y41) moist; coarse sand; massive structure; wet when sampled; clear to
6C5u	4.4 to 4.8	Dark grey (5Y41) moist; coarse sand; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4	2.4
.3		4.6	2.8
.6		4.5	3.3
.8		4.3	3
1		4.0	2.9
1.25		4.1	2.9
1.5		4.8	3.4
1.75		5.4	2.1
2	4	5.3	1.5
2.25	4	5.7	1.3
2.5	4	6.2	1.5
2.75	4	6.4	1.7
3	4	6.7	1.3
3.25		6.8	1.3
3.5	4	6.9	1.3
3.75		6.9	1.4
4		7.7	1.3
4.25		6.8	1.3
4.5		6.7	1.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon	2C1u	Thick mangrove root at 2.7m
Horizon	3C2u	Thick tree root at 3.4m

Project: NQAS **Site:** 33 **Observation:** 1

Location: GDA 94 ZONE 55 362727mE 8137921mN Lat: -16.83791 Long: 145.71156

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Depth to Water: 1.2

Disturbances: Cultivation - Rainfed

Classifications:

ASC: SULFURIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .15	Very dark greyish brown (10YR32) moist; very few <2% fine <5mm faint orange mottles; light clay; granular weak 2-5mm structure; dry when sampled; gradual to
B21	.15 to .45	Greyish brown (10YR52) moist; few 2-10% medium 5-15mm distinct orange mottles; light medium clay; subangular blocky moderate 2-5mm structure; dry when sampled; gradual to
B22i	.45 to 1.2	Grey (10YR61) moist; common 10-20% very coarse >30mm prominent red mottles, few 2-10% medium 5-15mm distinct orange mottles; light medium clay; subangular blocky weak 2-5mm structure; moderately moist when sampled; clear to
B23ia	1.2 to 1.45	Grey (10YR51) moist; few 2-10% medium 5-15mm distinct orange mottles, very few <2% medium 5-15mm distinct red mottles, few 2-10% medium 5-15mm distinct yellow jarosite (from pyrite) mottles; silty light clay; subangular blocky weak 2-5mm structure; moderately moist when sampled; gradual to
B24ia	1.45 to 1.75	Grey (2.5Y51) moist; common 10-20% medium 5-15mm distinct yellow jarosite (from pyrite) mottles; silty light clay; dry when sampled; diffuse to
C1u	1.75 to 2.7	Dark grey (5Y41) moist; silty light clay; massive structure; moist when sampled
C2u	2.7 to 4.1	Dark grey (5Y41) moist; silty light clay; massive structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.1	2.4
.3		3.8	2.4
.6		3.6	2.6
.8		3.6	2.7
1		3.8	2.8
1.25		3.9	2.8
1.5		3.9	2.7
1.75		3.9	2.7
2	4	3.6	1.7
2.25	4	3.6	1.2
2.5	4	3.6	1.2
2.75	4	3.7	1.2
3	4	3.9	1.4
3.25	4	4.8	1.5
3.5	4	5.7	1.8
3.75	4	5.9	1.8
4	4	6	1.7

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon C2u Coarse sand layers interspersed

Project: NQAS **Site:** 34 **Observation:** 1

Location: GDA 94 ZONE 55 362168mE 8137925mN Lat: -16.83784 Long: 145.70632

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: GREY, Dermosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .4	Brown (10YR43) moist; sandy clay loam; subangular blocky weak 2-5mm structure; dry when sampled; clear to
2A1p	.4 to .65	Very dark greyish brown (10YR32) moist; coarse sand; gradual to
3B21	.65 to 1	Grey (10YR61) moist; common 10-20% coarse 15-30mm distinct orange mottles, few 2-10% medium 5-15mm distinct dark mottles; sandy light medium clay; subangular blocky moderate 5- 10mm structure; dry when sampled; gradual to
3B22	1 to 1.75	Dark grey (2.5Y41) moist; few 2-10% fine <5mm distinct orange mottles; silty light medium clay; subangular blocky moderate 5-10mm structure; lenticular moderate 2-5mm structure; moderately moist when sampled; clear to
3B23	1.75 to 2.05	Grey (10YR51) moist; few 2-10% medium 5-15mm distinct orange mottles; fine sandy light medium clay; subangular blocky weak 5-10mm structure; moderately moist when sampled; gradual to
4C1u	2.05 to 2.3	Grey (2.5Y51) moist; silty light clay; massive structure; moist when sampled; gradual to
4C2u	2.3 to 2.65	Dark grey (5Y41) moist; clay loam, sandy; massive structure; moist when sampled
5C3u	2.65 to 3.2	Dark grey (5Y41) moist; coarse sand; single grain structure; moist when sampled
6C4u	3.2 to 4.1	Dark grey (5Y41) moist; silty light clay; massive structure; common 10-20% coarse 6-20mm organic (humified) tubules; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.5	2.8
.3		4.5	3.1
.6		5.2	3.9
.8		5	3.4
1		4.7	2.4
1.25		6.8	2.1
1.5		6.8	2.6
1.75		6.9	3.3
2		6.6	3.1
2.25	4	6.4	1.6
2.5	4	6.3	1.4
2.75	4	6.3	1.4
3	4	6.4	1.4
3.25	4	6.5	1.4
3.5	4	6.5	1.4
3.75	4	6.8	1.4
4	4	6.8	1.6

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 35 **Observation:** 1

Location: GDA 94 ZONE 55 362049mE 8136936mN Lat: -16.84677 Long: 145.70514

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain

Element: prior stream

Disturbances: Cultivation - Rainfed

Classifications:

ASC: BROWN, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
B1	0 to .35	Brown (10YR43) moist; few 2-10% fine <5mm distinct orange mottles; light clay; subangular blocky weak 2-5mm structure; dry when sampled; gradual to
B21	.35 to 1.2	Strong brown (7.5YR46) moist; very few <2% fine <5mm faint orange mottles; light clay; subangular blocky weak 2-5mm structure; dry when sampled; gradual to
2C1	1.2 to 1.6	Dark yellowish brown (10YR46) moist; coarse sand; single grain structure; dry when sampled; clear to
3C2	1.6 to 2.5	Brownish yellow (10YR66) moist; coarse sand; common 10-20% angular quartz medium pebbles 6-20 mm; single grain structure; clear to
3C3	2.5 to 2.9	Light grey (10YR71) moist; coarse sand; few 2-10% angular quartz medium pebbles 6-20 mm; single grain structure; clear to
3C4	2.9 to 3.4	Grey (10YR61) moist; coarse sand; common 10-20% angular quartz medium pebbles 6-20 mm; single grain structure; clear to
4C5u	3.4 to 4.8	Grey (2.5Y51) moist; coarse sand; many 20-50% angular quartz large pebbles 20-60 mm

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.3	2.5
.3		4.9	3.5
.6		4.9	4.6
.8		4.9	4.4
1		5	4
1.25		5.4	4.2
1.5		5.5	3.7
1.75		5.5	4.2
2		5.3	4.1
2.25		5.4	3.1
2.5		5.4	3
2.75		5.3	3.6
3		5.5	2.7
3.25		4.2	2.2
3.5	4	4.5	1.4
3.75	4	5.3	1.3
4	4	6	1.5
4.25	4	6.3	1.8
4.5	4	6.5	1.6
4.75	4	6.7	1.5

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Texture 4C5u Some organic layers throughout

Project: NQAS **Site:** 36 **Observation:** 1

Location: GDA 94 ZONE 55 362627mE 8137440mN Lat: -16.84225 Long: 145.71059

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** levee

Disturbances: Cultivation - Rainfed

Classifications:

ASC: Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .5	Brown (7.5YR42) moist; fine sandy clay loam; weak structure; dry when sampled; gradual to
A21	.5 to .8	Dark yellowish brown (10YR44) moist; sandy clay loam; weak structure; dry when sampled; gradual to
2C1	.8 to 1.7	Yellowish brown (10YR56) moist; loamy sand; common 10-20% angular quartz small pebbles 2-6 mm; single grain structure; dry when sampled; clear to
3C2	1.7 to 2.5	Dark yellowish brown (10YR46) moist; coarse sand; common 10-20% angular quartz small pebbles 2-6 mm; few 2-10% angular quartz large pebbles 20-60 mm; dry when sampled; gradual to
3C3	2.5 to 2.9	Grey (10YR61) moist; coarse sand; common 10-20% angular quartz small pebbles 2-6 mm; few 2-10% angular quartz large pebbles 20-60 mm; dry when sampled

Field Tests:

Depth	PH-2	PH-3
.1	4.2	2.3
.3	4.2	2.5
.6	4.2	3.3
.8	4.6	3.8
1	4.5	3.8
1.25	4.5	4.1
1.5	4.7	4.4
1.75	4.5	4.7
2	4.6	4.8
2.25	4.9	4.8
2.5	5	4.7
2.75	5.1	4.8

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Site Notes:

Site Hit large rock, couldnt penetrate.

Project: NQAS **Site:** 37 **Observation:** 1

Location: GDA 94 ZONE 55 362945mE 8137041mN Lat: -16.84588 Long: 145.71355

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Depth to Water: 1.7

Disturbances: Cultivation - Rainfed

Classifications:

ASC: SULFIDIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .45	Brown (10YR43) moist; clay loam; granular weak 2-5mm structure; dry when sampled
B21	.45 to 1	Dark yellowish brown (10YR44) moist; few 2-10% medium 5-15mm faint orange mottles; light clay; subangular blocky weak 2-5mm structure; dry when sampled
B22	1 to 1.8	Grey (10YR61) moist; many 20-50% medium 5-15mm distinct orange mottles; clay loam, sandy; subangular blocky moderate 2-5mm structure; moist when sampled
2C1u	1.8 to 2.4	Dark grey (5Y41) moist; fine sandy clay loam; massive structure; moist when sampled
3C2u	2.4 to 3.7	Grey (2.5Y61) moist; coarse sand; few 2-10% angular quartz medium pebbles 6-20 mm; single grain structure; moist when sampled; abrupt to
4C3u	3.7 to 4.4	Dark grey (5Y41) moist; fine sandy light clay; massive structure; common 10-20% medium 2- 6mm organic (humified) tubules; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.3	2.3
.3		4.9	2.6
.6		5.4	2.9
.8		5.3	2.8
1		5.3	2.6
1.25		5.6	3.8
1.5		5.5	3.9
1.75		4.5	2.1
2	4	5.4	1.2
2.25	4	6.3	1.4
2.5	4	6.3	1.6
2.75	4	6.5	1.9
3	4	7.2	1.9
3.25	4	7.2	1.8
3.5	4	7.1	1.5
3.75	4	6.9	1.4
4	4	7.8	1.3
4.25	4	7.2	1.2

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 38 **Observation:** 1

Location: GDA 94 ZONE 55 363133mE 8137679mN Lat: -16.84012 Long: 145.71536

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Depth to Water: 1.8

Disturbances: Cultivation - Rainfed

Classifications:

ASC: SULFIDIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .15	Dark greyish brown (10YR42) moist; light clay; granular weak 2-5mm structure; dry when sampled; gradual to
B21	.15 to .5	Grey (10YR61) moist; few 2-10% medium 5-15mm distinct orange mottles; light medium clay; subangular blocky moderate 5-10mm structure; dry when sampled; clear to
B22	.5 to 1.1	Grey (5Y61) moist; common 10-20% medium 5-15mm distinct orange mottles; fine sandy light medium clay; subangular blocky moderate 5-10mm structure; moderately moist when sampled; gradual to
B23	1.1 to 1.4	Grey (5Y61) moist; few 2-10% fine <5mm distinct orange mottles; fine sandy light medium clay; weak structure; moist when sampled; gradual to
2C1u	1.4 to 1.7	Dark grey (5Y41) moist; fine sandy light clay; massive structure; moist when sampled; gradual to
3C2u	1.7 to 2.5	Dark grey (5Y41) moist; silty light clay; massive structure; gradual to
4C3u	2.5 to 3.1	Dark grey (5Y41) moist; sandy clay loam; massive structure; very few <2% medium 2-6mm organic (humified) root linings; moist when sampled; gradual to
5C4u	3.1 to 3.7	Grey (10YR51) moist; sand; single grain structure; moist when sampled; abrupt to
6C5u	3.7 to 4.4	Grey (10YR61) moist; coarse sand; few 2-10% angular quartz small pebbles 2-6 mm; single grain structure; moist when sampled; clear to
7C6u	4.4 to 4.5	Dark grey (5Y41) moist; silty light clay; massive structure; few 2-10% medium 2-6mm organic (humified) root linings; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.3	2.3
.3		4.6	2.7
.6		6.1	3.8
.8		6.5	5.2
1		6.8	2.7
1.25		6.9	4.5
1.5	4	6.8	1.6
1.75	4	7	1.5
2	4	7.1	1.6
2.25	4	7	1.4
2.5	4	6.9	1.5
2.75	4	6.7	1.4
3	4	6.7	1.3
3.25	4	6.6	1.5
3.5	4	6.5	1.7
3.75	4	7.1	1.6
4	4	7.2	1.8
4.25	4	7.2	1.9
4.5	4	6.4	1.5

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 39 **Observation:** 1

Location: GDA 94 ZONE 55 363155mE 8137467mN Lat: -16.84204 Long: 145.71555

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: BROWN, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A11p	0 to .4	Very dark greyish brown (10YR32) moist; clay loam; granular weak 2-5mm structure; dry when sampled; clear to
A12	.4 to .7	Brown (10YR43) moist; few 2-10% fine <5mm faint orange mottles; heavy clay loam; granular weak 2-5mm structure; dry when sampled; gradual to
B21	.7 to 1	Dark yellowish brown (10YR46) moist; few 2-10% medium 5-15mm faint orange mottles; sandy loam; granular weak 2-5mm structure; moderately moist when sampled; gradual to
B22	1 to 1.4	Light olive brown (2.5Y54) moist; common 10-20% medium 5-15mm distinct orange mottles; heavy sandy loam; massive structure; moderately moist when sampled; gradual to
2B23	1.4 to 2	Greyish brown (2.5Y53) moist; common 10-20% coarse 15-30mm prominent orange mottles; sand; massive structure; moist when sampled; gradual to
2B24	2 to 2.5	Grey (2.5Y61) moist; common 10-20% coarse 15-30mm prominent orange mottles; sandy clay loam; gradual to
2C1	2.5 to 3.4	Grey (10YR61) moist; many 20-50% coarse 15-30mm prominent orange mottles; clay loam, sandy; gradual to
3C2	3.4 to 3.8	Grey (5Y51) moist; sandy light clay; gradual to
4C3u	3.8 to 4.2	Dark grey (5Y41) moist; light medium clay; massive structure; few 2-10% medium 2-6mm organic (humified) tubules

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.5	2.8
.3		5	3.4
.6		4.9	4.1
.8		4.8	4.1
1		4.9	4.4
1.25		5	4
1.5		5.1	4.1
1.75		4.5	3.5
2		4.3	2.2
2.25		4	3
2.5		4	3
2.75		4	2.7
3		4.1	2.9
3.25		4.2	2.5
3.5		4.9	2.6
3.75		4.9	2.4
4	4	5.4	1.3
4.2	4	6.2	1.4

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Texture 2B23 Dilatent sands

Project: NQAS **Site:** 40 **Observation:** 1

Location: GDA 94 ZONE 55 362227mE 8137280mN Lat: -16.84367 Long: 145.70683

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Depth to Water: 1.5

Disturbances: Limited clearing

Classifications:

ASC: SULFIDIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .45	Dark brown (10YR33) moist; clay loam, sandy; granular weak 2-5mm structure; dry when sampled; gradual to
A12	.45 to .75	Very dark greyish brown (10YR32) moist; very few <2% fine <5mm faint orange mottles; clay loam, sandy; granular weak 2-5mm structure; dry when sampled; diffuse to
A21	.75 to 1.05	Dark greyish brown (10YR42) moist; few 2-10% fine <5mm faint orange mottles; sandy clay loam; granular weak 2-5mm structure; moderately moist when sampled; clear to
B21	1.05 to 1.4	Grey (5Y61) moist; common 10-20% medium 5-15mm prominent orange mottles; sandy light medium clay; subangular blocky weak 5-10mm structure; moderately moist when sampled; gradual to
B22	1.4 to 1.6	Grey (10YR61) moist; coarse sandy light clay; massive structure; moist when sampled; clear to
2C1u	1.6 to 2.9	Grey (2.5Y51) moist; coarse sand; common 10-20% angular quartz small pebbles 2-6 mm; single grain structure; few 2-10% medium 2-6mm organic (humified) root linings; clear to
2C2u	2.9 to 4.3	Grey (2.5Y61) moist; coarse sand; very few <2% angular quartz large pebbles 20-60 mm; common 10-20% angular quartz small pebbles 2-6 mm; single grain structure

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.9	2.4
.3		5.5	2.5
.6		5.4	2.4
.8		5.3	2.5
1		4.7	3
1.25		4.2	2.6
1.5		4.1	2.1
1.75	4	4.5	1.7
2	4	4.4	1.5
2.25	4	5	1.5
2.5	4	5.1	1.5
2.75	4	5.1	1.6
3	4	5.3	1.8
3.25	4	5.3	1.8
3.5	4	5.6	2.6
3.75	4	5.7	5.7
4	4	5.6	1.6
4.25	4	5.7	1.5

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Texture 2C2u Some silty light clay lenses within

Project: NQAS **Site:** 41 **Observation:** 1

Location: GDA 94 ZONE 55 361821mE 8137612mN Lat: -16.84065 Long: 145.70304

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain

Element: prior stream

Depth to Water: 1.5

Disturbances: Cultivation - Rainfed

Classifications:

ASC: SULFIDIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .4	Very dark greyish brown (10YR32) moist; fine sandy light clay; granular weak 2-5mm structure; dry when sampled; diffuse to
A21	.4 to .7	Dark yellowish brown (10YR44) moist; sandy clay loam; weak structure; dry when sampled; gradual to
2C1	.7 to 1	Yellowish brown (10YR56) moist; loamy sand; single grain structure; moderately moist when sampled; gradual to
2D2	1 to 1.2	Brownish yellow (10YR68) moist; common 10-20% medium 5-15mm prominent orange mottles, few 2-10% fine <5mm distinct grey mottles; loamy sand; single grain structure; moderately moist when sampled; gradual to
2D3	1.2 to 1.4	Grey (10YR61) moist; few 2-10% medium 5-15mm distinct orange mottles; sandy loam; massive structure; moist when sampled; gradual to
3C4	1.4 to 1.75	Light grey (10YR72) moist; coarse sand; single grain structure; moist when sampled; gradual to
3C5u	1.75 to 2.3	Grey (10YR61) moist; coarse sand; few 2-10% angular quartz small pebbles 2-6 mm; moist when sampled; diffuse to
3C6u	2.3 to 4.3	Grey (2.5Y61) moist; coarse sand; common 10-20% angular quartz small pebbles 2-6 mm; few 2-10% angular quartz large pebbles 20-60 mm; moist when sampled

Field Tests:

Depth	PH-2	PH-3
.1	4.9	2.6
.3	5.4	3
.6	5.6	4.1
.8	5.7	4.6
1	5.9	4.4
1.25	6	4.3
1.5	6.2	4.3
1.75	5.5	2.2
2	5.6	2.2
2.25	5.4	2.1
2.5	5.5	2.1
2.75	5.8	2
3	5.9	2
3.25	6.1	1.8
3.5	6.1	2
3.75	6.2	2.2
4	6.1	2.2
4.25	6.2	2.1
PH-2: pH using electrode probe		
PH-3: pH of hydrogen peroxide extract		

Project: NQAS **Site:** 42 **Observation:** 1

Location: GDA 94 ZONE 55 361714mE 8137935mN Lat: -16.83772 Long: 145.70206

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Depth to Water: 1.5

Disturbances: Cultivation - Rainfed

Classifications:

ASC: SULFIDIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .15	Dark greyish brown (10YR42) moist; light clay; subangular blocky moderate 2-5mm structure; granular moderate 2-5mm structure; moderately moist when sampled; gradual to
A12	.15 to .45	Greyish brown (10YR52) moist; heavy light clay; subangular blocky moderate 5-10mm structure; moderately moist when sampled; diffuse to
B21	.45 to .75	Grey (10YR61) moist; common 10-20% coarse 15-30mm distinct orange mottles; light medium clay; subangular blocky weak 2-5mm structure; moist when sampled; gradual to
B22	.75 to 1.1	Grey (5Y61) moist; common 10-20% medium 5-15mm prominent orange mottles; medium clay; subangular blocky weak 5-10mm structure; moist when sampled; clear to
2C1	1.1 to 1.4	Grey (5Y51) moist; coarse sandy light clay; massive structure; moist when sampled; clear to
3C2u	1.4 to 1.7	Dark grey (5Y41) moist; sandy clay loam; massive structure; wet when sampled; clear to
4C3u	1.7 to 2.8	Dark grey (5Y41) moist; coarse sand; common 10-20% angular quartz small pebbles 2-6 mm; wet when sampled; abrupt to
4C4u	2.8 to 3.25	Dark grey (5Y41) moist; coarse sand; single grain structure; wet when sampled; gradual to
4C5u	3.25 to 3.5	Dark grey (5Y41) moist; coarse sand; common 10-20% subangular quartz large pebbles 20-60 mm; common 10-20% angular quartz small pebbles 2-6 mm; wet when sampled; clear to
4C6u	3.5 to 4	Grey (5Y51) moist; coarse sand; very few <2% subangular quartz large pebbles 20-60 mm; wet when sampled; abrupt to
5C7u	4 to 4.1	Dark grey (5Y41) moist; silty light clay; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.6	3
.3		5	3.3
.6		5.8	3.7
.8		6.3	4.1
1		6.2	4.2
1.25		6.6	3.9
1.5	4	6.6	1.7
1.75	4	7	1.4
2	4	7.1	1.3
2.25	4	6.7	1.3
2.5	4	7	1.2
2.75	4	7.1	1.2
3	4	6.7	1.2
3.25	4	6.9	1.2
3.5	4	7.2	1.3
3.75	4	7	1.5
4	4	7.4	1.2

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Texture 4C4u Some clay layers within

Project: NQAS **Site:** 43 **Observation:** 1

Location: GDA 94 ZONE 55 361476mE 8138264mN Lat: -16.83474 Long: 145.69984

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Depth to Water: 1.75

Disturbances: Cultivation - Rainfed

Classifications:

ASC: Tenosol

Profile Morphology:

Horizon	Depth (m)	Description
B21	0 to .4	Reddish brown (5YR44) moist; clayey sand; single grain structure; dry when sampled; sharp to
2C1	.4 to .9	Light yellowish brown (10YR64) moist; common 10-20% fine <5mm distinct orange mottles; coarse sand; single grain structure; dry when sampled; gradual to
3C2	.9 to 1.1	Light yellowish brown (2.5Y64) moist; sand; single grain structure; dry when sampled; diffuse to
3C3	1.1 to 1.3	Olive yellow (2.5Y66) moist; sand; single grain structure; moderately moist when sampled; gradual to
4C4	1.3 to 1.8	Light grey (2.5Y72) moist; coarse sand; few 2-10% angular quartz large pebbles 20-60 mm; moist when sampled; gradual to
5C5	1.8 to 2.35	Light grey (N70) moist; common 10-20% coarse 15-30mm prominent orange mottles; sandy loam; very few <2% angular quartz small pebbles 2-6 mm; single grain structure; moist when sampled; clear to
5C6	2.35 to 2.7	Light grey (5Y71) moist; sandy loam; single grain structure; clear to
5C7	2.7 to 3	Yellow (2.5Y76) moist; sandy loam; single grain structure; moist when sampled; gradual to
6D1	3 to 3.6	Light grey (N70) moist; few 2-10% medium 5-15mm distinct orange mottles; sandy clay loam; massive structure; moist when sampled; gradual to
6D2	3.6 to 4.5	Light greenish grey (10Y71) moist; few 2-10% medium 5-15mm distinct orange mottles, few 2- 10% medium 5-15mm distinct red mottles; coarse sandy clay loam; massive structure; moist when sampled

Field Tests:

Depth	PH-2	PH-3
.1	4.3	3.2
.3	4.5	3.1
.6	4.6	3.7
.8	4.8	3.8
1	4.8	3.7
1.25	4.8	3.7
1.5	4.9	4.0
1.75	5	4.4
2	5.1	4.4
2.25	5.2	4.6
2.5	5.3	4.8
2.75	5.4	4.8
3	5.5	4.9
3.25	5.7	4.7
3.5	5.5	4.6
3.75	5.5	4.8
4	5.7	4.5
4.25	5.6	4.7
4.5	5.8	4.7

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Texture	5C5	Dilatent sands
Texture	6D2	Dilatent sands

Project: NQAS **Site:** 44 **Observation:** 1

Location: GDA 94 ZONE 55 361985mE 8138506mN Lat: -16.83258 Long: 145.70463

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: SULFURIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .3	Very dark greyish brown (10YR32) moist; few 2-10% medium 5-15mm distinct orange mottles; heavy clay loam; weak structure; clear to
B21	.3 to .55	Light yellowish brown (10YR64) moist; sandy clay loam; weak structure; clear to
B22	.55 to .9	Light greenish grey (10Y71) moist; common 10-20% coarse 15-30mm distinct orange mottles, common 10-20% medium 5-15mm distinct red mottles; clay loam, sandy; weak structure; gradual to
B23	.9 to 1.25	Light greenish grey (10Y71) moist; common 10-20% coarse 15-30mm prominent red mottles, few 2-10% medium 5-15mm distinct orange mottles; medium clay; weak structure; gradual to
B24	1.25 to 1.5	Greyish brown (10YR52) moist; few 2-10% medium 5-15mm distinct orange mottles; light medium clay; massive structure; gradual to
B25	1.5 to 1.85	Dark greyish brown (10YR42) moist; few 2-10% medium 5-15mm distinct orange mottles; sandy light clay; massive structure; gradual to
C1u	1.85 to 2.3	Dark grey (5Y41) moist; sandy clay loam; massive structure; few 2-10% medium 2-6mm organic (humified) tubules; very few <2% medium 2-6mm organic (humified) root linings; gradual to
2C2u	2.3 to 3	Dark grey (5Y41) moist; coarse sand; single grain structure

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4	2.2
.3		4.3	2.4
.6		4.4	3.0
.8		4.3	3.5
1		4.1	2.4
1.25		4.1	2.3
1.5		4	2.2
1.75	4	4.6	1.7
2	4	4.9	1.2
2.25	4	5.5	1
2.5	4	6.1	1.8
2.75	4	6.9	1.7
3	4	6.5	1.5

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Texture 2C2u Some clay layering within

Project: NQAS **Site:** 45 **Observation:** 1

Location: GDA 94 ZONE 55 361701mE 8138328mN Lat: -16.83417 Long: 145.70196

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: Rudosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .15	Dark brown (10YR33) moist; sandy clay loam; single grain structure; dry when sampled; gradual to
A12	.15 to .4	Dark brown (10YR33) moist; heavy sandy clay loam; massive structure; dry when sampled; gradual to
A21	.4 to .9	Brown (7.5YR43) moist; sandy clay loam; massive structure; dry when sampled; gradual to
2C1	.9 to 1.4	Dark yellowish brown (10YR46) moist; loamy sand; single grain structure; dry when sampled; gradual to
3C2	1.4 to 2.4	Brownish yellow (10YR66) moist; sand; single grain structure; moderately moist when sampled; clear to
4C3	2.4 to 2.75	Light grey (5Y71) moist; fine sand; moist when sampled; gradual to
5C4	2.75 to 3.6	Light grey (10YR71) moist; coarse sand; common 10-20% angular quartz small pebbles 2-6 mm; single grain structure; moist when sampled; gradual to
6C5	3.6 to 4.5	Very pale brown (10YR73) moist; coarse sand; few 2-10% angular quartz large pebbles 20-60 mm; common 10-20% angular quartz small pebbles 2-6 mm; moist when sampled

Field Tests:

Depth	PH-2	PH-3
.1	4.2	2.5
.3	4.3	2.6
.6	4.6	3.7
.8	5	4
1	5.3	4.2
1.25	5.2	4
1.5	4.8	4.8
1.75	5.2	4.3
2	5.4	3.5
2.25	5.2	4
2.5	5.3	3.9
2.75	5.2	4
3	5.3	4.3
3.25	5.3	4.4
3.5	5.5	4.5
3.75	5.5	4.6
4	5.5	4.5
4.25	5.6	4.3
4.5	5.7	4.6

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 46 **Observation:** 1

Location: GDA 94 ZONE 55 361756mE 8138184mN Lat: -16.83548 Long: 145.70247

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** prior stream

Disturbances: Cultivation - Rainfed

Classifications:

ASC: SULFIDIC, OXYAQUIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .35	Very dark greyish brown (10YR32) moist; very few <2% fine <5mm faint orange mottles; silty light clay; subangular blocky weak 2-5mm structure; granular weak 2-5mm structure; dry when sampled; gradual to
B21	.35 to .5	Grey (5Y61) moist; few 2-10% medium 5-15mm distinct orange mottles; light medium clay; subangular blocky weak 2-5mm structure; moderately moist when sampled; clear to
2C1u	.5 to 1.15	Grey (10YR61) moist; coarse sand; single grain structure; moist when sampled; clear to
3C2u	1.15 to 3	Light grey (10YR71) moist; coarse sand; common 10-20% angular quartz small pebbles 2-6 mm; single grain structure; moist when sampled; gradual to
3C3u	3 to 3.4	Light grey (10YR71) moist; coarse sand; very few <2% angular quartz large pebbles 20-60 mm; common 10-20% angular quartz small pebbles 2-6 mm; moist when sampled; abrupt to
4D1	3.4 to 3.8	Light greenish grey (5G71) moist; fine sandy clay loam; massive structure; dry when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.1	2.7
.3		4.3	2.9
.6		4.9	2.6
.8	4	5.4	1.6
1	4	5.5	5.5
1.25	4	5.7	1.7
1.5	4	5.7	1.7
1.75	4	5.8	1.8
2	4	5.7	1.7
2.25	4	5.8	1.6
2.5	4	6.1	1.6
2.75	4	6.2	1.7
3	4	6.2	1.6
3.25	4	6.7	1.7
3.5	4	6.1	2.7
3.75	4	6.2	4.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 47 **Observation:** 1

Location: GDA 94 ZONE 55 361442mE 8137469mN Lat: -16.84192 Long: 145.69947

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** prior stream

Disturbances: Cultivation - Rainfed

Classifications:

ASC: Rudosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .4	Brown (10YR43) moist; sandy clay loam; granular weak 2-5mm structure; dry when sampled; gradual to
2C1	.4 to .75	Yellowish brown (10YR56) moist; coarse sand; single grain structure; dry when sampled; gradual to
3C2	.75 to 1	Light grey (5Y71) moist; common 10-20% medium 5-15mm prominent orange mottles; sandy loam; very few <2% angular quartz small pebbles 2-6 mm; single grain structure; dry when sampled; gradual to
4C3	1 to 1.6	Dark reddish brown (5YR33) moist; coarse sand; very few <2% angular quartz large pebbles 20- 60 mm; moderately moist when sampled; gradual to
5C4	1.6 to 2	Grey (10YR61) moist; coarse sand; very few <2% angular quartz large pebbles 20-60 mm; single grain structure; wet when sampled; diffuse to
5C5u	2 to 2.7	Grey (10YR51) moist; coarse sand; very few <2% angular quartz large pebbles 20-60 mm; single grain structure; wet when sampled; clear to
5C6u	2.7 to 3	Grey (5Y51) moist; coarse sand; single grain structure; wet when sampled; clear to
6C7u	3 to 3.15	Grey (5Y51) moist; fine sandy loam; massive structure; wet when sampled; clear to
7C8u	3.15 to 3.4	Grey (5Y51) moist; coarse sand; few 2-10% angular quartz small pebbles 2-6 mm; very few <2% angular quartz large pebbles 20-60 mm; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.4	3
.3		4.3	2.8
.6		4.3	2.9
.8		4.2	3.3
1		4.6	3.2
1.25		4.6	5.6
1.5		5.8	2.5
1.75		6.4	2.3
2	4	6.3	2.4
2.25	4	6.4	1.6
2.5	4	6.2	1.7
2.75	4	6.4	1.9
3	4	6.5	1.5
3.25	4	6.6	1.6

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 48 **Observation:** 1

Location: GDA 94 ZONE 55 361549mE 8138399mN Lat: -16.83352 Long: 145.70054

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** prior stream

Disturbances: Cultivation - Rainfed

Classifications:

ASC: REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .15	Dark greyish brown (10YR42) moist; sandy clay loam; granular weak 2-5mm structure; dry when sampled; gradual to
A12	.15 to .4	Brown (10YR43) moist; sandy loam; granular weak 2-5mm structure; dry when sampled; clear to
2A1	.4 to .5	Very dark greyish brown (10YR32) moist; sandy clay loam; granular weak 2-5mm structure; dry when sampled; gradual to
2B21	.5 to .65	Grey (10YR61) moist; few 2-10% medium 5-15mm faint orange mottles; fine sandy light clay; subangular blocky weak 2-5mm structure; dry when sampled; gradual to
2B22	.65 to .9	Light brownish grey (10YR62) moist; many 20-50% coarse 15-30mm distinct orange mottles; sandy clay loam; subangular blocky weak 2-5mm structure; moderately moist when sampled; clear to
2B23	.9 to 1.35	Grey (2.5Y61) moist; few 2-10% medium 5-15mm distinct orange mottles; sandy loam; massive structure; moist when sampled; clear to
3C1u	1.35 to 2.1	Grey (10YR61) moist; coarse sand; very few <2% angular quartz large pebbles 20-60 mm; single grain structure; gradual to
3C2u	2.1 to 2.8	Reddish grey (2.5YR51) moist; coarse sand; few 2-10% angular quartz small pebbles 2-6 mm; single grain structure; gradual to
3C3u	2.8 to 3.3	Grey (5Y51) moist; coarse sand; single grain structure; gradual to
4C4u	3.3 to 4.05	Dark grey (5Y41) moist; coarse sand; very few <2% angular quartz large pebbles 20-60 mm; single grain structure; sharp to
5D1	4.05 to 4.6	Greenish grey (5GY61) moist; common 10-20% medium 5-15mm distinct orange mottles; light fine sandy light clay

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.4	2.2
.3		4.5	2.7
.6		5.4	3.5
.8		5.7	3.9
1		5.8	4.1
1.25		5.8	4
1.5		6.4	2.5
1.75	4	6.3	1.8
2	4	6.4	1.8
2.25	4	6.3	1.6
2.5	4	6.1	1.4
2.75	4	6.3	1.4
3	4	6.3	1.8
3.25	4	6.6	1.6
3.5	4	6.6	1.7
3.75	4	6.7	1.8
4	4	6.6	1.4
4.25		6.7	3.6
4.5		6.8	5.7

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 49 **Observation:** 1

Location: GDA 94 ZONE 55 363014mE 8138708mN Lat: -16.83081 Long: 145.7143

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Complete clearing - pasture - cultivation at some stage

Classifications:

ASC: SULFIDIC, OXYAQUIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .2	Brown (10YR43) moist; clay loam; granular weak 2-5mm structure; dry when sampled; gradual to
B1	.2 to .4	Dark greyish brown (10YR42) moist; few 2-10% fine <5mm faint orange mottles; light clay; subangular blocky weak 2-5mm structure; dry when sampled; gradual to
B21	.4 to .85	Grey (2.5Y61) moist; common 10-20% coarse 15-30mm distinct orange mottles; silty light clay; subangular blocky weak 2-5mm structure; moderately moist when sampled; gradual to
B22	.85 to 1.2	Reddish grey (2.5YR61) moist; few 2-10% medium 5-15mm distinct orange mottles; medium clay; massive structure; wet when sampled; clear to
2C1u	1.2 to 1.8	Dark grey (5Y41) moist; heavy sandy clay loam; few 2-10% coarse 6-20mm organic (humified) tubules; clear to
2C2u	1.8 to 2.3	Dark grey (5Y41) moist; coarse sandy clay loam; massive structure; gradual to
3C3u	2.3 to 3.4	Greenish grey (10Y61) moist; coarse sandy loam; very few <2% angular quartz small pebbles 2-6 mm
4C4u	3.4 to 4.8	Grey (10YR61) moist; coarse sand; very few <2% angular quartz large pebbles 20-60 mm; common 10-20% angular quartz small pebbles 2-6 mm; single grain structure
5C5u	4.8 to 5	Bluish grey (5B61) moist; coarse sandy loam
6C6u	5 to 5.1	Bluish grey (5B61) moist; coarse sandy light clay; massive structure

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.8	2.2
.3		4.8	2.4
.6		6.7	5
.8		6.6	4.5
1		6.4	4.4
1.25		4.7	3.2
1.5	4	5.8	1.4
1.75	4	6.4	1.3
2	4	6.5	1.4
2.25	4	6.5	1.7
2.5	4	6.5	1.5
2.75	4	6.5	1.5
3	4	6.5	1.4
3.25	4	6.2	1.7
3.5	4	6.3	1.7
3.75	4	6.4	1.7
4	4	6.6	1.7
4.25	4	6.3	1.6
4.5	4	6.6	1.6
4.75	4	6.7	1.6
5	4	6.7	1.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 50 **Observation:** 1

Location: GDA 94 ZONE 55 361769mE 8136598mN Lat: -16.84981 Long: 145.70249

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: GREY, Dermosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .4	Dark brown (10YR33) moist; light medium clay; dry when sampled; gradual to
B21	.4 to 1.1	Grey (10YR61) moist; common 10-20% medium 5-15mm distinct orange mottles; fine sandy light medium clay; subangular blocky moderate 2-5mm structure; few 2-10% medium 2-6mm ferromanganiferous soft segregations; moderately moist when sampled; gradual to
B22	1.1 to 1.75	Grey (5Y61) moist; few 2-10% medium 5-15mm distinct red mottles, many 20-50% medium 5- 15mm prominent orange mottles; fine sandy medium clay; few 2-10% medium 2-6mm ferromanganiferous soft segregations; moderately moist when sampled; gradual to
B23	1.75 to 2	Grey (2.5Y51) moist; common 10-20% medium 5-15mm distinct orange mottles; fine sandy medium clay; weak structure; moist when sampled; abrupt to
2C1	2 to 2.4	Grey (10YR61) moist; coarse sand; single grain structure; wet when sampled; gradual to
2C2	2.4 to 2.6	Grey (10YR61) moist; coarse sand; common 10-20% angular quartz medium pebbles 6-20 mm; single grain structure; wet when sampled; clear to
3C3u	2.6 to 2.9	Grey (10YR51) moist; coarse sandy light clay; wet when sampled; gradual to
4C4u	2.9 to 3.6	Grey (10YR51) moist; coarse sand; few 2-10% angular quartz large pebbles 20-60 mm; few 2- 10% angular quartz small pebbles 2-6 mm; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.4	3.4
.3		5	2.8
.6		5.3	3
.8		5.5	4
1		6	4.6
1.25		6.5	3.9
1.5		5.8	3.7
1.75		5.4	3.5
2		5.6	3.5
2.25		5.4	2.6
2.5		5.4	2.2
2.75	4	6.5	1.9
3	4	6.7	1.9

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS**Site:** 51**Observation:** 1

Location: GDA 94

ZONE

55

364498mE

8136329mN

Lat: -16.8524

Long: 145.72808

Described By: Justin Adams (ADAJ)

Landscape:**Landform Pattern:** alluvial plain**Element:** plain**Disturbances:** Cultivation - Rainfed**Classifications:****ASC:** SULFURIC, OXYAQUIC, Hydrosol**Profile Morphology:**

Horizon	Depth (m)	Description
A1	0 to .15	Dark greyish brown (10YR42) moist; clay loam; granular weak 2-5mm structure; dry when sampled; gradual to
B21	.15 to .4	Dark greyish brown (10YR42) moist; few 2-10% fine <5mm faint orange mottles; light clay; subangular blocky weak 2-5mm structure; gradual to
B22	.4 to .8	Dark greyish brown (10YR42) moist; few 2-10% medium 5-15mm distinct orange mottles; silty light clay; subangular blocky weak 2-5mm structure; moderately moist when sampled; gradual to
B23	.8 to 1.1	Common 10-20% fine <5mm distinct orange mottles, few 2-10% medium 5-15mm prominent red mottles; fine sandy light medium clay; weak structure; moderately moist when sampled; clear to
B24	1.1 to 1.8	Grey (5Y61) moist; many 20-50% coarse 15-30mm prominent red mottles; light medium clay; weak structure; moderately moist when sampled; gradual to
B25ia	1.8 to 2.2	Grey (5Y51) moist; few 2-10% medium 5-15mm distinct red mottles, very few <2% fine <5mm faint yellow jarosite (from pyrite) mottles, few 2-10% medium 5-15mm distinct orange mottles; light medium clay; massive structure; moist when sampled; gradual to
B26ia	2.2 to 2.6	Dark grey (5Y41) moist; few 2-10% medium 5-15mm distinct orange mottles, few 2-10% fine <5mm distinct yellow jarosite (from pyrite) mottles; silty light medium clay; massive structure; wet when sampled; gradual to
C1u	2.6 to 3	Dark grey (5Y41) moist; silty light medium clay; massive structure; wet when sampled; gradual to
C2u	3 to 3.6	Dark grey (5Y41) moist; silty light medium clay; massive structure; few 2-10% medium 2-6mm organic (humified) tubules; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.5	2.3
.3		4.8	2.6
.6		4.4	2.3
.8		4.4	2.4
1		4.2	2.7
1.25		4	2.4
1.5		3.8	2.4
1.75		3.8	2.5
2		3.7	2.3
2.25		4.1	2.3
2.5		5.6	2.8
2.75	4	5.7	1.8
3	4	5.6	2
3.25	4	6.5	1.5
3.5	4	7.1	2.6

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Texture

C2u

Some coarse sand layers within

Project: NQAS **Site:** 52 **Observation:** 1

Location: GDA 94 ZONE 55 364923mE 8137334mN Lat: -16.84334 Long: 145.73213

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .4	Dark greyish brown (10YR42) moist; light light clay; dry when sampled; gradual to
A12	.4 to .9	Brown (10YR43) moist; coarse sandy clay loam; few 2-10% angular quartz small pebbles 2-6 mm; dry when sampled; gradual to
2B21	.9 to 1.25	Brownish yellow (10YR66) moist; coarse sandy light clay; common 10-20% angular quartz small pebbles 2-6 mm; few 2-10% angular quartz medium pebbles 6-20 mm; massive structure; dry when sampled; gradual to
2B22	1.25 to 1.6	Pale brown (10YR63) moist; few 2-10% medium 5-15mm distinct orange mottles; clay loam, coarse sandy; very few <2% angular quartz large pebbles 20-60 mm; moderately moist when sampled; clear to
2B23	1.6 to 1.95	Grey (10YR61) moist; coarse sandy light clay; very few <2% angular quartz small pebbles 2-6 mm; moderately moist when sampled; clear to
3C1	1.95 to 2.3	Grey (10YR51) moist; coarse sand; common 10-20% angular quartz medium pebbles 6-20 mm; moist when sampled; clear to
3C2	2.3 to 2.45	Grey (2.5Y51) moist; coarse sand; wet when sampled; gradual to
4C3u	2.45 to 2.7	Dark grey (5Y41) moist; fine sandy clay loam; very few <2% angular quartz medium pebbles 6-20 mm; wet when sampled; gradual to
5C4u	2.7 to 3.95	Dark grey (5Y41) moist; coarse sand; very few <2% angular quartz large pebbles 20-60 mm; wet when sampled; clear to
6C5u	3.95 to 4.15	Grey (5Y51) moist; fine sandy light clay; clear to
7C6u	4.15 to 4.3	Dark grey (5Y41) moist; loamy sand

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.2	2.2
.3		4	2.4
.6		5.2	3.5
.8		5.2	3.4
1		5.1	3.7
1.25		5.4	2.9
1.5		5.1	3.6
1.75		5.4	3.7
2		5.6	3.4
2.25		6.1	2.4
2.5	4	6	1.6
2.75	4	6.4	3.7
3	4	6.3	1.7
3.25	4	6.5	1.6
3.5	4	6.4	1.8
3.75	4	6.6	1.8
4	4	6.7	1.6
4.25	4	7	2

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 53 **Observation:** 1

Location: GDA 94 ZONE 55 364454mE 8136907mN Lat: -16.84717 Long: 145.72771

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** supratidal flat

Disturbances: Cultivation - Rainfed

Classifications:

ASC: SULFIDIC, REDOXIC, Hydrosol

Vegetation:

Species: Sporobolus virginicus (sand couch, marine couch)

Profile Morphology:

Horizon	Depth (m)	Description
B11	0 to .15	Grey (10YR51) moist; light clay; granular weak 2-5mm structure; gradual to
B12	.15 to .4	Grey (10YR51) moist; few 2-10% fine <5mm faint orange mottles; heavy light clay; subangular blocky weak 2-5mm structure; moderately moist when sampled; gradual to
B21	.4 to .9	Grey (5Y61) moist; common 10-20% coarse 15-30mm distinct orange mottles; silty light medium clay; subangular blocky moderate 2-5mm structure; moderately moist when sampled; clear to
B22	.9 to 1.25	Grey (2.5Y51) moist; silty light medium clay; massive structure; moist when sampled; gradual to
2C1u	1.25 to 1.9	Dark grey (5Y41) moist; silty light clay; massive structure; wet when sampled; gradual to
2C2u	1.9 to 2.3	Dark grey (5Y41) moist; sandy clay loam; wet when sampled; clear to
3C3u	2.3 to 2.6	Grey (10YR51) moist; coarse sand; very few <2% angular quartz small pebbles 2-6 mm; wet when sampled; abrupt to
4C4u	2.6 to 2.8	Dark grey (10YR41) moist; fibric silty light clay; common 10-20% medium 2-6mm organic (humified) root linings
5C5u	2.8 to 3.2	Grey (5Y51) moist; coarse sand; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		5	2.6
.3		6.1	4.1
.6		6.5	4.9
.8		6.7	4.9
1		6.7	4.7
1.25	4	6.1	1.6
1.5	4	6.9	1.5
1.75	4	7.3	1.5
2	4	7.1	1.4
2.25	4	7.1	1.4
2.5	4	7.5	1.5
2.75	4	6.7	1.2
3	4	7.1	1.5

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 54 **Observation:** 1

Location: GDA 94 ZONE 55 364343mE 8137923mN Lat: -16.83799 Long: 145.72673

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: SULFIDIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .2	Very dark greyish brown (10YR32) moist; sandy clay loam; granular weak 2-5mm structure; dry when sampled; gradual to
B21	.2 to .45	Dark grey (10YR41) moist; few 2-10% medium 5-15mm distinct orange mottles; light clay; subangular blocky weak 2-5mm structure; dry when sampled; gradual to
B22	.45 to .9	Grey (10YR51) moist; common 10-20% coarse 15-30mm distinct orange mottles, few 2-10% medium 5-15mm distinct red mottles; fine sandy medium clay; subangular blocky weak 5-10mm structure; moderately moist when sampled; gradual to
B23	.9 to 1.2	Grey (5Y51) moist; common 10-20% coarse 15-30mm distinct orange mottles, very few <2% fine <5mm distinct red mottles; sandy medium clay; subangular blocky weak 5-10mm structure; moderately moist when sampled; gradual to
2C1u	1.2 to 1.4	Very dark grey (10YR31) moist; sandy light medium clay; massive structure; moist when sampled; gradual to
2C2u	1.4 to 2.5	Very dark grey (5Y31) moist; clay loam, sandy; massive structure; common 10-20% medium 2- 6mm organic (humified) root linings; moist when sampled; gradual to
3C3u	2.5 to 3	Dark grey (5Y41) moist; coarse sand; single grain structure; few 2-10% medium 2-6mm organic (humified) root linings; gradual to
3C4u	3 to 4.1	Dark grey (5Y41) moist; coarse sand; common 10-20% angular quartz small pebbles 2-6 mm; gradual to
3C5u	4.1 to 4.6	Dark grey (5Y41) moist; coarse sand; gradual to
4C6u	4.6 to 5.1	Dark grey (5Y41) moist; silty light clay; clear to
4C7u	5.1 to 5.3	Dark grey (5Y41) moist; silty light clay

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1		4.8	2.7	2.75	4	6.2	1.4
.3		4.7	3	3	4	6.2	1.4
.6		6.1	4.4	3.25	4	6.2	1.4
.8		6.1	4.8	3.5	4	6.2	1.4
1		5.8	4.3	3.75	4	6.2	1.4
1.25	4	5.6	1.9	4	4	6.1	1.4
1.5	4	5.3	1.3	4.25	4	5.9	1.6
1.75	4	5.6	1.3	4.5	4	6	1.6
2	4	5.7	1.3	4.75	4	6.2	1.6
2.25	4	6	1.4	5	4	6.5	1.6
2.5	4	6.1	1.4	5.25	4	7	1.6

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Texture 4C6u Coarse sand layers throughout

Project: NQAS **Site:** 55 **Observation:** 1

Location: GDA 94 ZONE 55 364362mE 8137634mN Lat: -16.8406 Long: 145.72689

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Irrigated, past or present

Classifications:

ASC: Tenosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .1	Dark brown (10YR33) moist; clayey sand; dry when sampled; gradual to
A12	.1 to .4	Brown (10YR43) moist; fine sand; single grain structure; dry when sampled; clear to
A13	.4 to .95	Dark yellowish brown (10YR44) moist; loamy sand; single grain structure; few 2-10% medium 2- 6mm manganiferous soft segregations; moderately moist when sampled; clear to
2C1	.95 to 1.5	Light grey (10YR72) moist; sand; moderately moist when sampled; gradual to
2C2	1.5 to 2.4	Light grey (10YR72) moist; coarse sand; common 10-20% angular quartz small pebbles 2-6 mm; moderately moist when sampled; gradual to
2C3	2.4 to 3.15	Light grey (10YR71) moist; coarse sand; few 2-10% angular quartz small pebbles 2-6 mm; very few <2% angular quartz medium pebbles 6-20 mm; moist when sampled; abrupt to
3C4u	3.15 to 3.6	Grey (2.5Y61) moist; coarse sand; wet when sampled; abrupt to
3C5u	3.6 to 3.8	Grey (5Y51) moist; coarse sand; wet when sampled; abrupt to
3C6u	3.8 to 4.25	Grey (2.5Y61) moist; coarse sand; common 10-20% angular quartz small pebbles 2-6 mm; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.5	3
.3		4.5	3
.6		4.2	3.3
.8		4	3.2
1		4	3.2
1.25		4.8	4
1.5		4.5	4.7
1.75		4.3	4.3
2		4.4	3.8
2.25		4.5	4.5
2.5		4.5	4
2.75		5	3.8
3	4	5.3	3.5
3.25	4	5.3	2.2
3.5	4	5.7	2.2
3.75	4	6	1.6
4	4	6.2	1.9
4.25	4	6.3	2

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 56 **Observation:** 1

Location: GDA 94 ZONE 55 364376mE 8137251mN Lat: -16.84406 Long: 145.727

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Complete clearing - pasture - cultivation at some stage

Classifications:

ASC: Tenosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .15	Very dark greyish brown (10YR32) moist; fine sandy clay loam; granular weak 2-5mm structure; dry when sampled; gradual to
A12	.15 to .65	Very dark greyish brown (10YR32) moist; clay loam, fine sandy; dry when sampled; abrupt to
2C1	.65 to 1	Brown (10YR53) moist; coarse sand; single grain structure; dry when sampled; gradual to
2C2	1 to 2	Brownish yellow (10YR66) moist; coarse sand; single grain structure; moderately moist when sampled; clear to
3C3	2 to 2.4	Light grey (10YR71) moist; coarse sand; common 10-20% angular quartz small pebbles 2-6 mm; wet when sampled; abrupt to
3C4	2.4 to 2.7	Grey (5Y51) moist; coarse sand; single grain structure; wet when sampled; abrupt to
3C5u	2.7 to 3.1	Dark grey (5Y41) moist; sandy clay loam; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.5	3.2
.3		4.1	3.2
.6		5.1	2.9
.8		5.1	3.8
1		5.1	4.1
1.25		5.4	4.3
1.5		5.4	4.5
1.75		5.2	4.7
2.25		5.6	5
2.5		5.6	1.8
2.75	4	6.5	1.5
3	4	6.2	1.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 57 **Observation:** 1

Location: GDA 94 ZONE 55 365119mE 8136300mN Lat: -16.8527 Long: 145.73391

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** prior stream

Disturbances: Cultivation - Rainfed

Classifications:

ASC: Tenosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .4	Very dark greyish brown (10YR32) moist; sandy loam; granular weak 2-5mm structure; dry when sampled; gradual to
A12	.4 to .8	Very dark greyish brown (10YR32) moist; few 2-10% fine <5mm faint orange mottles; heavy sandy loam; granular weak 2-5mm structure; dry when sampled; abrupt to
2B21	.8 to 1.3	Light grey (10YR72) moist; coarse sand; single grain structure; moderately moist when sampled; gradual to
2C1	1.3 to 1.6	Light grey (10YR72) moist; coarse sand; common 10-20% angular quartz small pebbles 2-6 mm; single grain structure; moist when sampled; gradual to
2C2	1.6 to 2.25	Light grey (10YR71) moist; coarse sand; common 10-20% angular quartz small pebbles 2-6 mm; moist when sampled; gradual to
3C3	2.25 to 2.55	Light yellowish brown (10YR64) moist; few 2-10% medium 5-15mm distinct orange mottles; coarse sand; common 10-20% angular quartz small pebbles 2-6 mm; moist when sampled; clear to
4C4u	2.55 to 3.2	Grey (2.5Y51) moist; coarse sand; few 2-10% angular quartz small pebbles 2-6 mm; very few <2% angular quartz medium pebbles 6-20 mm; moist when sampled; gradual to
4C5u	3.2 to 3.5	Greenish grey (5GY51) moist; coarse sand; moist when sampled; clear to
5C6u	3.5 to 3.8	Grey (5Y51) moist; coarse sand; common 10-20% angular quartz small pebbles 2-6 mm

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.5	2.2
.3		4.5	2.1
.6		5.6	2.4
.8		5.1	2.2
1		5.3	3.6
1.25		5.4	4
1.5		5.4	4
1.75		5.4	4.8
2		5.3	4.8
2.25		5.2	4.5
2.5		5.1	2.2
2.75	4	5.3	1.9
3	4	5.5	1.9
3.25	4	5.4	1.9
3.5	4	5.6	1.8
3.75	4	5.9	1.5

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 58 **Observation:** 1

Location: GDA 94 ZONE 55 363310mE 8136654mN Lat: -16.84939 Long: 145.71695

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: BROWN, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .25	Dark brown (7.5YR32) moist; sandy clay loam; weak structure; dry when sampled; gradual to
A12	.25 to .75	Very dark greyish brown (10YR32) moist; sandy clay loam; granular weak 2-5mm structure; dry when sampled; gradual to
A3	.75 to 1	Brown (10YR43) moist; clay loam, sandy; weak structure; few 2-10% medium 2-6mm manganiferous soft segregations; dry when sampled; gradual to
B21	1 to 1.4	Brown (10YR53) moist; few 2-10% fine <5mm faint orange mottles; clay loam, sandy; few 2-10% medium 2-6mm manganiferous soft segregations; moderately moist when sampled; gradual to
B22	1.4 to 2.05	Light brownish grey (10YR62) moist; common 10-20% medium 5-15mm distinct orange mottles; clay loam, sandy; weak structure; moderately moist when sampled; gradual to
B23	2.05 to 3	Light brownish grey (10YR62) moist; common 10-20% coarse 15-30mm distinct orange mottles; fine sandy light clay; weak structure; gradual to
B24	3 to 3.35	Grey (10YR51) moist; common 10-20% medium 5-15mm distinct orange mottles; light clay; moist when sampled; gradual to
B25	3.35 to 3.7	Grey (10YR61) moist; many 20-50% medium 5-15mm prominent red mottles; clay loam, sandy; weak structure; moist when sampled; gradual to
B26	3.7 to 4.6	Grey (5Y61) moist; common 10-20% medium 5-15mm prominent red mottles, few 2-10% medium 5-15mm distinct orange mottles; clay loam, sandy; massive structure; moist when sampled; gradual to
B27	4.6 to 4.9	Grey (2.5Y51) moist; few 2-10% medium 5-15mm distinct orange mottles, few 2-10% medium 5- 15mm distinct red mottles; clay loam, sandy; wet when sampled; gradual to
2C1u	4.9 to 5.3	Very dark grey (5Y31) moist; silty light medium clay; massive structure; wet when sampled; clear to
2C2u	5.3 to 5.6	Very dark grey (5Y31) moist; silty light medium clay; massive structure; few 2-10% medium 2- 6mm organic (humified) tubules; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1		4.1	1.9	3		4.5	2.9
.3		4.1	2.1	3.25		4.5	2.6
.6		4.8	3.7	3.5		4.6	2.9
.8		5.1	5.8	3.75		4.6	2.9
1		5.5	5.6	4		4.5	2.9
1.25		6	5.8	4.25		4.5	3
1.5		6	6.1	4.5		4.6	2.8
1.75		6.1	5.7	4.75		5.4	2.7
2		5.7	3.9	5	4	5.3	1.7
2.25		4.8	3.2	5.25	4	5.3	1.3
2.5		4.7	3	5.5	4	5.6	1.4
2.75		4.5	2.8				

PH-2: pH using electrode probe
PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 59 **Observation:** 1

Location: GDA 94 ZONE 55 363688mE 8136990mN Lat: -16.84638 Long: 145.72052

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: GREY, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .1	Very dark greyish brown (10YR32) moist; fine sandy clay loam; granular weak 2-5mm structure; dry when sampled; gradual to
A12	.1 to .7	Dark brown (10YR33) moist; fine sandy clay loam; granular weak 2-5mm structure; dry when sampled; gradual to
A13	.7 to 1	Dark brown (10YR33) moist; very few <2% fine <5mm faint orange mottles; fine sandy clay loam; granular weak 2-5mm structure; dry when sampled; gradual to
B21	1 to 1.55	Dark greyish brown (10YR42) moist; few 2-10% medium 5-15mm distinct orange mottles; fine sandy clay loam; subangular blocky weak 2-5mm structure; moderately moist when sampled; gradual to
B22	1.55 to 2	Grey (10YR51) moist; few 2-10% medium 5-15mm distinct orange mottles, few 2-10% fine <5mm distinct red mottles; clay loam, fine sandy; subangular blocky weak 2-5mm structure; moderately moist when sampled; gradual to
B23	2 to 2.3	Grey (10YR51) moist; few 2-10% medium 5-15mm distinct orange mottles, many 20-50% medium 5-15mm prominent red mottles; fine sandy light clay; subangular blocky weak 2-5mm structure; moderately moist when sampled; gradual to
B24	2.3 to 2.6	Grey (5Y61) moist; common 10-20% coarse 15-30mm distinct orange mottles; fine sandy light clay; moist when sampled; gradual to
B25ia	2.6 to 3.2	Grey (5Y61) moist; very few <2% fine <5mm faint yellow jarosite (from pyrite) mottles, many 20- 50% coarse 15-30mm distinct orange mottles; clay loam, sandy; massive structure; diffuse to
C1u	3.2 to 3.9	Very dark grey (5Y31) moist; silty light clay; massive structure; common 10-20% medium 2-6mm organic (humified) tubules

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.1	1.6
.3		4.3	2
.6		4.1	2.5
.8		4.8	3.1
1		5.2	2.9
1.25		5.1	3.4
1.5		4.7	2.7
1.75		4.5	2.6
2		4.5	2.9
2.25		4.4	2.8
2.5		4.2	2.9
2.75		4.1	2.8
3		4.2	2.5
3.25		4.5	2
3.5	4	6.3	1.6
3.75	4	6.9	1.8

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 60 **Observation:** 1

Location: GDA 94 ZONE 55 363474mE 8136351mN Lat: -16.85214 Long: 145.71848

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: Tenosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .4	Brown (10YR43) moist; clay loam, sandy; dry when sampled; gradual to
A12	.4 to .85	Brown (10YR43) moist; sandy clay loam; weak structure; dry when sampled; clear to
2C1	.85 to 1.05	Brown (10YR53) moist; sand; weak structure; dry when sampled; gradual to
3C2	1.05 to 1.6	Brown (10YR43) moist; clay loam, sandy; dry when sampled; gradual to
4B21	1.6 to 2.2	Greyish brown (10YR52) moist; few 2-10% fine <5mm faint orange mottles; light clay; weak structure; moderately moist when sampled; gradual to
4B22	2.2 to 2.6	Grey (10YR51) moist; common 10-20% medium 5-15mm distinct orange mottles; light medium clay; subangular blocky weak 2-5mm structure; moderately moist when sampled; gradual to
4B23	2.6 to 2.95	Grey (N50) moist; many 20-50% coarse 15-30mm prominent orange mottles; light medium clay; subangular blocky weak 2-5mm structure; moderately moist when sampled; gradual to
4B24	2.95 to 3.25	Dark grey (5Y41) moist; few 2-10% medium 5-15mm distinct orange mottles; medium clay; subangular blocky weak 5-10mm structure; moist when sampled; gradual to
5C1u	3.25 to 3.8	Dark grey (5Y41) moist; sandy light clay; massive structure; moist when sampled; clear to
5C2u	3.8 to 4	Dark grey (5Y41) moist; sandy clay loam; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.1	1.9
.3		4	2.1
.6		4.4	2.5
.8		4.8	2.9
1		5.1	2.8
1.25		5.4	3.7
1.5		5.8	4.2
1.75		6	4.3
2		6.4	3.4
2.25		6.2	3.4
2.5		5.8	3.6
2.75		5.6	3.5
3		4.6	2.7
3.25	4	5.3	1.6
3.5	4	5.4	1.5
3.75	4	5.7	1.5
4	4	5.8	1.6

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 61 **Observation:** 1

Location: GDA 94 ZONE 55 364033mE 8136805mN Lat: -16.84807 Long: 145.72375

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: SULFIDIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .1	Dark greyish brown (10YR42) moist; very few <2% fine <5mm faint orange mottles; heavy clay loam; weak structure; dry when sampled; gradual to
B21	.1 to .35	Grey (10YR51) moist; few 2-10% medium 5-15mm distinct orange mottles; sandy clay loam; weak structure; gradual to
B22	.35 to .5	Grey (10YR51) moist; few 2-10% medium 5-15mm distinct orange mottles; fine sandy clay loam; subangular blocky weak 2-5mm structure; moderately moist when sampled; gradual to
B23	.5 to .95	Grey (10YR51) moist; common 10-20% medium 5-15mm distinct orange mottles; medium clay; subangular blocky weak 5-10mm structure; moderately moist when sampled; gradual to
B24	.95 to 1.25	Grey (10YR51) moist; common 10-20% medium 5-15mm prominent red mottles, few 2-10% medium 5-15mm distinct orange mottles; medium clay; subangular blocky weak 5-10mm structure; gradual to
B25	1.25 to 1.8	Grey (5Y61) moist; few 2-10% medium 5-15mm distinct orange mottles, few 2-10% medium 5- 15mm prominent red mottles; medium clay; massive structure; moist when sampled; gradual to
C1u	1.8 to 2.05	Silty Light Clay; moist when sampled; gradual to
C2u	2.05 to 2.6	Very dark grey (5Y31) moist; fine sandy light clay; massive structure; gradual to
C3u	2.6 to 3.2	Very dark grey (5Y31) moist; fine sandy light clay; massive structure; few 2-10% medium 2-6mm organic (humified) tubules; few 2-10% medium 2-6mm organic (humified) root linings; gradual to
C4u	3.2 to 4	Dark grey (5Y41) moist; silty light clay; massive structure; few 2-10% medium 2-6mm organic (humified) root linings

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.4	1.9
.3		5.1	2.6
.6		5.7	3.3
.8		6.1	3.7
1		6.3	3.9
1.25		6.2	4.1
1.5		6.4	4.7
1.75		6.5	4.5
2	4	6.3	2.8
2.25	4	6.5	1.9
2.5	4	6.7	2
2.75	4	6.7	2.1
3	4	6.7	1.5
3.25	4	6.7	1.4
3.5	4	6.7	1.3
3.75	4	6.7	1.4
4	4	6.8	1.5

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 62 **Observation:** 1

Location: GDA 94 ZONE 55 363802mE 8135100mN Lat: -16.86347 Long: 145.72148

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain

Element: prior stream

Disturbances: Cultivation - Rainfed

Classifications:

ASC: Tenosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .05	Brown (10YR43) moist; clay loam; granular weak 2-5mm structure; gradual to
A12	.05 to .7	Brown (10YR43) moist; clay loam; subangular blocky weak 2-5mm structure; dry when sampled; clear to
2A11	.7 to .9	Brown (10YR43) moist; sandy loam; single grain structure; dry when sampled; clear to
2A21	.9 to 1.1	Brown (10YR43) moist; clay loam, sandy; single grain structure; dry when sampled; clear to
3C1	1.1 to 1.4	Dark yellowish brown (10YR44) moist; loamy sand; dry when sampled; clear to
4C2	1.4 to 2.5	Brown (10YR53) moist; coarse sand; few 2-10% angular quartz small pebbles 2-6 mm; very few <2% angular quartz medium pebbles 6-20 mm; moderately moist when sampled; gradual to
4C3	2.5 to 3.2	Yellowish brown (10YR56) moist; coarse sand; very few <2% angular quartz cobbles 60-200 mm; many 20-50% angular quartz medium pebbles 6-20 mm; moist when sampled; clear to
4C4	3.2 to 3.85	Strong brown (7.5YR46) moist; coarse sand; few 2-10% angular quartz medium pebbles 6-20 mm; many 20-50% angular quartz medium pebbles 6-20 mm; moist when sampled; gradual to
4C5	3.85 to 4.4	Grey (10YR61) moist; coarse sand; common 10-20% angular quartz medium pebbles 6-20 mm; single grain structure; moist when sampled

Field Tests:

Depth	PH-2	PH-3
.1	4	2
.3	4.3	2.5
.6	5.1	3
.8	5.4	3.2
1	5.2	3.4
1.25	5.5	3.2
1.5	5.4	3.7
1.75	5.5	5.1
2	5.7	5.4
2.25	5.7	6.1
2.5	5.8	6.1
2.75	5.9	6.3
3	6	6.5
3.25	5.8	6.6
3.5	6.1	5.6
3.75	6	4.6
4	6	4.2
4.25	6	4.4

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 63 **Observation:** 1

Location: GDA 94 ZONE 55 364013mE 8135065mN Lat: -16.8638 Long: 145.72346

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: Tenosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .1	Brown (10YR53) moist; light clay; weak structure; dry when sampled; gradual to
A12	.1 to .85	Dark greyish brown (10YR42) moist; light clay; weak structure; dry when sampled; clear to
2C1	.85 to 1.1	Brown (10YR53) moist; loamy sand; single grain structure; dry when sampled; gradual to
3D2	1.1 to 1.4	Dark yellowish brown (10YR44) moist; sand; few 2-10% rounded charcoal small pebbles 2-6 mm; single grain structure; moderately moist when sampled; clear to
4D3	1.4 to 1.65	Dark grey (5Y41) moist; sandy clay loam; massive structure; clear to
5D4	1.65 to 2.4	Brown (10YR43) moist; coarse sand; common 10-20% angular quartz small pebbles 2-6 mm; gradual to
6C5u	2.4 to 2.65	Greenish black (5GY2.5/1) moist; silty light clay; common 10-20% angular quartz small pebbles 2-6 mm; single grain structure; clear to
7C6u	2.65 to 3	Light brownish grey (10YR62) moist; coarse sand; single grain structure; clear to
7C7u	3 to 3.15	Grey (10YR61) moist; coarse sand; single grain structure; common 10-20% medium 2-6mm organic (humified) tubules; clear to
7C8u	3.15 to 3.6	Grey (2.5Y61) moist; coarse sand; common 10-20% angular quartz small pebbles 2-6 mm; single grain structure; abrupt to
8C9u	3.6 to 3.65	Dark greenish grey (5GY41) moist; silty light clay; massive structure; abrupt to
9C10u	3.65 to 4.4	Grey (2.5Y61) moist; coarse sand; common 10-20% angular quartz small pebbles 2-6 mm; single grain structure

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4	2.3
.3		4.2	2.7
.6		5.6	3.6
.8		5	3.9
1		5	3.4
1.25		5.2	6
1.5		4.8	2.9
1.75		5.6	4.2
2		6.2	4.9
2.25		6.3	3.2
2.5	4	6.3	1.2
2.75		6.8	1.9
3		6.9	1.8
3.25	4	6	2.5
3.5		6.1	2.1
3.75		6.6	2.4
4		6.8	2.7
4.25		6.6	3.2

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 64 **Observation:** 1

Location: GDA 94 ZONE 55 363694mE 8136023mN Lat: -16.85512 Long: 145.72052

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: Tenosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .3	Brown (10YR43) moist; clay loam; granular weak 2-5mm structure; dry when sampled; gradual to
A21	.3 to 1	Brown (10YR43) moist; light clay; subangular blocky weak 2-5mm structure; dry when sampled; diffuse to
2C1	1 to 1.4	Brown (10YR43) moist; sand; few 2-10% rounded charcoal small pebbles 2-6 mm; single grain structure; dry when sampled; gradual to
3C2	1.4 to 2.4	Yellowish brown (10YR54) moist; coarse sand; few 2-10% angular quartz small pebbles 2-6 mm; dry when sampled; gradual to
3C3	2.4 to 3	Yellowish brown (10YR56) moist; coarse sand; many 20-50% angular quartz small pebbles 2-6 mm; few 2-10% angular quartz medium pebbles 6-20 mm; single grain structure; moderately moist when sampled; gradual to
3C4	3 to 3.7	Brown (10YR43) moist; coarse sand; many 20-50% angular quartz small pebbles 2-6 mm; few 2- 10% angular quartz medium pebbles 6-20 mm; moist when sampled; gradual to
3C5	3.7 to 4.65	Light grey (10YR71) moist; coarse sand; few 2-10% subangular quartz cobbles 60-200 mm; common 10-20% angular quartz medium pebbles 6-20 mm; abrupt to
4C6	4.65 to 4.75	Dark grey (2.5Y41) moist; coarse sand; common 10-20% angular quartz small pebbles 2-6 mm; moist when sampled

Field Tests:

Depth	PH-2	PH-3
.1	4.4	2.2
.3	4.6	2.7
.6	5.7	4.1
.8	5.7	3.7
1	6	3.4
1.25	5.8	3.5
1.5	5.7	3.2
1.75	5.7	4.1
2	5.7	4.2
2.25	5.7	6
2.5	5.8	5.9
2.75	6	4.3
3	6.1	5.1
3.25	6	6.9
3.5	6	7.3
3.75	6.2	7.4
4	6.2	5
4.25	6	4.7
4.5	6.3	4.4
4.75	6	2.9

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 65 **Observation:** 1

Location: GDA 94 ZONE 55 364332mE 8135244mN Lat: -16.8622 Long: 145.72646

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: SULFURIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .3	Brown (10YR43) moist; fine sandy clay loam; weak structure; dry when sampled; gradual to
A3	.3 to .9	Brown (10YR43) moist; few 2-10% medium 5-15mm distinct orange mottles; fine sandy loam; weak structure; dry when sampled; abrupt to
B21	.9 to 1.4	Grey (10YR51) moist; common 10-20% medium 5-15mm distinct orange mottles; fine sandy light clay; subangular blocky weak 5-10mm structure; moderately moist when sampled; clear to
B22	1.4 to 1.6	Grey (10YR51) moist; light clay loam, sandy; massive structure; moderately moist when sampled; gradual to
B23	1.6 to 1.8	Grey (10YR51) moist; common 10-20% medium 5-15mm distinct orange mottles; sandy clay loam; moderately moist when sampled; clear to
2C1	1.8 to 2.1	Dark grey (2.5Y41) moist; clay loam, sandy; massive structure; gradual to
2C2u	2.1 to 3.4	Dark grey (5Y41) moist; silty light clay; common 10-20% medium 2-6mm organic (humified) tubules

Field Tests:

Depth	PH-2	PH-3
.1	4.4	2.3
.3	4.7	2.7
.6	6.5	3.4
.8	6.7	3.6
1	6	3.1
1.25	4.5	2.8
1.5	3.9	2.2
1.75	4.2	2.3
2	4.6	2
2.25	6.1	1.2
2.5	6.4	1.4
2.75	7.1	1.6
3	7.1	1.5
3.25	7.1	1.6

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 66 **Observation:** 1

Location: GDA 94 ZONE 55 364119mE 8135352mN Lat: -16.86121 Long: 145.72447

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: Tenosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .3	Brown (10YR43) moist; fine sandy clay loam; subangular blocky weak 2-5mm structure; dry when sampled; clear to
2C1	.3 to .9	Brown (10YR43) moist; sand; single grain structure; dry when sampled; gradual to
2C2	.9 to 1.25	Brown (10YR43) moist; sandy loam; massive structure; dry when sampled; gradual to
2C3	1.25 to 1.75	Brown (10YR53) moist; sand; single grain structure; dry when sampled; gradual to
2C4	1.75 to 2	Brown (10YR43) moist; loamy sand; single grain structure; dry when sampled; gradual to
3C5	2 to 2.7	Light yellowish brown (10YR64) moist; sand; single grain structure; dry when sampled; clear to
4C6	2.7 to 2.95	Grey (10YR61) moist; coarse sand; single grain structure; few 2-10% medium 2-6mm organic (humified) root linings; moderately moist when sampled; gradual to
4C7	2.95 to 3.3	Light brownish grey (10YR62) moist; coarse sand; few 2-10% angular quartz small pebbles 2-6 mm; moist when sampled; gradual to
5C8	3.3 to 3.9	Grey (10YR61) moist; coarse sand; many 20-50% angular quartz small pebbles 2-6 mm; moist when sampled

Field Tests:

Depth	PH-2	PH-3
.1	4.5	2.4
.3	4.6	2.6
.6	5.3	3.1
.8	5.7	3
1	5.6	3.1
1.25	6.1	3.7
1.5	6	4.4
1.75	6	3.3
2	5.7	2.8
2.25	6	3.2
2.5	6.2	4.4
2.75	5.9	3.1
3	6	4.5
3.25	6.1	5
3.5	6.1	3.8
3.75	6.1	3.9

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 67 **Observation:** 1

Location: GDA 94 ZONE 55 365547mE 8135146mN Lat: -16.86315 Long: 145.73786

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain

Element: plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: SULFIDIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
B21	0 to .6	Grey (2.5Y51) moist; few 2-10% fine <5mm faint orange mottles; light clay; subangular blocky weak 2-5mm structure; granular moderate 2-5mm structure; dry when sampled; gradual to
B22	.6 to .85	Grey (2.5Y61) moist; few 2-10% medium 5-15mm distinct orange mottles; light clay; subangular blocky weak 2-5mm structure; dry when sampled; gradual to
B23	.85 to 1.4	Grey (5Y61) moist; common 10-20% medium 5-15mm distinct orange mottles; medium clay; subangular blocky weak 5-10mm structure; moderately moist when sampled; gradual to
C1u	1.4 to 2.1	Dark grey (5Y41) moist; silty light clay; massive structure; moist when sampled; clear to
2C2u	2.1 to 2.25	Dark grey (5Y41) moist; coarse sand; few 2-10% angular quartz small pebbles 2-6 mm; single grain structure; abrupt to
3C3u	2.25 to 2.4	Greenish grey (5GY51) moist; silty light clay; massive structure; abrupt to
4C4u	2.4 to 4.1	Grey (2.5Y61) moist; coarse sand; many 20-50% angular quartz small pebbles 2-6 mm; single grain structure; clear to
5C5u	4.1 to 4.8	Dark grey (5Y41) moist; silty light clay; few 2-10% angular shell medium pebbles 6-20 mm; massive structure

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.4	3.3
.3		4.6	2.7
.6		6.2	3.9
.8		6.7	5.3
1		6.4	4.7
1.25		4.4	2.9
1.5	4	5	1.5
1.75	4	6.2	1.7
2	4	6.8	1.6
2.25		6.7	1.4
2.5		6.7	1.5
2.75		6.6	1.6
3		6.5	1.8
3.25		6.4	1.8
3.5		6.7	1.7
3.75		6.4	1.8
4		6.6	1.9
4.25		7	1.8
4.5		7.5	2.2
4.75		7.6	5.8

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Site Notes:

Site Coarse sand fill over clay

Project: NQAS **Site:** 68 **Observation:** 1

Location: GDA 94 ZONE 55 365794mE 8135367mN Lat: -16.86117 Long: 145.74019

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: beach ridge plain

Element: beach ridge

Disturbances: Cultivation - Rainfed

Classifications:

ASC: SULFIDIC, OXYAQUIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .1	Very dark greyish brown (10YR32) moist; loamy coarse sand; dry when sampled; gradual to
A12	.1 to .25	Very dark greyish brown (10YR32) moist; loamy coarse sand; moist when sampled; gradual to
A21	.25 to .55	Very dark greyish brown (10YR32) moist; coarse sandy light clay; moist when sampled; gradual to
2C1	.55 to .7	Brownish yellow (10YR66) moist; coarse sand; moist when sampled; gradual to
3A1	.7 to .9	Very dark greyish brown (10YR32) moist; sandy loam; moist when sampled; clear to
4C2	.9 to 1.5	Grey (10YR61) moist; coarse sand; many 20-50% angular quartz small pebbles 2-6 mm; wet when sampled; clear to
5C3u	1.5 to 2.3	Grey (5Y51) moist; sandy clay loam; wet when sampled; abrupt to
5C4u	2.3 to 2.7	Dark grey (5Y41) moist; coarse sand; few 2-10% angular quartz large pebbles 20-60 mm; wet when sampled; clear to
5C5u	2.7 to 3.5	Grey (5Y61) moist; coarse sand; few 2-10% angular quartz medium pebbles 6-20 mm; common 10-20% angular quartz small pebbles 2-6 mm; wet when sampled; abrupt to
6C6u	3.5 to 3.75	Dark grey (5Y41) moist; silty light clay; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		5	2.7
.3		5.6	3
.6		6.3	3.2
.8		6.7	2.6
1		6.1	2.7
1.25		6.1	2.2
1.5	4	5.8	1.7
1.75	4	5.5	1.8
2	4	5.7	1.8
2.25	4	5.6	1.8
2.5	4	5.7	1.6
2.75	4	5.8	1.6
3	4	5.7	1.7
3.25	4	5.7	1.9
3.5	4	6.6	2
3.75	4	6.4	1.6

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Site Notes:

Site Edge of cane near airport land and Barron River. Adjacent to quarried sand, looks like fill in top layers.

Project: NQAS **Site:** 69 **Observation:** 1

Location: GDA 94 ZONE 55 364495mE 8134213mN Lat: -16.87152 Long: 145.72793

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Depth to Water: 3.1

Disturbances: Cultivation - Rainfed

Classifications:

ASC: Tenosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .4	Dark greyish brown (10YR42) moist; sandy clay loam; massive structure; dry when sampled; gradual to
A12	.4 to .7	Brown (10YR43) moist; clay loam, sandy; massive structure; dry when sampled; gradual to
A2	.7 to 2.55	Dark greyish brown (10YR42) moist; sand; single grain structure; dry when sampled; gradual to
C1	2.55 to 2.85	Greyish brown (10YR52) moist; few 2-10% fine <5mm faint red mottles; sandy clay loam; massive structure; moderately moist when sampled; diffuse to
2C2	2.85 to 3.1	Dark grey (5Y41) moist; sandy light clay; massive structure; moist when sampled; abrupt to
3C3	3.1 to 4.05	Brown (7.5YR44) moist; coarse sand; few 2-10% angular quartz small pebbles 2-6 mm; few 2- 10% rounded charcoal small pebbles 2-6 mm; single grain structure; gradual to
4C4	4.05 to 4.35	Grey (10YR61) moist; coarse sand; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		5	2.8
.3		5	2.8
.6		5.1	2.8
.8		5.3	2.8
1		5.8	3
1.25		5.8	3.2
1.5		5.9	3.1
1.75		5.3	3.3
2		5.7	3.2
2.25		5.7	3.1
2.5		6.4	3.1
2.75		6.6	3.6
3		7.1	4.1
3.25		6.9	6
3.5	2	6.3	3.3
3.75		6.3	6.5
4		6.2	4.2
4.25		6.1	3.2

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 70 **Observation:** 1

Location: GDA 94 ZONE 55 364832mE 8134284mN Lat: -16.8709 Long: 145.7311

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: tidal flat

Element: supratidal flat

Disturbances: Cultivation - Rainfed

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .15	Grey (10YR51) moist; few 2-10% fine <5mm faint orange mottles; fine sandy clay loam; subangular blocky weak 2-5mm structure; dry when sampled; clear to
B21	.15 to .35	Very dark grey (N30) moist; few 2-10% medium 5-15mm faint red mottles, very few <2% fine <5mm distinct dark mottles; clay loam, fine sandy; subangular blocky weak 2-5mm structure; clear to
B22	.35 to .6	Dark grey (N40) moist; few 2-10% coarse 15-30mm distinct orange mottles; clay loam, fine sandy; weak structure; moderately moist when sampled; gradual to
B23	.6 to 1	Greenish grey (5GY51) moist; common 10-20% coarse 15-30mm distinct orange mottles; clay loam, fine sandy; weak structure; moderately moist when sampled; gradual to
B24	1 to 1.45	Grey (5Y51) moist; common 10-20% medium 5-15mm distinct orange mottles; clay loam, fine sandy; massive structure; moist when sampled; gradual to
C1u	1.45 to 1.7	Dark grey (5Y41) moist; clay loam, fine sandy; moist when sampled; gradual to
C2u	1.7 to 2.2	Dark grey (5Y41) moist; silty light clay; moist when sampled; gradual to
C3u	2.2 to 2.5	Greenish grey (5GY51) moist; silty light medium clay; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		6.6	4.3
.3		6.7	3.2
.6		6.8	3.8
.8		6.5	4.3
1		6.7	4
1.25	3	6.8	2.2
1.5	4	6.7	1.6
1.75	4	6.8	1.6
2	4	6.6	1.6
2.25	4	6.7	1.7
2.5	4	6.7	2

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Site Notes:

Site Mangrove area,

Project: NQAS **Site:** 71 **Observation:** 1

Location: GDA 94 ZONE 55 364739mE 8134715mN Lat: -16.867 Long: 145.73025

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Depth to Water: 3.5

Disturbances: Cultivation - Rainfed

Classifications:

ASC: BROWN, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .3	Dark greyish brown (10YR42) moist; clay loam; granular weak 2-5mm structure; dry when sampled; gradual to
B1	.3 to .8	Brown (10YR53) moist; few 2-10% fine <5mm faint orange mottles; clay loam; dry when sampled; gradual to
B21	.8 to 1.25	Brown (10YR53) moist; few 2-10% medium 5-15mm distinct orange mottles; sandy clay loam; subangular blocky weak 2-5mm structure; dry when sampled; gradual to
B22	1.25 to 1.9	Yellowish brown (10YR54) moist; common 10-20% medium 5-15mm distinct orange mottles; sandy clay loam; subangular blocky weak 2-5mm structure; dry when sampled; gradual to
B23	1.9 to 2.35	Grey (10YR61) moist; common 10-20% medium 5-15mm prominent red mottles; light clay; massive structure; moderately moist when sampled; gradual to
B24	2.35 to 3.2	Light olive grey (5Y62) moist; many 20-50% coarse 15-30mm prominent red mottles, few 2-10% medium 5-15mm distinct orange mottles; silty light clay; massive structure; moist when sampled; clear to
B25	3.2 to 4	Grey (2.5Y61) moist; common 10-20% medium 5-15mm distinct yellow jarosite (from pyrite) mottles, few 2-10% medium 5-15mm distinct orange mottles; silty light clay; massive structure; moist when sampled; gradual to
C1u	4 to 4.4	Dark grey (5Y41) moist; silty light clay; gradual to
C2u	4.4 to 5	Dark grey (5Y41) moist; silty light clay; massive structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.6	2.1
.3		5	2.6
1		6.2	3.6
1.25		5.5	3.5
1.5		5.4	3.4
1.75		5.4	3.5
2		4.8	3.2
2.25		4.7	3.1
2.5		4.7	3.1
2.75		4.5	3
3		4.3	2.9
3.25		4	2.3
3.5		4	2.2
3.75		4.1	2.2
4		4.7	2.3
4.25	4	4.9	1.7
4.5	4	5.9	1.5
4.75	4	6.4	1.5
5	4	6.8	1.5

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 72 **Observation:** 1

Location: GDA 94 ZONE 55 365210mE 8134546mN Lat: -16.86856 Long: 145.73466

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .05	Dark greyish brown (10YR42) moist; fine sandy clay loam; subangular blocky weak 2-5mm structure; dry when sampled; gradual to
A12	.05 to .35	Dark greyish brown (10YR42) moist; fine sandy clay loam; granular weak 2-5mm structure; gradual to
A13	.35 to .85	Greyish brown (10YR52) moist; fine sandy clay loam; granular weak 2-5mm structure; gradual to
A14	.85 to 1.45	Greyish brown (10YR52) moist; few 2-10% fine <5mm faint orange mottles; fine sandy clay loam; granular weak 2-5mm structure; dry when sampled; clear to
B21	1.45 to 1.85	Grey (10YR51) moist; few 2-10% medium 5-15mm distinct orange mottles; fine sandy clay loam; weak structure; moderately moist when sampled; gradual to
B22	1.85 to 2.6	Grey (2.5Y61) moist; many 20-50% coarse 15-30mm prominent orange mottles; sandy clay loam; weak structure; moderately moist when sampled; gradual to
B23	2.6 to 2.9	Grey (2.5Y51) moist; common 10-20% medium 5-15mm distinct orange mottles, few 2-10% fine <5mm distinct yellow jarosite (from pyrite) mottles; clay loam, sandy; massive structure; moist when sampled; gradual to
C1u	2.9 to 3.4	Grey (2.5Y51) moist; sandy clay loam; massive structure; few 2-10% medium 2-6mm organic (humified) tubules; moist when sampled; gradual to
C2u	3.4 to 5.3	Dark grey (5Y41) moist; silty light medium clay; massive structure; few 2-10% medium 2-6mm organic (humified) tubules; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1		4.2	2.2	2.75	3	2.9	1.9
.3		4.3	2.2	3	4	3	1.5
.6		4.7	2.4	3.25	4	4.7	1.3
.8		5.1	2.9	3.5	4	6	1.2
1		5.2	2.8	3.75	4	6.4	1.3
1.25		5.1	2.8	4	4	6.6	1.3
1.5		4.8	2.6	4.25	4	6.8	1.4
1.75		4	2.5	4.5	4	7	1.4
2		3.3	2.4	4.75	4	6.7	1.6
2.25		3.2	2.1	5	4	6.7	1.4
2.5		3.2	2	5.25	4	6.6	1.7

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Texture C2u Lenses of silty light clay

Project: NQAS **Site:** 73 **Observation:** 1

Location: GDA 94 ZONE 55 364295mE 8135628mN Lat: -16.85872 Long: 145.72614

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: SULFIDIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .1	Dark greyish brown (10YR42) moist; light clay; granular weak 2-5mm structure; dry when sampled; gradual to
A12	.1 to .4	Dark greyish brown (10YR42) moist; light clay; subangular blocky moderate 2-5mm structure; dry when sampled; gradual to
B21	.4 to .85	Grey (10YR51) moist; few 2-10% medium 5-15mm distinct orange mottles, very few <2% fine <5mm faint red mottles; light medium clay; few 2-10% rounded charcoal medium pebbles 6-20 mm; subangular blocky weak 2-5mm structure; dry when sampled; gradual to
B22	.85 to 1.25	Light brownish grey (10YR62) moist; few 2-10% medium 5-15mm distinct orange mottles; sandy loam; massive structure; clear to
B23	1.25 to 1.6	Grey (2.5Y51) moist; common 10-20% coarse 15-30mm distinct orange mottles, few 2-10% medium 5-15mm distinct red mottles; sandy clay loam; massive structure; gradual to
C1u	1.6 to 1.85	Dark grey (5Y41) moist; sandy clay loam; massive structure; gradual to
C2u	1.85 to 2.6	Dark grey (5Y41) moist; silty light clay; massive structure; gradual to
C3u	2.6 to 3	Dark greenish grey (5GY31) moist; silty light clay

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.6	2.2
.3		4.4	2.3
.6		6.8	4.9
.8		6.6	4.1
1		6.7	5.9
1.25		7.1	5.3
1.5		6.8	4.9
1.75	4	4.8	1.3
2	4	7.3	1.1
2.25	4	7.5	1.5
2.5	4	7.4	1.4
2.75	4	7.6	1.7
3	4	7.5	2.2

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 74 **Observation:** 1

Location: GDA 94 ZONE 55 365301mE 8134928mN Lat: -16.86511 Long: 145.73554

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Highly disturbed e.g. mining, urban

Classifications:

ASC: SULFIDIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .3	Dark yellowish brown (10YR44) moist; coarse sand; very few <2% angular quartz small pebbles 2-6 mm; dry when sampled; gradual to
A12p	.3 to .45	Brown (10YR43) moist; coarse sand; very few <2% angular quartz large pebbles 20-60 mm; very few <2% angular quartz small pebbles 2-6 mm; clear to
2B21	.45 to .8	Grey (5Y51) moist; few 2-10% medium 5-15mm distinct orange mottles; light medium clay; subangular blocky weak 5-10mm structure; moderately moist when sampled; gradual to
2B22	.8 to 1.2	Dark grey (5Y41) moist; few 2-10% medium 5-15mm distinct orange mottles; light medium clay; moist when sampled; gradual to
2C1u	1.2 to 1.9	Dark greenish grey (10Y41) moist; silty light clay; few 2-10% medium 2-6mm organic (humified) root linings; moist when sampled; gradual to
2C2u	1.9 to 2.3	Dark greenish grey (10Y31) moist; silty light clay; single grain structure; very few <2% medium 2- 6mm organic (humified) root linings; wet when sampled; gradual to
2C3u	2.3 to 2.5	Dark grey (5Y41) moist; sandy clay loam; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.6	3
.3		4.8	3
.6		6.6	4
.8		6.3	3.8
1		6.6	3.8
1.25		6.9	3
1.5		6.7	2
1.75	4	6.6	1.7
2	4	6.7	1.8
2.25	4	6.7	1.7
2.5	4	6.5	1.6

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Site Notes:

Site Nnear mangrove area

Project: NQAS **Site:** 75 **Observation:** 1

Location: GDA 94 ZONE 55 360246mE 8144165mN Lat: -16.78133 Long: 145.68867

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: tidal flat

Element: tidal creek

Disturbances: No effective disturbance

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .3	Light brownish grey (10YR62) moist; very few <2% fine <5mm faint orange mottles; sandy clay loam; very few <2% medium 2-6mm organic (humified) root linings; wet when sampled; gradual to
C1u	.3 to .8	Dark grey (2.5Y41) moist; fibric sandy clay loam; massive structure; few 2-10% medium 2-6mm organic (humified) root linings; few 2-10% medium 2-6mm organic (humified) tubules; wet when sampled; clear to
C2u	.8 to 1.6	Dark grey (5Y41) moist; silty light clay; massive structure; few 2-10% medium 2-6mm organic (humified) root linings; wet when sampled; gradual to
C3u	1.6 to 1.9	Dark grey (5Y41) moist; sandy light clay; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		6.3	3.6
.3	3	6.3	2.5
.6		6.6	1.3
.8		6.7	1.0
1	4	7	1
1.25	4	7.1	1.2
1.5	4	7.4	1.2
1.75	4	7.3	1.4

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Site Notes:

Site Mangroves on creek line

Project: NQAS **Site:** 76 **Observation:** 1

Location: GDA 94 ZONE 55 360059mE 8143966mN Lat: -16.78312 Long: 145.6869

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** stream bed

Depth to Water: .3

Disturbances: No effective disturbance

Classifications:

ASC: SULFIDIC, OXYAQUIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
B11	0 to .05	Grey (10YR61) moist; light clay; granular weak 2-5mm structure; moderately moist when sampled; gradual to
B21	.05 to .3	Grey (10YR61) moist; few 2-10% medium 5-15mm distinct orange mottles; light clay; moist when sampled; gradual to
C1u	.3 to .7	Grey (5Y51) moist; silty light clay; massive structure; moist when sampled; diffuse to
C2u	.7 to 1.2	Dark grey (5Y41) moist; fibric silty light clay; massive structure; few 2-10% medium 2-6mm organic (humified) tubules; wet when sampled; gradual to
C3u	1.2 to 2	Dark grey (5Y41) moist; silty light clay; massive structure; wet when sampled; gradual to
C4u	2 to 2.35	Dark grey (5Y41) moist; fibric clay loam, fine sandy; massive structure; few 2-10% medium 2- 6mm organic (humified) root linings; wet when sampled; gradual to
C5u	2.35 to 3	Light grey (N70) moist; sandy light clay; very few <2% angular quartz medium pebbles 6-20 mm; massive structure; few 2-10% medium 2-6mm organic (humified) root linings; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.5	1.5
.3		5.4	1.9
.6		6.2	1.7
.8		6.5	1.7
1		6.4	1.5
1.25	4	6.4	1.1
1.5	4	6.1	1.7
2	4	6.3	1.4
2.25	4	6	1.3
2.5	4	6	1.4
2.75	4	5.7	1.7

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 77 **Observation:** 1

Location: GDA 94 ZONE 55 358778mE 8145975mN Lat: -16.76489 Long: 145.67501

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: beach ridge plain **Element:** swale

Depth to Water: .3

Disturbances: No effective disturbance

Classifications:

ASC: SULFIDIC, OXYAQUIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .1	Grey (10YR51) moist; few 2-10% fine <5mm distinct orange mottles; clay loam, sandy; few 2- 10% rounded charcoal small pebbles 2-6 mm; dry when sampled; gradual to
A12	.1 to .2	Grey (2.5Y51) moist; few 2-10% fine <5mm faint orange mottles; light clay; weak structure; dry when sampled; gradual to
B21	.2 to .5	Grey (2.5Y51) moist; light medium clay; subangular blocky weak 2-5mm structure; moderately moist when sampled; gradual to
B22	.5 to .8	Greyish brown (2.5Y52) moist; clay loam, sandy; massive structure; wet when sampled; gradual to
C1u	.8 to 1	Grey (2.5Y51) moist; sandy light clay; massive structure; wet when sampled; gradual to
C2u	1 to 1.2	Dark grey (2.5Y41) moist; coarse sandy light clay; massive structure; wet when sampled; clear to
2C3u	1.2 to 1.25	Dark grey (5Y41) moist; coarse sand; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.8	2.1
.3		5.7	2.5
.6		6.2	2.1
.8		6.2	2.2
1	4	6	1.3
1.25	4	6.2	1.2

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 78 **Observation:** 1

Location: GDA 94 ZONE 55 360730mE 8143814mN Lat: -16.78453 Long: 145.69319

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain

Element: supratidal flat

Disturbances: Limited clearing

Classifications:

ASC: GREY, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .2	Very dark greyish brown (10YR32) moist; clayey sand; dry when sampled; clear to
B21	.2 to .4	Light grey (5Y71) moist; very few <2% medium 5-15mm faint orange mottles, few 2-10% medium 5-15mm distinct yellow mottles; sandy light clay; dry when sampled; gradual to
B22	.4 to .85	Light grey (10YR72) moist; few 2-10% medium 5-15mm distinct orange mottles; sandy light clay; moderately moist when sampled; gradual to
C1	.85 to 1.65	Light grey (N70) moist; sand; moderately moist when sampled; gradual to
2D1	1.65 to 2	Light grey (N70) moist; few 2-10% medium 5-15mm distinct orange mottles; sandy loam; moderately moist when sampled; clear to
2D2	2 to 3.5	Light grey (N70) moist; common 10-20% coarse 15-30mm distinct orange mottles, few 2-10% medium 5-15mm distinct red mottles; clay loam, sandy; massive structure; moderately moist when sampled

Field Tests:

Depth	PH-2	PH-3
.1	3.8	1.8
.3	3.8	2.8
.6	3.8	2.8
.8	4.2	3.5
1	6.2	2.7
1.25	6.3	4.2
1.5	6.4	3.5
1.75	4.7	3.3
2	4.3	3.1
2.25	4.8	3.4
2.5	4.9	3.5
2.75	4.6	3.1

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 79 **Observation:** 1

Location: GDA 94 ZONE 55 364855mE 8136095mN Lat: -16.85454 Long: 145.73142

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .2	Very dark greyish brown (10YR32) moist; very few <2% fine <5mm faint orange mottles; clay loam; granular weak 2-5mm structure; dry when sampled; gradual to
B21	.2 to .5	Dark greyish brown (10YR42) moist; few 2-10% medium 5-15mm distinct orange mottles; light clay; subangular blocky weak 2-5mm structure; dry when sampled; gradual to
B22	.5 to .9	Grey (2.5Y51) moist; few 2-10% medium 5-15mm distinct orange mottles, few 2-10% fine <5mm distinct red mottles; light medium clay; subangular blocky weak 2-5mm structure; moderately moist when sampled; gradual to
B23	.9 to 1.45	Grey (5Y61) moist; common 10-20% coarse 15-30mm distinct orange mottles, common 10-20% coarse 15-30mm prominent red mottles; light medium clay; granular weak 2-5mm structure; subangular blocky weak 5-10mm structure; moderately moist when sampled; clear to
C1	1.45 to 1.9	Grey (5Y61) moist; medium clay; massive structure; moist when sampled; gradual to
C2	1.9 to 2.1	Dark grey (5Y41) moist; medium clay; massive structure; moist when sampled; gradual to
C3u	2.1 to 2.7	Dark grey (5Y41) moist; silty light medium clay; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4	1.9
.3		4.2	2.2
.6		5	2.6
.8		4.9	2.7
1		4.7	2.6
1.25		4.7	3.1
1.5		4.8	3
1.75		5.1	3.5
2		5.2	3.1
2.25		5.7	3.1
2.5	4	5.8	1.4

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 80 **Observation:** 1

Location: GDA 94 ZONE 55 364853mE 8136391mN Lat: -16.85186 Long: 145.73142

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: BROWN, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .15	Dark greyish brown (10YR42) moist; light clay; dry when sampled; gradual to
A12	.15 to .6	Dark greyish brown (10YR42) moist; few 2-10% fine <5mm faint orange mottles; light clay; granular moderate 5-10mm structure; dry when sampled; gradual to
B21	.6 to 1.4	Brown (10YR53) moist; common 10-20% medium 5-15mm distinct orange mottles; light medium clay; subangular blocky weak 2-5mm structure; dry when sampled; gradual to
B22	1.4 to 1.75	Brown (10YR53) moist; common 10-20% medium 5-15mm distinct red mottles; light medium clay; massive structure; moderately moist when sampled; gradual to
B23	1.75 to 2.2	Grey (2.5Y61) moist; few 2-10% medium 5-15mm distinct orange mottles; clay loam, sandy; massive structure; moderately moist when sampled; clear to
2B24	2.2 to 2.5	Light brownish grey (2.5Y63) moist; common 10-20% coarse 15-30mm distinct orange mottles; coarse sand; single grain structure; moist when sampled; clear to
2C1	2.5 to 3.2	Light brownish grey (2.5Y62) moist; coarse sand; common 10-20% angular quartz small pebbles 2-6 mm; few 2-10% angular quartz large pebbles 20-60 mm; moist when sampled; gradual to
2C2	3.2 to 3.5	Dark grey (5Y41) moist; coarse sand; few 2-10% angular quartz small pebbles 2-6 mm; moist when sampled; gradual to
3C3u	3.5 to 4	Dark grey (5Y41) moist; coarse sand; single grain structure; moist when sampled; gradual to
4C4u	4 to 4.6	Dark grey (5Y41) moist; silty light clay; massive structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.4	2.6
.3		4.1	2.7
.6		5	3.8
.8		5.4	4.1
1		5.6	3.9
1.25		5.7	3.8
1.5		5.2	3.4
1.75		5.2	3.5
2		5.6	3.3
2.25		5.8	4.1
2.5		5.7	4.4
2.75		5.7	3.9
3		5.7	4.1
3.25		5.6	2.3
3.5		6.4	1.7
3.75	4	6.3	1.5
4	4	6.4	1.4
4.25	4	6.7	1.5
4.5	4	7	1.5

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Texture 2C1 Some clay layers throughout

Project: NQAS **Site:** 81 **Observation:** 1

Location: GDA 94 ZONE 55 364284mE 8139613mN Lat: -16.82271 Long: 145.72627

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Irrigated, past or present

Classifications:

ASC: SULFIDIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .3	Dark grey (10YR41) moist; silty clay loam; granular weak 2-5mm structure; dry when sampled; clear to
B21	.3 to .8	Grey (10YR51) moist; common 10-20% coarse 15-30mm distinct orange mottles, few 2-10% medium 5-15mm distinct red mottles; medium clay; subangular blocky weak 2-5mm structure; dry when sampled; gradual to
B22	.8 to 1.1	Grey (5Y61) moist; few 2-10% fine <5mm distinct dark mottles, few 2-10% medium 5-15mm distinct red mottles, few 2-10% medium 5-15mm distinct orange mottles; medium clay; subangular blocky weak 2-5mm structure; moderately moist when sampled; diffuse to
2C1	1.1 to 1.4	Grey (5Y51) moist; clay loam, sandy; massive structure; moist when sampled; gradual to
3C2	1.4 to 1.8	Grey (10YR61) moist; coarse sand; single grain structure; moist when sampled; clear to
4C3	1.8 to 3.4	Dark grey (5Y41) moist; coarse sand; common 10-20% angular quartz small pebbles 2-6 mm; very few <2% angular quartz medium pebbles 6-20 mm; moist when sampled; abrupt to
5C4	3.4 to 4.1	Dark greenish grey (5GY41) moist; fine sandy light clay; few 2-10% angular shell small pebbles 2-6 mm; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.6	
.3		5.2	3.4
.6		5.8	3.8
.8		5.7	3.9
1		6.2	4.2
1.25		6	3
1.5		5.1	2.3
1.75		6.3	2.1
2	4	7.1	1.8
2.25	4	7	1.8
2.5	4	7.1	1.9
2.75	4	7.2	1.9
3	4	7.2	1.9
3.25	4	7	1.9
3.5	4	7.3	1.9
3.75	4	7.7	2
4	4	7.7	2.1

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 82 **Observation:** 1

Location: GDA 94 ZONE 55 364025mE 8139722mN Lat: -16.82171 Long: 145.72385

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Complete clearing - pasture - cultivation at some stage

Classifications:

ASC: SULFURIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .1	Dark greyish brown (10YR42) moist; clay loam; granular weak 2-5mm structure; dry when sampled; gradual to
B21	.1 to .5	Grey (10YR61) moist; light clay; subangular blocky weak 2-5mm structure; dry when sampled; gradual to
B22ia	.5 to .85	Dark grey (5Y41) moist; few 2-10% medium 5-15mm distinct yellow jarosite (from pyrite) mottles, few 2-10% medium 5-15mm distinct orange mottles; fine sandy light clay; subangular blocky weak 2-5mm structure; moderately moist when sampled; gradual to
B23i	.85 to 1.05	Dark grey (5Y41) moist; few 2-10% medium 5-15mm prominent orange mottles; fine sandy light clay; massive structure; moist when sampled; gradual to
C1u	1.05 to 1.35	Dark grey (5Y41) moist; very few <2% fine <5mm faint orange mottles; silty light clay; massive structure; moist when sampled; clear to
2C2u	1.35 to 2.7	Grey (5Y51) moist; coarse sand; few 2-10% angular quartz small pebbles 2-6 mm; wet when sampled; gradual to
2C3u	2.7 to 3.7	Grey (5Y51) moist; coarse sand; common 10-20% angular quartz small pebbles 2-6 mm; few 2-10% angular quartz large pebbles 20-60 mm; single grain structure; wet when sampled; abrupt to
3C4u	3.7 to 3.9	Dark grey (5Y41) moist; silty light clay; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.3	2.1
.3		4.3	2.5
.6		3.7	2.1
.8	3	3.3	1.6
1	4	3.7	1.5
1.25	4	5.6	1.9
1.5	4	5.5	1.6
1.75	4	5.5	1.6
2	4	5.6	1.8
2.25	4	6.2	1.8
2.5	4	6.2	1.9
2.75	4	6.4	1.8
3	4	7.3	1.9
3.25	4	7.2	1.7
3.5	4	6.8	1.7
3.75	4	7.4	1.8
3.9	4	6.7	1.7

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 83 **Observation:** 1

Location: GDA 94 ZONE 55 362423mE 8136753mN Lat: -16.84845 Long: 145.70864

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** ox-bow

Disturbances: Cultivation - Rainfed

Classifications:

ASC: BROWN, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .1	Dark greyish brown (10YR42) moist; light clay; subangular blocky weak 2-5mm structure; granular moderate 2-5mm structure; dry when sampled; gradual to
A3	.1 to .5	Dark greyish brown (10YR42) moist; few 2-10% fine <5mm faint orange mottles; light clay; dry when sampled; gradual to
B21	.5 to .75	Light brownish grey (10YR62) moist; few 2-10% medium 5-15mm distinct orange mottles; light clay; granular weak 2-5mm structure; dry when sampled; gradual to
B22	.75 to 1.35	Grey (10YR61) moist; few 2-10% fine <5mm distinct orange mottles; light medium clay; granular weak 2-5mm structure; dry when sampled; gradual to
B23	1.35 to 1.7	Grey (10YR61) moist; common 10-20% coarse 15-30mm distinct orange mottles; coarse sandy light medium clay; moderately moist when sampled; gradual to
B24	1.7 to 2.2	Grey (2.5Y61) moist; common 10-20% coarse 15-30mm prominent orange mottles; coarse sandy light medium clay; massive structure; moist when sampled; clear to
2C1u	2.2 to 3	Grey (10YR61) moist; coarse sand; few 2-10% angular quartz small pebbles 2-6 mm; moist when sampled; gradual to
2C2u	3 to 4.1	Grey (5Y51) moist; coarse sand; abundant 50-90% angular quartz small pebbles 2-6 mm; few 2-10% angular quartz medium pebbles 6-20 mm; single grain structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		5	2.8
.3		5.2	2.9
.6		5.2	3
.8		5.2	2.9
1		5.2	3
1.25		5.3	3.1
1.5		5.2	3.2
1.75		5.4	3.3
2		5.8	3.6
2.25	2	5.8	4.4
2.5	4	5.4	1.7
2.75	4	5.4	1.9
3	4	5.4	1.8
3.25	4	5.6	1.8
3.5	4	5.5	1.8
3.75	4	5.7	1.6
4	4	5.7	1.7

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 84 **Observation:** 1

Location: GDA 94 ZONE 55 362496mE 8137108mN Lat: -16.84524 Long: 145.70934

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** stream bed

Disturbances: Complete clearing - pasture - but never cultivated

Classifications:

ASC: SULFIDIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
B1	0 to .15	Grey (10YR51) moist; few 2-10% fine <5mm faint orange mottles; light clay; granular weak 2-5mm structure; dry when sampled; gradual to
B21	.15 to .5	Grey (10YR51) moist; few 2-10% medium 5-15mm distinct orange mottles; light medium clay; subangular blocky moderate 2-5mm structure; moderately moist when sampled; gradual to
B22	.5 to .9	Grey (10YR61) moist; few 2-10% medium 5-15mm distinct orange mottles, common 10-20% medium 5-15mm prominent orange mottles; light medium clay; very few <2% rounded charcoal small pebbles 2-6 mm; subangular blocky weak 2-5mm structure; moderately moist when sampled; clear to
C1	.9 to 1.1	Grey (10YR51) moist; clay loam, sandy; clear to
2C2u	1.1 to 1.5	Grey (10YR51) moist; coarse sand; common 10-20% angular quartz medium pebbles 6-20 mm; single grain structure; gradual to
2C3u	1.5 to 2.2	Grey (10YR51) moist; coarse sand; very few <2% angular quartz cobbles 60-200 mm; common 10-20% angular quartz small pebbles 2-6 mm; gradual to
3C4u	2.2 to 2.8	Dark grey (5Y41) moist; coarse sand; many 20-50% angular quartz small pebbles 2-6 mm; few 2- 10% angular quartz medium pebbles 6-20 mm

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.4	2.1
.3		4.4	2.2
.6		4.7	2.7
.8		5	3.3
1		4.3	2.1
1.25	4	5	2
1.5	4	4.4	1.6
1.75	4	4.2	1.8
2	4	4.3	1.8
2.25	4	4.5	1.5
2.5	4	5	1.5
2.75	4	5	1.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Site Notes:

Site Robert Gualtieri. On creekline near trees behind house. Stopped by rock.

Project: NQAS **Site:** 85 **Observation:** 1

Location: GDA 94 ZONE 55 362265mE 8139277mN Lat: -16.82563 Long: 145.70731

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain

Element: swamp

Disturbances: Limited clearing

Classifications:

ASC: SULFIDIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
B21	0 to .2	Brown (10YR53) moist; many 20-50% medium 5-15mm prominent orange mottles; light clay; granular moderate 2-5mm structure; subangular blocky moderate 2-5mm structure; dry when sampled; gradual to
B22	.2 to .6	Grey (10YR51) moist; few 2-10% medium 5-15mm distinct orange mottles; light medium clay; subangular blocky weak 5-10mm structure; moderately moist when sampled; gradual to
C1u	.6 to 1.4	Dark grey (5Y41) moist; silty light clay; massive structure; moist when sampled; gradual to
C2u	1.4 to 1.9	Dark grey (5Y41) moist; clay loam, sandy; massive structure; few 2-10% medium 2-6mm organic (humified) root linings; moist when sampled; clear to
C3u	1.9 to 2	Dark grey (5Y41) moist; sandy clay loam; massive structure; few 2-10% medium 2-6mm organic (humified) root linings; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.5	2.3
.3		5.1	2.7
.6		5	2.8
.8		5.2	1.7
1	4	5.6	1.8
1.25	4	6	1.5
1.5	4	6.1	1.5
1.75	4	6.1	1.5
2	4	6.2	1.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Site Notes:

Site Near Sewerage treatment plant in dead melaleucas. Looks like A horizons removed or shrunk

Project: NQAS **Site:** 86 **Observation:** 1

Location: GDA 94 ZONE 55 362486mE 8140281mN Lat: -16.81657 Long: 145.70944

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: No effective disturbance

Classifications:

ASC: Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .2	Very dark greyish brown (10YR32) moist; sandy clay loam; dry when sampled; abrupt to
A2e	.2 to .4	Light grey (10YR71) moist; few 2-10% fine <5mm faint orange mottles; coarse sand; dry when sampled; clear to
B21	.4 to .7	Grey (5Y61) moist; few 2-10% medium 5-15mm distinct orange mottles; coarse sandy light clay; moderately moist when sampled; gradual to
2C1	.7 to 1	Light grey (2.5Y71) moist; coarse sandy loam; moist when sampled; gradual to
2C2	1 to 1.3	Light grey (2.5Y71) moist; coarse sand; moist when sampled; gradual to
2C3	1.3 to 1.9	Light grey (2.5Y72) moist; clayey coarse sand; moist when sampled; clear to
3C4	1.9 to 2.6	Greenish grey (5GY61) moist; clayey coarse sand; wet when sampled; gradual to
3C5	2.6 to 3.3	Light greenish grey (5GY71) moist; sandy loam; wet when sampled; gradual to
3C6	3.3 to 3.7	Light greenish grey (5GY71) moist; coarse sand; wet when sampled; clear to
4C7	3.7 to 4.4	Greenish grey (5G61) moist; fine sandy light clay; gradual to
4C8	4.4 to 4.6	Greenish grey (5G61) moist; clayey coarse sand; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		3.9	2
.3		4	2.1
.6		4.6	3.1
.8		5.8	3.8
1		5.4	3.5
1.25		5.8	3.8
1.5		5.7	3.5
1.75		5.5	2.8
2		5.2	2
2.25		4.8	2
2.5		5.4	2.2
2.75		5.9	2.2
3		6	1.9
3.25		5.8	1.9
3.5		5.9	1.8
3.75	4	6.2	1.5
4	4	6.7	2.1
4.25	4	7.1	2.4
4.5		7.4	2.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Site Notes:

Site At end of Obrien Rd and into Melaleuca and vegetated area. Mangroves about 50m away. Ec 38ms/cm; pH 5.4

Project: NQAS **Site:** 87 **Observation:** 1

Location: GDA 94 ZONE 55 361733mE 8139160mN Lat: -16.82665 Long: 145.70231

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
B1	0 to .1	Brown (10YR53) moist; very few <2% fine <5mm faint orange mottles; light clay; granular weak 2-5mm structure; dry when sampled; gradual to
B21	.1 to .4	Light brownish grey (10YR62) moist; few 2-10% fine <5mm distinct orange mottles; light clay; dry when sampled; gradual to
B22	.4 to .9	Grey (10YR61) moist; few 2-10% medium 5-15mm distinct orange mottles; light clay; subangular blocky weak 2-5mm structure; dry when sampled; gradual to
B23	.9 to 1.4	Grey (10YR51) moist; many 20-50% coarse 15-30mm distinct orange mottles; light clay; subangular blocky weak 2-5mm structure; moderately moist when sampled; clear to
B24	1.4 to 2.05	Grey (10YR61) moist; common 10-20% medium 5-15mm distinct orange mottles; fine sandy clay loam; massive structure; clear to
B25	2.05 to 2.25	Light grey (5Y71) moist; many 20-50% medium 5-15mm prominent red mottles; light fine sandy clay loam; massive structure; moist when sampled; clear to
B26	2.25 to 2.5	Light grey (5Y71) moist; common 10-20% medium 5-15mm distinct orange mottles; sandy clay loam; massive structure; moist when sampled; gradual to
B27	2.5 to 2.85	Light greenish grey (10Y71) moist; common 10-20% coarse 15-30mm distinct orange mottles, few 2-10% medium 5-15mm distinct yellow jarosite (from pyrite) mottles; sandy loam; massive structure; moist when sampled; clear to
B28	2.85 to 3	Brown (10YR53) moist; common 10-20% medium 5-15mm distinct orange mottles; sandy clay loam; massive structure; wet when sampled; gradual to
C1	3 to 3.4	Very dark greyish brown (10YR32) moist; clay loam, sandy; few 2-10% medium 2-6mm ferruginous soft segregations; wet when sampled; gradual to
C2	3.4 to 3.7	Very dark greyish brown (10YR32) moist; fine sandy light clay; massive structure; few 2-10% medium 2-6mm organic (humified) tubules; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.2	1.9
.3		4.3	2.1
.6		4	2.1
.8		4	2.1
1		4	2.1
1.25		3.8	2
1.5		3.7	2.1
1.75		3.7	1.8
2		3.9	2.2
2.25		3.7	2.3
2.5		3.8	2.3
2.75		3.4	2
3		3.4	2.3
3.25		4.4	0.9
3.5	4	4.5	1.1

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Site Notes:

Site Opposite waste transfer station in cane. Very low pH's

Project: NQAS **Site:** 88 **Observation:** 1

Location: GDA 94 ZONE 55 361212mE 8139665mN Lat: -16.82206 Long: 145.69745

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .45	Dark greyish brown (10YR42) moist; clay loam; granular weak 2-5mm structure; dry when sampled
B21	.45 to .75	Greyish brown (10YR52) moist; few 2-10% fine <5mm distinct orange mottles; light clay; subangular blocky weak 2-5mm structure; dry when sampled
B22	.75 to 1	Light brownish grey (2.5Y63) moist; few 2-10% fine <5mm faint orange mottles; light clay; subangular blocky weak 2-5mm structure; moderately moist when sampled
B23	1 to 1.6	Light brownish grey (2.5Y63) moist; common 10-20% medium 5-15mm prominent red mottles, few 2-10% medium 5-15mm distinct orange mottles; silty light clay; subangular blocky weak 2- 5mm structure; few 2-10% medium 2-6mm ferruginous concretions; moderately moist when sampled
2B24	1.6 to 1.8	Pale yellow (2.5Y73) moist; few 2-10% medium 5-15mm distinct orange mottles, few 2-10% medium 5-15mm distinct red mottles; fine sandy clay loam; few 2-10% rounded quartz large pebbles 20-60 mm; massive structure; very few <2% medium 2-6mm ferruginous concretions; moderately moist when sampled
2C1	1.8 to 1.9	Greyish brown (2.5Y53) moist; sandy loam; common 10-20% rounded quartz large pebbles 20- 60 mm; massive structure; moist when sampled
2C2	1.9 to 2.3	Dark yellowish brown (10YR44) moist; sandy loam; common 10-20% angular quartz small pebbles 2-6 mm; few 2-10% subrounded quartz large pebbles 20-60 mm; moist when sampled
3B21	2.3 to 2.8	Brownish yellow (10YR66) moist; few 2-10% medium 5-15mm prominent red mottles; coarse sand; moist when sampled
3B22	2.8 to 3.1	Light grey (10YR71) moist; coarse sand; common 10-20% angular quartz small pebbles 2-6 mm; common 10-20% subangular quartz large pebbles 20-60 mm; moist when sampled
3B23	3.1 to 3.6	Brownish yellow (10YR66) moist; few 2-10% medium 5-15mm distinct orange mottles; coarse sandy clay loam; few 2-10% subangular quartz large pebbles 20-60 mm; moist when sampled
4C1	4 to 4.9	Light greenish grey (10Y71) moist; sand; very few <2% angular chert cobbles 60-200 mm; massive structure; moist when sampled

Field Tests:

Depth	PH-2	PH-3	Depth	PH-2	PH-3
.1	3.6	2.5	2.25	5.5	5
.3	4.1	2.8	2.5	5.4	4.7
.6	4.5	2.7	2.75	5.5	4.8
.8	4.8	5.1	3	5.5	4.6
1	4.8	5.4	3.25	5.7	6
1.25	5	3	3.5	5.5	5.6
1.5	5	3.7	4.25	5.5	4.9
1.75	5.2	4.2	4.5	5.4	4.6
2	5.4	5.7	4.75	5.5	4.6

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Site Notes:

Site In abandoned cane along Macgregor Road.Missing layer 3.6-4.0m

Project: NQAS **Site:** 89 **Observation:** 1

Location: GDA 94 ZONE 55 362787mE 8138498mN Lat: -16.8327 Long: 145.71216

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: SULFURIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .1	Dark greyish brown (10YR42) moist; light clay; granular weak 2-5mm structure; dry when sampled; gradual to
B21	.1 to .4	Grey (2.5Y51) moist; few 2-10% fine <5mm distinct orange mottles; light clay; dry when sampled; gradual to
B22	.4 to .65	Grey (2.5Y51) moist; common 10-20% medium 5-15mm distinct orange mottles; light medium clay; subangular blocky weak 5-10mm structure; dry when sampled; clear to
B23	.65 to .8	Light grey (2.5Y71) moist; few 2-10% medium 5-15mm distinct orange mottles; clay loam, fine sandy; moderately moist when sampled; clear to
B24	.8 to 1.05	Grey (2.5Y61) moist; few 2-10% medium 5-15mm distinct orange mottles; fine sandy clay loam; massive structure; moderately moist when sampled; gradual to
B25	1.05 to 1.4	Grey (2.5Y61) moist; very few <2% fine <5mm distinct orange mottles; fine sandy clay loam; moist when sampled; gradual to
B26	1.4 to 1.6	Grey (5Y51) moist; few 2-10% medium 5-15mm distinct orange mottles, few 2-10% medium 5- 15mm distinct yellow jarosite (from pyrite) mottles; silty light clay; moist when sampled; gradual to
C1u	1.6 to 2.5	Dark grey (5Y41) moist; silty light clay; massive structure; very few <2% medium 2-6mm organic (humified) root linings; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.5	2.2
.3		4.5	2.2
.6		4.7	2.7
.8		4.4	2.7
1		4.1	2.4
1.25		3.9	2.3
1.5		3.9	1.9
1.75	4	3.9	1.6
2	4	4.8	1.2
2.25	4	6.3	1.2
2.5	4	6.8	1.4

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 90 **Observation:** 1

Location: GDA 94 ZONE 55 362545mE 8138348mN Lat: -16.83404 Long: 145.70988

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .15	Dark greyish brown (10YR42) moist; light clay; granular weak 2-5mm structure; dry when sampled; gradual to
A12	.15 to .4	Dark greyish brown (10YR42) moist; few 2-10% fine <5mm faint orange mottles; light clay; granular weak 2-5mm structure; dry when sampled; clear to
2B21	.4 to .8	Grey (10YR61) moist; few 2-10% medium 5-15mm distinct orange mottles; coarse sandy light clay; few 2-10% angular quartz small pebbles 2-6 mm; single grain structure; dry when sampled; clear to
2C1	.8 to 1.1	Dark yellowish brown (10YR46) moist; coarse sand; few 2-10% angular quartz small pebbles 2-6 mm; single grain structure; dry when sampled; gradual to
2C2	1.1 to 1.6	Light olive brown (2.5Y56) moist; coarse sand; common 10-20% angular quartz small pebbles 2- 6 mm; single grain structure; diffuse to
2C3	1.6 to 1.9	Grey (2.5Y61) moist; coarse sand; common 10-20% angular quartz small pebbles 2-6 mm; moderately moist when sampled; gradual to
2C4u	1.9 to 3.2	Dark grey (2.5Y41) moist; coarse sand; very few <2% angular quartz small pebbles 2-6 mm; moderately moist when sampled; abrupt to
3C5u	3.2 to 3.65	Dark grey (5Y41) moist; silty light clay; massive structure; few 2-10% medium 2-6mm organic (humified) root linings; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		3.9	2.9
.3		4	2.2
.6		4.3	2.5
.8		4.4	2.4
1		4.8	2.7
1.25		5.5	3.2
1.5		4.6	3.1
1.75		5.6	2.7
2	4	5.7	1.2
2.25	4	5.6	1.2
2.5	4	6	1.6
2.75	4	6	1.6
3	4	6.5	1.6
3.25	4	6.5	1.8
3.5	4	6.7	1.4

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 91 **Observation:** 1

Location: GDA 94 ZONE 55 362990mE 8141147mN Lat: -16.80877 Long: 145.71423

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: tidal flat

Element: supratidal flat

Disturbances: No effective disturbance

Classifications:

ASC: SULFIDIC, SUPRATIDAL, Hydrosol

Confidence:

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .1	Grey (10YR51) moist; silty light clay; granular weak 2-5mm structure; dry when sampled; gradual to
B21	.1 to .2	Grey (2.5Y61) moist; few 2-10% medium 5-15mm distinct orange mottles; light medium clay; subangular blocky weak 2-5mm structure; dry when sampled; gradual to
B22	.2 to .7	Grey (2.5Y51) moist; few 2-10% medium 5-15mm distinct orange mottles, many 20-50% coarse 15-30mm prominent red mottles; silty light medium clay; massive structure; moderately moist when sampled; clear to
C1	.7 to 1.8	Dark grey (5Y41) moist; silty light clay; wet when sampled; gradual to
C2	1.8 to 2	Dark grey (5Y41) moist; silty light clay; massive structure; few 2-10% medium 2-6mm organic (humified) tubules; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		5.2	3.3
.3		4.4	3.1
.6		4.2	2.6
.8	4	4.5	1.2
1	4	4.7	1.2
1.25	4	5.3	1.3
1.5	4	5.7	1.3
1.75	4	6	1.3
2	4	6.2	1.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Site Notes:

Site On salt pan area near half moon creek

Project: NQAS **Site:** 92 **Observation:** 1

Location: GDA 94 ZONE 55 363548mE 8138825mN Lat: -16.82979 Long: 145.71932

Described By: Justin Adams (ADAJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: SULFURIC, REDOXIC, Hydrosol

Confidence:

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .1	Greyish brown (10YR52) moist; silty light clay; granular weak 2-5mm structure; dry when sampled; gradual to
B21	.1 to .4	Grey (10YR61) moist; light clay; granular weak 2-5mm structure; subangular blocky weak 2-5mm structure; dry when sampled; clear to
B22	.4 to .55	Grey (10YR61) moist; common 10-20% coarse 15-30mm prominent red mottles; light medium clay; subangular blocky moderate 2-5mm structure; dry when sampled; clear to
B23i	.55 to .8	Grey (2.5Y61) moist; common 10-20% medium 5-15mm distinct red mottles, few 2-10% medium 5-15mm distinct orange mottles; light medium clay; subangular blocky moderate 2-5mm structure; dry when sampled; gradual to
B24ia	.8 to 1.1	Grey (2.5Y51) moist; few 2-10% medium 5-15mm distinct orange mottles, very few <2% fine <5mm distinct yellow jarosite (from pyrite) mottles; light medium clay; subangular blocky weak 2- 5mm structure; moderately moist when sampled; gradual to
B25	1.1 to 1.4	Grey (5Y51) moist; few 2-10% fine <5mm distinct orange mottles; silty light medium clay; massive structure; moist when sampled; gradual to
C1	1.4 to 2.5	Dark grey (5Y41) moist; silty light clay; massive structure; common 10-20% medium 2-6mm organic (humified) tubules; few 2-10% medium 2-6mm organic (humified) root linings; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.2	3
.3		4.3	2.9
.6		4	2.4
.8		3.7	2.3
1		3.9	2.1
1.25		3.7	1.7
1.5	4	3.4	1.1
1.75	4	4	1.1
2	4	4.4	1.1
2.25	4	5.4	1
2.5	4	5.7	1.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Site Notes:

Site Near locked gate. Vegetation in low area

Project: NQAS **Site:** 93 **Observation:** 1

Location: GDA 94 ZONE 55 358374mE 8145975mN Lat: -16.76486 Long: 145.67122

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: plain **Element:** plain

Slope: 3 %

Surface Condition: Hard setting

Classifications:

ASC: GREY, Kurosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .2	Greyish brown (10YR52) moist; very few <2% medium 5-15mm faint orange mottles; fine sandy clay loam; massive structure; dry when sampled; clear to
2A1	.2 to .6	Dark grey (10YR41) moist; fine sandy clay loam; massive structure; dry when sampled; clear to
2A2e	.6 to .9	Light grey (10YR71) moist; white (10YR81) dry; fine sandy clay loam; massive structure; dry when sampled; clear to
2B21	.9 to 1.5	Light brownish grey (2.5Y63) moist; common 10-20% coarse 15-30mm faint orange mottles; clay loam, fine sandy; platy weak structure; massive structure; dry when sampled; gradual to
2B22	1.5 to 2.4	Light grey (10YR72) moist; few 2-10% coarse 15-30mm faint orange mottles; fine sandy light clay; very few <2% angular metamorphic rock (unidentified) large pebbles 20-60 mm; angular blocky weak structure; dry when sampled; gradual to
2B23	2.4 to 5	Brownish yellow (10YR66) moist; few 2-10% very coarse >30mm prominent grey mottles; fine sandy light clay; very few <2% angular metamorphic rock (unidentified) large pebbles 20-60 mm; angular blocky moderate 10-20mm structure; dry when sampled; diffuse to
2B24	5 to 6	Yellow (10YR76) moist; few 2-10% very coarse >30mm prominent grey mottles; fine sandy light clay; lenticular moderate 10-20mm structure; moderately moist when sampled

Field Tests:

Depth	PH-2	PH-3
.1	5.3	2.8
.3	5.5	3.6
.6	5.5	3.9
.8	5.5	4.5
1	5.4	4.7
1.25	5.6	4.7
1.5	5.4	4.6
1.75	5.4	4.5
2	4.9	4.2
2.25	5	4.7
2.5	4.8	3.8
2.75	5.1	3.8
3	4.9	3.8
3.25	5.4	5.4
3.5	5.5	5.5
3.75	5.5	5.5
4	5.7	5.7
4.25	6.1	5
4.5	6	4.8
4.75	6.1	4.9
5	6	4.9
5.5	5.8	4.8
6	5.9	4.7

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 94 **Observation:** 1

Location: GDA 94 ZONE 55 359031mE 8144732mN Lat: -16.77614 Long: 145.6773

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: plain **Element:** levee

Slope: 3 %

Surface Condition: Hard setting

Classifications:

ASC: YELLOW, Dermosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .5	Dark greyish brown (10YR42) moist; clay loam, fine sandy; few 2-10% angular gravel medium pebbles 6-20 mm; weak structure; massive structure; dry when sampled; abrupt to
B21	.5 to 1.3	Very pale brown (10YR74) moist; few 2-10% coarse 15-30mm faint yellow mottles; light clay; very few <2% subrounded gravel medium pebbles 6-20 mm; subangular blocky moderate 5- 10mm structure; very few <2% medium 2-6mm manganiferous nodules; dry when sampled; clear to
2C	1.3 to 2	Light brownish grey (10YR62) moist; very few <2% medium 5-15mm distinct orange mottles; clay loam, sandy; platy weak structure; massive structure; very few <2% fine <2mm ferruginous veins; dry when sampled; gradual to
3C	2 to 2.9	Yellowish brown (10YR54) moist; very few <2% coarse 15-30mm faint grey mottles; sandy clay loam; weak structure; moderately moist when sampled; gradual to
4C	2.9 to 3.7	Dark grey (5Y41) moist; few 2-10% coarse 15-30mm prominent yellow mottles; sandy light clay; common 10-20% rounded gravel medium pebbles 6-20 mm; common 10-20% rounded quartz medium pebbles 6-20 mm; massive structure; moist when sampled; gradual to
5C	3.7 to 4.4	Light grey (2.5Y71) moist; common 10-20% medium 5-15mm prominent brown mottles; silty light clay; massive structure; moderately moist when sampled; clear to
6C	4.4 to 5	Red (2.5YR46) moist; many 20-50% coarse 15-30mm distinct brown mottles; silty light clay; massive structure; moderately moist when sampled

Field Tests:

Depth	PH-2	PH-3
.1	5.1	3.7
.3	5.4	3.8
.6	5.2	4.5
.8	5.6	4.5
1	5.6	4.6
1.25	5.6	4.8
1.5	7.8	4.9
1.75	7.9	4.0
2	6.4	4.8
2.25	6.2	5.2
2.5	5.6	4.4
2.75	5.1	5.0
3	5.1	4.6
3.25	4.8	4.3
3.5	5.4	3.2
3.75	6.2	4.1
4	6.4	2.8
4.25	6.4	2.8
4.5	6.1	2.9
4.75	6.2	4.7

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 95 **Observation:** 1

Location: GDA 94 ZONE 55 362546mE 8142219mN Lat: -16.79906 Long: 145.71013

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: beach ridge plain **Element:** beach ridge

Slope: 0 %

Surface Condition: Hard setting

Disturbances: Highly disturbed e.g. mining, urban

Classifications:

ASC: STRATIC, Rudosol

GSG: Siliceous sand

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .3	Very dark greyish brown (10YR32) moist; sandy loam; few 2-10% angular gravel medium pebbles 6-20 mm; massive structure; dry when sampled; clear to
2C	.3 to .6	Dark greyish brown (10YR42) moist; coarse sand; single grain structure; dry when sampled
3C	.6 to .8	Brown (10YR43) moist; coarse sand; massive structure; dry when sampled
4C	.8 to 1.3	Light yellowish brown (10YR64) moist; sand; single grain structure; dry when sampled
5C	1.3 to 3	Very pale brown (10YR74) moist; sand; single grain structure; dry when sampled
6C	3 to 3.6	Very pale brown (10YR74) moist; coarse sand; common 10-20% subrounded quartz medium pebbles 6-20 mm; single grain structure; dry when sampled
7C	3.6 to 3.9	Very pale brown (10YR73) moist; sand; single grain structure; dry when sampled
8C	3.9 to 4.4	Very pale brown (10YR74) moist; coarse sand; common 10-20% subrounded quartz medium pebbles 6-20 mm; single grain structure; moderately moist when sampled
9C	4.4 to 4.7	Very pale brown (10YR73) moist; sand; single grain structure; moderately moist when sampled
10C	4.7 to 5.1	Very pale brown (10YR74) moist; coarse sand; common 10-20% subrounded quartz medium pebbles 6-20 mm; single grain structure; moderately moist when sampled
11C	5.1 to 5.4	Light grey (10YR72) moist; sand; single grain structure; moderately moist when sampled
12C	5.4 to 5.6	Brownish yellow (10YR66) moist; coarse sand; common 10-20% subrounded quartz medium pebbles 6-20 mm; single grain structure; moderately moist when sampled
13C	5.6 to 5.8	Light brownish grey (2.5Y63) moist; loamy sand; single grain structure; moderately moist when sampled
14C	5.8 to 6	Grey (2.5Y61) moist; loamy sand; single grain structure; moderately moist when sampled

Field Tests:

Depth	PH-2	PH-3	Depth	PH-2	PH-3
.1	6.4	4.7	3	7.1	5.2
.3	6.2	4.6	3.25	7.1	5.3
.6	6.5	4.9	3.5	7.1	5.3
.8	6.7	5.1	3.75	7.2	5.2
1	6.8	5.2	4	7.2	5.2
1.25	6.9	5.3	4.25	7.1	5.4
1.5	6.8	5.2	4.5	7.1	5.3
1.75	6.7	5.1	4.75	7.1	5.5
2	6.9	5.3	5	7.1	5.4
2.25	6.9	5.3	5.5	7.0	4.9
2.5	7.1	5.3	5.75	6.9	4.8
2.75	7.2	5.2	6	6.9	3.9

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 96 **Observation:** 1

Location: GDA 94 ZONE 55 372857mE 8118147mN Lat: -17.01719 Long: 145.8055

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: alluvial plain

Element: plain

Surface Condition: Firm

Disturbances: Cultivation - Rainfed

Classifications:

ASC: BROWN, Chromosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .15	Very dark greyish brown (10YR32) moist; clay loam, sandy; subangular blocky moderate 5-10mm structure; moderately moist when sampled; clear to
B21	.15 to .3	Yellowish brown (10YR56) moist; common 10-20% medium 5-15mm distinct grey mottles; coarse sandy light medium clay; subangular blocky weak 5-10mm structure; moderately moist when sampled; gradual to
2B2	.3 to 1.9	Grey (2.5Y51) moist; common 10-20% coarse 15-30mm distinct yellow mottles; light medium clay; massive structure; moist when sampled; gradual to
3B2	1.9 to 2.4	Grey (2.5Y61) moist; many 20-50% coarse 15-30mm prominent orange mottles; fine sandy light medium clay; massive structure; moderately moist when sampled; gradual to
4B21	2.4 to 3	Brownish yellow (10YR66) moist; common 10-20% coarse 15-30mm prominent red mottles, very few <2% coarse 15-30mm prominent grey mottles; light medium clay; subangular blocky moderate 10-20mm structure; moderately moist when sampled; gradual to
4B22	3 to 3.6	Dark yellowish brown (10YR46) moist; few 2-10% coarse 15-30mm prominent grey mottles, few 2-10% coarse 15-30mm prominent yellow mottles; light medium clay; subangular blocky strong 5-10mm structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	4	5.4	2.7
.3	4	6.7	4.0
.6	4	6.2	2.3
.8	4	7.5	2.3
1		7.4	5.0
1.25		7.5	7.8
1.5		7.7	7.8
1.75		7.7	7.8
2		8	8.0
2.25	4	7.3	2.3
2.5		7.2	7.0
2.75		7.0	6.9
3		6.8	6.9
3.25		7.0	6.6
3.5		7.1	6.8

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 97 **Observation:** 1

Location: GDA 94 ZONE 55 373193mE 8118268mN Lat: -17.01612 Long: 145.80866

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: alluvial fan **Element:** plain

Slope: 1 %

Surface Condition: Hard setting

Disturbances: Cultivation - Rainfed

Classifications:

ASC: BLACK, Dermosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .3	Dark grey (10YR41) moist; very few <2% medium 5-15mm faint red mottles; fine sandy light clay; few 2-10% subrounded quartz medium pebbles 6-20 mm; subangular blocky moderate 5-10mm structure; dry when sampled; gradual to
B21	.3 to .5	Very dark grey (10YR31) moist; few 2-10% medium 5-15mm distinct red mottles, few 2-10% medium 5-15mm distinct orange mottles; fine sandy light clay; few 2-10% subrounded quartz medium pebbles 6-20 mm; angular blocky strong 5-10mm structure; dry when sampled; gradual to
B22	.5 to 1	Grey (10YR61) moist; few 2-10% medium 5-15mm distinct orange mottles; light medium clay; few 2-10% subrounded quartz small pebbles 2-6 mm; subangular blocky moderate 5-10mm structure; dry when sampled; diffuse to
2D	1 to 1.9	Grey (2.5Y50) moist; common 10-20% coarse 15-30mm prominent orange mottles; light medium clay; very few <2% subrounded quartz medium pebbles 6-20 mm; lenticular weak 20-50mm structure; moderately moist when sampled; gradual to
3D	1.9 to 3.3	Grey (2.5Y50) moist; common 10-20% very coarse >30mm distinct brown mottles; light medium clay; massive structure; moderately moist when sampled; gradual to
4D	3.3 to 4.6	Grey (2.5Y60) moist; common 10-20% coarse 15-30mm distinct yellow mottles; light medium clay; massive structure; moderately moist when sampled; clear to
5B21	4.6 to 4.9	Reddish brown (2.5YR53) moist; few 2-10% medium 5-15mm prominent yellow mottles, few 2- 10% medium 5-15mm distinct grey mottles; light medium clay; lenticular weak 20-50mm structure; moderately moist when sampled; gradual to
5B22	4.9 to 5.3	Light olive brown (2.5Y56) moist; few 2-10% coarse 15-30mm distinct grey mottles, very few <2% medium 5-15mm distinct red mottles; light medium clay; subangular blocky moderate 5-10mm structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		5.2	2.8
.3		5.2	2.2
.6		4.7	2.6
.8		4.7	2.6
1		5.1	3.1
1.25		5.2	3.0
1.5		5.3	3.7
1.75		5.4	3.9
2		5.4	4.4
2.5	4	6.5	6.2
3	4	6.5	6.6
3.5		6.6	6.7
4		6.8	7.1
4.25		7.0	7.1
4.5		6.8	6.0
5		6.9	5.7

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 98 **Observation:** 1

Location: GDA 94 ZONE 55 373229mE 8118019mN Lat: -17.01837 Long: 145.80898

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: alluvial plain

Element: fill-top

Surface Condition: Hard setting

Disturbances: Highly disturbed e.g. mining, urban

Classifications:

ASC: DREDGIC, Anthroposol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .6	Dark grey (10YR41) moist; very few <2% medium 5-15mm distinct brown mottles; coarse sandy light clay; weak structure; dry when sampled; sharp to
2A1	.6 to 1.1	Dark grey (10YR41) moist; very few <2% medium 5-15mm distinct yellow jarosite (from pyrite) mottles; fine sandy clay loam; very few <2% angular charcoal medium pebbles 6-20 mm; angular blocky weak structure; wet when sampled; gradual to
2B2	1.1 to 1.6	Dark greyish brown (10YR42) moist; very few <2% coarse 15-30mm faint brown mottles; light clay; common 10-20% angular charcoal large pebbles 20-60 mm; very few <2% subrounded quartz medium pebbles 6-20 mm; subangular blocky moderate structure; wet when sampled; clear to
3D	1.6 to 3.4	Dark grey (2.5Y40) moist; very few <2% coarse 15-30mm faint grey mottles; coarse sandy light clay; very few <2% angular charcoal large pebbles 20-60 mm; few 2-10% subrounded quartz medium pebbles 6-20 mm; massive structure; wet when sampled; clear to
4B2	3.4 to 3.6	Greenish grey (5G51) moist; common 10-20% medium 5-15mm prominent yellow mottles, very few <2% medium 5-15mm prominent red mottles; light medium clay; subangular blocky moderate structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	2	3.5	1.1
.3	2	3.2	1.2
.6	2	3.2	1.2
.8	2	3.5	2.7
1	2	3.6	2.6
1.25	2	3.7	2.7
1.5	2	3.8	2.2
1.75	2	3.9	2.3
2	4	4.2	1.4
2.25	4	4.4	1
2.5	4	5.8	1.1
2.75	4	5.8	1.2
3	4	5.8	1.2
3.25	4	6.0	1.1
3.5	4	6.6	1.4

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 99 **Observation:** 1

Location: GDA 94 ZONE 55 372684mE 8117056mN Lat: -17.02704 Long: 145.80381

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: alluvial plain **Element:** channel bench

Surface Condition: Hard setting

Disturbances: No effective disturbance except grazing by hoofed animals

Classifications:

ASC: ORTHIC, Tenosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .1	Brown (10YR53) moist; few 2-10% medium 5-15mm prominent orange mottles; fine sandy light clay; subangular blocky moderate 5-10mm structure; dry when sampled
A12	.1 to .4	Very dark greyish brown (10YR32) moist; very few <2% medium 5-15mm prominent orange mottles; light clay; subangular blocky strong 5-10mm structure; dry when sampled
B21	.4 to 1.3	Grey (10YR61) moist; very few <2% medium 5-15mm faint yellow jarosite (from pyrite) mottles; sandy light clay; angular blocky weak structure; dry when sampled
2D	1.3 to 1.5	Light brownish grey (10YR62) moist; coarse sand; many 20-50% subrounded quartz medium pebbles 6-20 mm; single grain structure; dry when sampled
3D	1.5 to 2.3	Very dark grey (10YR31) moist; few 2-10% medium 5-15mm faint brown mottles; light clay; angular blocky moderate 10-20mm structure; dry when sampled
4D	2.3 to 2.8	Grey (2.5Y50) moist; light clay; massive structure; moist when sampled
5D	2.8 to 3.5	Grey (2.5Y60) moist; coarse sandy light clay; common 10-20% subrounded quartz medium pebbles 6-20 mm; massive structure; moist when sampled
6D	3.5 to 4.1	Light grey (2.5Y70) moist; sandy light clay; few 2-10% subrounded quartz small pebbles 2-6 mm; massive structure; moist when sampled
7D	4.1 to 5	White (2.5Y80) moist; loamy sand; few 2-10% subrounded quartz small pebbles 2-6 mm; single grain structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	2	4.9	3.5
.3	2	4.0	1.7
.6	2	3.7	2.5
.8	1	3.6	2.3
1	2	3.7	2.2
1.25	1	3.6	1.9
1.5	1	4.0	2.1
1.75	1	3.7	2.3
2	1	3.8	2.3
2.25	1	4.3	2.0
2.5	1	4.3	1.9
2.75	4	4.6	1.4
3	4	5.0	1.5
3.25	4	5.3	1
3.5	1	5.5	2.0
3.6	1	5.6	2.5
4	1	5.4	3.5
4.25	1	5.5	2.6
4.5	1	5.4	3.4

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 100 **Observation:** 1

Location: GDA 94 ZONE 55 373753mE 8118430mN Lat: -17.01469 Long: 145.81393

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Slope: .5 %

Surface Condition: Recently cultivated

Disturbances: Cultivation - Irrigated, past or present

Classifications:

ASC: GREY, Vertosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .3	Very dark greyish brown (10YR32) moist; light medium clay; subangular blocky strong 10-20mm structure; dry when sampled; gradual to
B21	.3 to .9	Dark grey (10YR41) moist; few 2-10% medium 5-15mm prominent yellow jarosite (from pyrite) mottles; light medium clay; lenticular moderate 20-50mm structure; moderately moist when sampled; gradual to
B22	.9 to 1.6	Grey (10YR51) moist; light medium clay; subangular blocky moderate 10-20mm structure; moderately moist when sampled; gradual to
B23	1.6 to 2.3	Greenish grey (5GY51) moist; very few <2% coarse 15-30mm prominent yellow mottles, very few <2% coarse 15-30mm prominent red mottles; light medium clay; few 2-10% subrounded quartz medium pebbles 6-20 mm; weak structure; moderately moist when sampled; diffuse to
B24	2.3 to 3.2	Grey (N60) moist; very few <2% coarse 15-30mm prominent yellow mottles, very few <2% coarse 15-30mm prominent red mottles; sandy light clay; few 2-10% subrounded quartz medium pebbles 6-20 mm; weak structure; moderately moist when sampled

Field Tests:

Depth	PH-2	PH-3
.1	4.7	2.4
.3	4.1	2.3
.6	3.4	2.0
.8	3.4	1.7
1	3.7	2.5
1.25	5.0	2.4
1.5	6.2	5.9
1.75	6.4	7.0
2	6.3	7.3
2.25	6.5	7.1
2.5	6.5	7.3
2.75	6.4	7.4
3	6.4	7.4

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 101 **Observation:** 1

Location: GDA 94 ZONE 55 374032mE 8118423mN Lat: -17.01476 Long: 145.81655

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: alluvial plain

Element: levee

Surface Condition: Firm

Classifications:

ASC: STRATIC, Rudosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .3	Very dark greyish brown (10YR32) moist; sandy clay loam; few 2-10% subrounded quartz medium pebbles 6-20 mm; single grain structure; dry when sampled
2D	.3 to .6	Brown (10YR53) moist; loamy coarse sand; few 2-10% subrounded quartz medium pebbles 6-20 mm; single grain structure; dry when sampled
3D	.6 to .9	Yellowish brown (10YR54) moist; sandy loam; very few <2% subrounded quartz medium pebbles 6-20 mm; single grain structure; moderately moist when sampled
4D	.9 to 2.4	Brown (10YR53) moist; loamy coarse sand; common 10-20% subrounded quartz medium pebbles 6-20 mm; single grain structure; moderately moist when sampled
5D	2.4 to 3	Strong brown (7.5YR56) moist; loamy coarse sand; common 10-20% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled
6D	3 to 4.5	Grey (10YR51) moist; loamy coarse sand; common 10-20% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled
7D	4.5 to 4.7	Grey (2.5Y60) moist; sandy light clay; massive structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	2	5.4	2.8
.3	2	5.6	2.9
.6	2	4.0	2.9
.8	2	4.2	2.4
1	2	4.3	2.3
1.25	1	4.1	2.4
1.5	1	3.9	2.2
1.75	1	3.9	2.3
2	1	4.1	2.8
2.25	1	4.3	3.0
2.5	1	4.0	2.8
2.75	1	4.5	3.0
3	4	5.5	3.0
3.25	4	5.8	3.5
3.5	4	6.5	2.7
3.75	4	6.3	1.4
4	4	6.1	2.0
4.25	4	6.1	2.0
4.5	4	6.0	1.8
4.7	2	6.0	4.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 102 **Observation:** 1

Location: GDA 94 ZONE 55 373371mE 8117897mN Lat: -17.01948 Long: 145.81031

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: alluvial fan **Element:** plain

Surface Condition: Recently cultivated

Disturbances: Cultivation - Irrigated, past or present

Classifications:

ASC: GREY, Dermosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .2	Very dark grey (10YR31) moist; clay loam, fine sandy; very few <2% subrounded quartz medium pebbles 6-20 mm; subangular blocky moderate 5-10mm structure; moderately moist when sampled; clear to
B21	.2 to .8	Grey (10YR51) moist; very few <2% medium 5-15mm faint yellow mottles; coarse sandy light medium clay; common 10-20% subrounded quartz medium pebbles 6-20 mm; angular blocky weak structure; moderately moist when sampled; gradual to
B22	.8 to 1.4	Light grey (10YR71) moist; few 2-10% coarse 15-30mm prominent orange mottles, few 2-10% coarse 15-30mm prominent red mottles; light medium clay; few 2-10% subrounded quartz medium pebbles 6-20 mm; angular blocky weak 10-20mm structure; moderate structure; moderately moist when sampled; gradual to
B23	1.4 to 2.5	Light grey (10YR71) moist; common 10-20% coarse 15-30mm prominent orange mottles, very few <2% medium 5-15mm prominent red mottles; medium clay; lenticular moderate 20-50mm structure; few 2-10% medium 2-6mm manganiferous soft segregations; few 2-10% medium 2- 6mm ferruginous soft segregations; moderately moist when sampled; gradual to
B24	2.5 to 3	Very dark grey (10YR31) moist; common 10-20% coarse 15-30mm prominent yellow mottles; medium clay; lenticular weak 20-50mm structure; moderate structure; few 2-10% medium 2-6mm manganiferous soft segregations; few 2-10% medium 2-6mm ferruginous soft segregations; moderately moist when sampled; gradual to
B25	3 to 3.5	Light grey (5Y71) moist; common 10-20% coarse 15-30mm prominent yellow mottles; sandy medium clay; common 10-20% subrounded quartz medium pebbles 6-20 mm; lenticular moderate 20-50mm structure; moderately moist when sampled

Field Tests:

Depth	PH-2	PH-3
.1	4.6	3.7
.6	4.9	3.7
.8	5.0	3.5
1	4.8	3.3
1.25	4.9	3.2
1.5	5.0	3.5
1.75	5.2	3.6
2	5.5	4.3
2.25	5.6	6.1
2.5	5.9	5.2
2.75	5.9	5.2
3	6.1	5.0
3.25	6.2	6.8
	PH-2: pH using electrode probe	
	PH-3: pH of hydrogen peroxide extract	

Project: NQAS **Site:** 103 **Observation:** 1

Location: GDA 94 ZONE 55 373640mE 8120318mN Lat: -16.99762 Long: 145.81298

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: alluvial plain **Element:** terrace flat

Surface Condition: Recently cultivated

Disturbances: Cultivation - Rainfed

Classifications:

ASC: STRATIC, Rudosol

Confidence:

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .3	Dark greyish brown (10YR42) moist; sandy clay loam; platy weak structure; dry when sampled
B2	.3 to 1.2	Brownish yellow (10YR66) moist; sandy loam; single grain structure; dry when sampled
2D	1.2 to 1.6	Pale brown (10YR63) moist; sand; single grain structure; moderately moist when sampled
3D	1.6 to 2	Light brownish grey (10YR62) moist; coarse sand; few 2-10% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled
4D	2 to 2.5	Strong brown (7.5YR56) moist; coarse sand; many 20-50% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled
5D	2.5 to 2.9	Grey (2.5Y60) moist; coarse sand; many 20-50% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled
6D	2.9 to 3.3	Grey (10YR51) moist; coarse sand; many 20-50% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled
6B22	3.3 to 4	Grey (10YR61) moist; few 2-10% very coarse >30mm prominent yellow mottles; sandy light clay; massive structure; moderately moist when sampled
6B23	4 to 4.8	Grey (10YR51) moist; few 2-10% coarse 15-30mm prominent yellow mottles, few 2-10% coarse 15-30mm prominent red mottles; sandy light medium clay; massive structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.3	2.6
.3		4.4	3.0
.6		4.5	3.4
.8		4.7	3.2
1		4.7	3.3
1.25		4.6	2.8
1.5		5.1	3.6
1.75		5.2	3.9
2		5.2	3.7
2.25		5.0	3.1
2.5		5.0	3.1
2.75		5.0	3.1
3	3	5.2	1.9
3.25	3	5.5	2.2
3.5	4	5.9	2.0
3.75		6.1	4.7
4		6.0	4.7
4.25		6.2	5.6

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 104 **Observation:** 1

Location: GDA 94 ZONE 55 373149mE 8120471mN Lat: -16.99621 Long: 145.80837

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: alluvial plain **Element:** supratidal flat

Disturbances: Cultivation - Rainfed

Classifications:

ASC: GREY, Kurosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .1	Light brownish grey (10YR62) moist; coarse sandy clay loam; massive structure; dry when sampled; clear to
B2	.1 to .6	Pale brown (10YR63) moist; common 10-20% medium 5-15mm distinct orange mottles, few 2- 10% coarse 15-30mm faint pale mottles; sandy light medium clay; subangular blocky moderate 5-10mm structure; moderately moist when sampled; gradual to
2D	.6 to 1.1	Light brownish grey (10YR62) moist; coarse sandy light clay; massive structure; wet when sampled; clear to
3D	1.1 to 1.5	Dark grey (10YR41) moist; loamy coarse sand; single grain structure; wet when sampled; clear to
4B2	1.5 to 2.4	Grey (2.5Y61) moist; many 20-50% coarse 15-30mm prominent brown mottles; light medium clay; massive structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.5	3.0
.3		4.7	3.0
.6		4.8	3.3
.8		4.9	3.2
1		5.4	3.3
1.25	4	5.2	1.5
1.5		5.3	1.3
1.75		5.8	2.4
2		6.0	5.7
2.25		6.2	6.1

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 105 **Observation:** 1

Location: GDA 94 ZONE 55 373258mE 8120398mN Lat: -16.99687 Long: 145.80939

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Surface Condition: Hard setting

Disturbances: Cultivation - Rainfed

Classifications:

ASC: YELLOW, Kurosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .3	Brown (10YR53) moist; clay loam, fine sandy; subangular blocky moderate 5-10mm structure; moderately moist when sampled; clear to
B21	.3 to .5	Brownish yellow (10YR66) moist; common 10-20% medium 5-15mm faint orange mottles; light medium clay; very few <2% subrounded quartz medium pebbles 6-20 mm; subangular blocky weak 10-20mm structure; moderate structure; moderately moist when sampled; gradual to
B22	.5 to 1.2	Grey (10YR61) moist; few 2-10% coarse 15-30mm prominent red mottles, few 2-10% coarse 15- 30mm distinct yellow mottles; coarse sandy light medium clay; few 2-10% subrounded quartz weak medium pebbles 6-20 mm; subangular blocky weak 10-20mm structure; moderate structure; moderately moist when sampled; gradual to
2D	1.2 to 1.7	Light brownish grey (10YR62) moist; coarse sand; few 2-10% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled; gradual to
3D	1.7 to 4	Grey (10YR51) moist; coarse sand; few 2-10% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled; abrupt to
4B2	4 to 4.8	Light grey (10YR71) moist; common 10-20% coarse 15-30mm prominent red mottles, common 10-20% coarse 15-30mm prominent yellow mottles; light medium clay; massive structure; few 2- 10% medium 2-6mm ferruginous nodules; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.2	1.7
.3		4.5	2.3
.6		4.4	2.7
.8		4.5	2.6
1		4.6	2.7
1.25		4.6	2.6
1.5		5.0	2.6
1.75	4	5.1	2.3
2	4	5.3	1.3
2.25	4	5.5	1.4
2.5	4	5.8	1.5
3	4	6.0	1.5
3.5	4	6.1	1.5
3.75	4	6.3	1.4
4	4	6.2	1.3
4.25		6.3	3.0
4.5		6.2	3.0
4.75		6.2	5.8

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 106 **Observation:** 1

Location: GDA 94 ZONE 55 373983mE 8120741mN Lat: -16.99381 Long: 145.81622

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: alluvial plain

Element: ox-bow

Surface Condition: Firm

Disturbances: Cultivation - Rainfed

Classifications:

ASC: OXYAQUIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .2	Brown (10YR53) moist; fine sandy clay loam; granular weak structure; moderately cemented continuous platy cultivation pan; dry when sampled; gradual to
B2	.2 to .7	Light yellowish brown (10YR64) moist; common 10-20% medium 5-15mm distinct orange mottles; clay loam, fine sandy; angular blocky moderate 5-10mm structure; few 2-10% medium 2-6mm ferruginous soft segregations; moderately moist when sampled; diffuse to
2D	.7 to 1.2	Very pale brown (10YR73) moist; few 2-10% coarse 15-30mm distinct orange mottles; fine sandy clay loam; massive structure; moderately moist when sampled; gradual to
3D	1.2 to 2.4	Grey (10YR51) moist; sandy clay loam; massive structure; wet when sampled; clear to
4D	2.4 to 3.6	Light grey (10YR71) moist; coarse sand; common 10-20% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled; diffuse to
5D	3.6 to 4	Light brownish grey (10YR62) moist; coarse sand; common 10-20% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled; abrupt to
6B	4 to 4.8	Light grey (N70) moist; few 2-10% coarse 15-30mm prominent yellow mottles, very few <2% coarse 15-30mm prominent red mottles; light medium clay; massive structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.3	2.6
.3		4.5	2.5
.6		5.2	3.0
.8		5.0	3.0
1		5.3	3.6
1.25	2	5.4	3.6
1.5	3	6.2	2.0
1.75	4	6.5	1.5
2	4	6.7	1.6
2.25	4	6.7	1.5
2.5	4	6.1	1.6
2.75	4	6.2	2.2
3	4	6.3	2.3
3.25	4	6.2	2.4
3.5	4	6.3	2.3
3.75	4	6.2	3.1
4	4	6.0	3.0
4.25	3	6.1	2.8
4.5	3	6.1	5.3
4.75	2	5.8	4.8

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 107 **Observation:** 1

Location: GDA 94 ZONE 55 373240mE 8120930mN Lat: -16.99206 Long: 145.80925

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: plain **Element:** plain

Surface Condition: Recently cultivated

Disturbances: Cultivation - Rainfed

Classifications:

ASC: YELLOW, Kurosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .3	Very dark greyish brown (10YR32) moist; coarse sandy clay loam; very few <2% subrounded quartz medium pebbles 6-20 mm; weak structure; moderately moist when sampled
A2	.3 to .8	Light brownish grey (10YR62) moist; very few <2% medium 5-15mm faint yellow mottles; clayey coarse sand; common 10-20% subrounded quartz medium pebbles 6-20 mm; weak structure; moderately moist when sampled
B21	.8 to 2.3	Yellowish brown (10YR56) moist; common 10-20% coarse 15-30mm prominent grey mottles; light medium clay; lenticular moderate 20-50mm structure; subangular blocky moderate 5-10mm structure; few 2-10% medium 2-6mm ferruginous nodules; moderately moist when sampled
B22	2.3 to 3.5	Grey (2.5Y60) moist; few 2-10% medium 5-15mm prominent red mottles, few 2-10% medium 5- 15mm prominent yellow mottles; light medium clay; lenticular moderate 20-50mm structure; subangular blocky moderate 5-10mm structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	2	5.1	3.4
.3	2	5.4	3.4
.6		5.2	3.8
.8		4.8	3.6
1		5.0	3.7
1.25		5.2	5.2
1.5		5.8	5.6
1.75		5.9	5.6
2		6.0	5.0
2.5		6.2	4.2
3		6.0	4.6

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 108 **Observation:** 1

Location: GDA 94 ZONE 55 373273mE 8120589mN Lat: -16.99515 Long: 145.80954

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: alluvial fan **Element:** plain

Surface Condition: Hard setting

Disturbances: Cultivation - Rainfed

Classifications:

ASC: GREY, Dermosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .15	Dark grey (10YR41) moist; light clay; very few <2% subrounded quartz medium pebbles 6-20 mm; subangular blocky moderate 5-10mm structure; dry when sampled; abrupt to
B21	.15 to .3	Olive yellow (2.5Y66) moist; light clay; very few <2% subrounded quartz medium pebbles 6-20 mm; platy weak 2-5mm structure; moderately cemented continuous platy cultivation pan; dry when sampled; clear to
B22	.3 to 1.1	Grey (10YR61) moist; very few <2% medium 5-15mm distinct red mottles, very few <2% medium 5-15mm distinct yellow mottles; coarse sandy light medium clay; common 10-20% subrounded quartz medium pebbles 6-20 mm; angular blocky weak 10-20mm structure; moderate structure; moderately moist when sampled; gradual to
B23	1.1 to 1.7	Grey (10YR61) moist; common 10-20% coarse 15-30mm prominent orange mottles, very few <2% coarse 15-30mm prominent red mottles; light medium clay; few 2-10% subrounded quartz medium pebbles 6-20 mm; angular blocky moderate 10-20mm structure; moderately moist when sampled; gradual to
B24	1.7 to 3.6	Brown (10YR53) moist; common 10-20% coarse 15-30mm prominent grey mottles; light medium clay; very few <2% subrounded quartz medium pebbles 6-20 mm; lenticular weak 20-50mm structure; few 2-10% medium 2-6mm calcareous nodules; moderately moist when sampled; gradual to
B25	3.6 to 3.8	Light greenish grey (5GY71) moist; very few <2% coarse 15-30mm prominent yellow mottles, very few <2% coarse 15-30mm prominent brown mottles; light medium clay; very few <2% subrounded quartz medium pebbles 6-20 mm; few 2-10% angular platy shell medium pebbles 6- 20 mm; weak structure; moderately moist when sampled; gradual to
B26	3.8 to 4.1	Light grey (5Y71) moist; common 10-20% coarse 15-30mm prominent brown mottles, few 2-10% coarse 15-30mm prominent yellow mottles; light medium clay; weak structure; wet when sampled; gradual to
2D	4.1 to 4.6	Light greenish grey (5GY71) moist; common 10-20% coarse 15-30mm prominent grey mottles, very few <2% coarse 15-30mm faint orange mottles; sandy light clay; massive structure; wet when sampled; clear to
3D	4.6 to 5.7	Yellow (10YR78) moist; common 10-20% coarse 15-30mm prominent grey mottles; sandy light medium clay; massive structure; moist when sampled

Field Tests:

.1	4.6	3.0
.3	5.0	2.6
.6	5.3	3.1
.8	5.2	2.8
1	5.0	2.8
1.25	4.7	2.9
1.5	4.9	3.1
1.75	6.2	6.2
2	6.7	6.7
2.25	7.0	7.2
2.5	7.3	7.4
3	7.5	7.1
3.5	7.3	7.3
4	7.6	7.9
4.5	7.6	7.6
5	7.0	6.5
5.5	7.1	6.1
PH-2: pH using electrode probe		
PH-3: pH of hydrogen peroxide extract		

Project: NQAS **Site:** 109 **Observation:** 1

Location: GDA 94 ZONE 55 373605mE 8120026mN Lat: -17.00025 Long: 145.81263

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: tidal flat **Element:** channel bench

Surface Condition: Hard setting

Disturbances: No effective disturbance except grazing by hoofed animals

Classifications:

ASC: OXYAQUIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .7	Brown (10YR43) moist; clay loam, fine sandy; few 2-10% subrounded quartz medium pebbles 6- 20 mm; granular moderate 2-5mm structure; dry when sampled
2D	.7 to 1.3	Yellowish brown (10YR56) moist; sand; few 2-10% subrounded quartz medium pebbles 6-20 mm; single grain structure; dry when sampled
3D	1.3 to 1.7	Pale brown (10YR63) moist; coarse sand; few 2-10% subrounded quartz medium pebbles 6-20 mm; single grain structure; moderately moist when sampled
4D	1.7 to 1.8	Grey (10YR61) moist; very few <2% medium 5-15mm prominent orange mottles; light clay; platy weak structure; moist when sampled
5D	1.8 to 3.3	Very dark greyish brown (10YR32) moist; light clay; platy weak structure; wet when sampled
6A	3.3 to 4.6	Very dark grey (10YR31) moist; clay loam; platy weak structure; wet when sampled
7D	4.6 to 7.3	Greenish grey (5GY51) moist; coarse sandy light clay; few 2-10% subrounded quartz medium pebbles 6-20 mm; massive structure; wet when sampled
9D	7.3 to 7.9	Grey (5Y51) moist; sandy light clay; massive structure; wet when sampled
9D	7.9 to 8	Bluish grey (5B61) moist; coarse sand; common 10-20% subrounded quartz medium pebbles 6- 20 mm; single grain structure; wet when sampled
10D	8 to 8.4	Bluish grey (5B61) moist; coarse sandy light clay; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	2	4.2	2.5	3.5	4	6.6	1.2
.3	2	4.0	2.7	3.75	4	6.9	1.1
.6	2	4.0	2.6	4	4	6.9	1.6
.8	2	4.1	2.3	4.25	4	6.7	1.1
1	2	5.2	2.9	4.5	4	6.9	1
1.25	2	5.2	2.8	4.75	4	6.9	1.7
1.5	2	5.2	3.5	5	4	6.9	1.3
1.75	2	5.6	3.1	5.5	4	6.9	2.0
2	4	5.1	1.0	6	4	7.1	1.8
2.25	4	5.1	1.0	6.5	4	7.0	1.7
2.5	4	5.5	1.2	7	4	7.0	2.4
2.75	4	5.9	1.3	7.5	4	6.6	2.5
3	4	6.3	1.1	8	4	6.8	2.2
3.25	4	6.5	1.4				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 110 **Observation:** 1

Location: GDA 94 ZONE 55 373498mE 8119650mN Lat: -17.00365 Long: 145.8116

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: alluvial fan **Element:** supratidal flat

Surface Condition: Loose

Disturbances: Extensive clearing

Classifications:

ASC: Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .5	Very dark grey (10YR31) moist; few 2-10% coarse 15-30mm faint orange mottles; coarse sandy clay loam; massive structure; dry when sampled; clear to
A2	.5 to .8	Grey (10YR61) moist; coarse sandy clay loam; few 2-10% subrounded quartz medium pebbles 6- 20 mm; weak structure; moderately moist when sampled; clear to
B21	.8 to 1.2	Dark grey (N40) moist; light medium clay; few 2-10% subrounded quartz medium pebbles 6-20 mm; subangular blocky moderate 5-10mm structure; subangular blocky weak 5-10mm structure; moderately moist when sampled; gradual to
B22	1.2 to 2.5	Dark grey (N40) moist; common 10-20% coarse 15-30mm distinct yellow mottles; light medium clay; common 10-20% subrounded quartz medium pebbles 6-20 mm; lenticular weak structure; moderately moist when sampled; gradual to
B23	2.5 to 3.6	Yellowish brown (10YR56) moist; many 20-50% coarse 15-30mm prominent grey mottles; light medium clay; very few <2% subrounded quartz medium pebbles 6-20 mm; subangular blocky moderate 5-10mm structure; subangular blocky moderate 10-20mm structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		5.0	2.6
.6		4.5	3.4
.8		4.5	3.4
1		5.3	3.2
1.25		5.8	3.5
1.5		6.2	4.9
1.75		6.6	5.2
2		6.6	5.1
2.25		6.8	6.6
2.5		6.9	6.2
2.75		7.0	5.4
3		6.7	7.0
3.25	3	7.0	7.0
3.5	3	7.2	6.8

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS**Site:** 111**Observation:** 1

Location: GDA 94

ZONE

55

373682mE

8119396mN

Lat: -17.00595

Long: 145.81332

Described By: S (Shane) Pointon (POIS)

Landscape:**Landform Pattern:** alluvial fan**Element:** supratidal flat**Surface Condition:** Recently cultivated**Disturbances:** Cultivation - Rainfed**Classifications:****ASC:** GREY, Dermosol**Confidence:****Profile Morphology:**

Horizon	Depth (m)	Description
A1	0 to .3	Dark grey (10YR41) moist; coarse sandy light clay; very few <2% subrounded quartz medium pebbles 6-20 mm; weak structure; dry when sampled; clear to
A2	.3 to .6	Light brownish grey (10YR62) moist; clay loam, fine sandy; few 2-10% subrounded quartz medium pebbles 6-20 mm; massive structure; dry when sampled; clear to
B21	.6 to 1.3	Grey (2.5Y50) moist; very few <2% coarse 15-30mm distinct orange mottles; coarse sandy light clay; very few <2% subrounded quartz medium pebbles 6-20 mm; lenticular moderate 20-50mm structure; moderately moist when sampled; gradual to
2D	1.3 to 1.7	Dark grey (2.5Y40) moist; coarse sandy clay loam; few 2-10% subrounded quartz medium pebbles 6-20 mm; massive structure; moderately moist when sampled; clear to
3B2	1.7 to 2.9	Dark grey (10YR41) moist; common 10-20% coarse 15-30mm distinct brown mottles; light medium clay; angular blocky weak 10-20mm structure; moist when sampled; diffuse to
4B2	2.9 to 3.8	Grey (N50) moist; common 10-20% coarse 15-30mm distinct brown mottles; fine sandy light clay; weak structure; moist when sampled; diffuse to
5B2	3.8 to 4.5	Greyish brown (2.5Y52) moist; common 10-20% medium 5-15mm distinct grey mottles, very few <2% medium 5-15mm distinct brown mottles; fine sandy light clay; very few <2% subrounded quartz medium pebbles 6-20 mm; weak structure; moist when sampled; diffuse to
6B2	4.5 to 5.6	Brownish yellow (10YR66) moist; common 10-20% medium 5-15mm distinct grey mottles; light medium clay; lenticular moderate 20-50mm structure; few 2-10% medium 2-6mm manganiferous nodules; few 2-10% medium 2-6mm manganiferous soft segregations; moderately moist when sampled

Field Tests:

Depth	PH-2	PH-3
.1	5.7	4.3
.3	5.4	2.9
.6	5.0	2.6
.8	4.7	2.7
1	4.9	3.1
1.25	5.4	3.8
1.5	5.7	4.8
1.75	6.1	7.0
2	6.5	6.7
2.25	6.7	6.4
2.5	6.9	7.1
3	7.0	7.2
3.5	6.9	7.0
4	7.1	7.0
4.5	7.2	7.2
5	7.2	7.7
5.5	7.2	7.6

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 112 **Observation:** 1

Location: GDA 94 ZONE 55 373949mE 8119152mN Lat: -17.00817 Long: 145.81581

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Surface Condition: Firm

Disturbances: Cultivation - Rainfed

Classifications:

ASC: LEPTIC, Tenosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .3	Very dark greyish brown (10YR32) moist; fine sandy light clay; very few <2% subrounded quartz medium pebbles 6-20 mm; subangular blocky strong 5-10mm structure; dry when sampled
A2	.3 to .45	Light brownish grey (10YR62) moist; fine sandy light clay; very few <2% subrounded quartz medium pebbles 6-20 mm; subangular blocky strong 5-10mm structure; dry when sampled
2A	.45 to 1.3	Black (10YR21) moist; fine sandy light clay; massive structure; moist when sampled
3B2	1.3 to 2.6	Dark grey (2.5Y40) moist; many 20-50% coarse 15-30mm prominent orange mottles; light medium clay; subangular blocky weak structure; moderately moist when sampled
4B2	2.6 to 3.4	Grey (2.5Y60) moist; common 10-20% very coarse >30mm prominent orange mottles; light medium clay; subangular blocky weak structure; moderately moist when sampled
5D	3.4 to 3.6	Greenish grey (5BG61) moist; few 2-10% coarse 15-30mm distinct grey mottles; coarse sandy light clay; few 2-10% subrounded quartz medium pebbles 6-20 mm; massive structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.9	2.7
.3		5.0	2.6
.6	4	4.1	1.6
.8	4	4.8	2.2
1	4	5.5	1.8
1.25	4	6.8	2.5
1.5	4	7.0	2.3
1.75		7.2	6.8
2		7.0	7.1
2.25		7.0	7.0
2.5		6.9	7.2
2.75		6.9	7.2
3		7.0	7.0
3.25		7.0	7.0
3.5		7.0	7.1

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 113 **Observation:** 1

Location: GDA 94 ZONE 55 373861mE 8118777mN Lat: -17.01156 Long: 145.81496

Described By: S (Shane) Pinton (POIS)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Surface Condition: Hard setting

Disturbances: Cultivation - Rainfed

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .3	Subangular Blocky moderate 5-10mm structure; moderately moist when sampled; clear to
A2	.3 to .5	Very Few <2% medium 5-15mm faint orange mottles; few 2-10% subrounded quartz medium pebbles 6-20 mm; subangular blocky weak 5-10mm structure; moderately moist when sampled; gradual to
B21	.5 to 1.2	Very Few <2% medium 5-15mm distinct brown mottles, very few <2% medium 5-15mm distinct yellow mechanical mixing mottles; few 2-10% subrounded quartz large pebbles 20-60 mm; subangular blocky moderate 10-20mm structure; moist when sampled; gradual to
B22	1.2 to 2.4	Common 10-20% medium 5-15mm distinct orange mottles, very few <2% medium 5-15mm distinct brown mottles; few 2-10% subrounded quartz medium pebbles 6-20 mm; lenticular weak 10-20mm structure; few 2-10% medium 2-6mm ferruginous soft segregations; moderately moist when sampled

Project: NQAS **Site:** 114 **Observation:** 1

Location: GDA 94 ZONE 55 374162mE 8118878mN Lat: -17.01066 Long: 145.8178

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Surface Condition: Hard setting

Disturbances: Cultivation - Rainfed

Classifications:

ASC: LEPTIC, Tenosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .3	Dark greyish brown (10YR42) moist; clay loam, fine sandy; granular weak 5-10mm structure; dry when sampled; clear to
A2	.3 to .7	White (10YR82) moist; sandy clay loam; massive structure; dry when sampled; clear to
2D	.7 to 1.6	Light brownish grey (10YR62) moist; sand; very few <2% subrounded quartz medium pebbles 6- 20 mm; single grain structure; moderately moist when sampled; clear to
3D	1.6 to 2.5	Dark grey (2.5Y40) moist; loamy coarse sand; common 10-20% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled; abrupt to
4B	2.5 to 4.8	Greenish grey (5GY61) moist; few 2-10% very coarse >30mm prominent red mottles, common 10-20% coarse 15-30mm prominent orange mottles, few 2-10% medium 5-15mm distinct gley mottles; light medium clay; subangular blocky moderate 5-10mm structure; few 2-10% medium 2-6mm ferruginous nodules; moderately moist when sampled

Field Tests:

Depth	PH-2	PH-3
.1	4.4	2.5
.3	4.4	2.8
.6	4.7	3.3
.8	4.5	3.0
1	4.7	3.4
1.25	4.5	2.7
1.5	5.3	2.3
1.75	5.5	1.5
2	5.8	1.8
2.25	6.1	1.9
2.5	6.3	1.6
2.75	7.0	3.5
3	7.2	7.0
3.25	7.5	7.5
3.5	7.2	7.7
3.75	7.3	7.7
4	7.3	7.2
4.25	5.8	7.2
	PH-2:	pH using electrode probe
	PH-3:	pH of hydrogen peroxide extract

Project: NQAS **Site:** 115 **Observation:** 1

Location: GDA 94 ZONE 55 374166mE 8119076mN Lat: -17.00887 Long: 145.81785

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Surface Condition: Hard setting, Surface crust

Disturbances: Cultivation - Rainfed

Classifications:

ASC: GREY, Dermosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .3	Very dark grey (10YR31) moist; light medium clay; angular blocky strong 10-20mm structure; dry when sampled
B21	.3 to .7	Greyish brown (10YR52) moist; very few <2% medium 5-15mm distinct yellow mottles; light medium clay; subangular blocky moderate 5-10mm structure; moderately moist when sampled
2D	.7 to 1.1	Greyish brown (10YR52) moist; coarse sandy light clay; massive structure; wet when sampled
3B21	1.1 to 1.7	Grey (2.5Y51) moist; very few <2% coarse 15-30mm faint orange mottles; light clay; subangular blocky moderate 5-10mm structure; wet when sampled
3B22	1.7 to 3.2	Greenish grey (5BG61) moist; common 10-20% medium 5-15mm faint orange mottles; light medium clay; weak structure; few 2-10% medium 2-6mm ferruginous nodules; moist when sampled
3B23	3.2 to 3.3	Light grey (5Y71) moist; common 10-20% medium 5-15mm distinct orange mottles; light medium clay; lenticular weak structure; few 2-10% medium 2-6mm manganiferous soft segregations; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		6.3	3.0
.3		6.0	2.8
.6		5.2	3.5
.8		5.4	3.0
1		5.7	2.8
1.25	3	5.8	2.9
1.5	3	6.0	1.7
1.75		6.5	6.6
2	3	6.6	2.1
2.25		6.7	6.3
2.5		6.8	2.9
2.75		7.0	6.8
3	3	7.1	6.8
3.25		6.8	7.0

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 116 **Observation:** 1

Location: GDA 94 ZONE 55 374393mE 8119079mN Lat: -17.00885 Long: 145.81998

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Surface Condition: Hard setting, Surface crust

Disturbances: Cultivation - Rainfed

Classifications:

ASC: GREY, Dermosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .4	Dark grey (10YR41) moist; light medium clay; subangular blocky strong 5-10mm structure; dry when sampled; gradual to
B21	.4 to .9	Light brownish grey (10YR62) moist; few 2-10% coarse 15-30mm distinct orange mottles; light medium clay; subangular blocky moderate 10-20mm structure; moderately moist when sampled; clear to
B22	.9 to 1.3	Red (2.5YR46) moist; very few <2% medium 5-15mm distinct grey mottles; light clay; weak structure; many 20-50% medium 2-6mm ferruginous nodules; moderately moist when sampled; clear to
B23	1.3 to 1.5	Grey (N60) moist; very few <2% fine <5mm prominent red mottles, very few <2% fine <5mm prominent orange mottles; medium clay; very few <2% subrounded quartz medium pebbles 6-20 mm; weak structure; moderately moist when sampled; diffuse to
B24	1.5 to 2	Grey (2.5Y61) moist; few 2-10% fine <5mm prominent red mottles, few 2-10% medium 5-15mm prominent orange mottles; medium clay; very few <2% subrounded quartz medium pebbles 6-20 mm; weak structure; moderately moist when sampled; gradual to
B25	2 to 3.3	Greenish grey (5GY61) moist; common 10-20% coarse 15-30mm prominent red mottles, few 2- 10% medium 5-15mm distinct orange mottles; medium clay; angular blocky moderate 10-20mm structure; few 2-10% medium 2-6mm ferruginous soft segregations; few 2-10% medium 2-6mm ferruginous nodules; moderately moist when sampled

Field Tests:

Depth	PH-2	PH-3
.1	4.8	2.0
.3	4.6	2.3
.6	4.2	2.4
.8	4.1	2.3
1	3.8	2.3
1.25	3.9	2.6
1.5	3.9	2.6
1.75	3.9	2.6
2	4.4	2.7
2.25	4.6	2.8
2.5	4.8	4.6
2.75	5.1	5.8
3	5.4	5.9

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 117 **Observation:** 1

Location: GDA 94 ZONE 55 373142mE 8118489mN Lat: -17.01412 Long: 145.80819

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: alluvial fan **Element:** tidal flat

Surface Condition: Hard setting, Firm, Recently cultivated

Disturbances: Cultivation - Rainfed

Classifications:

ASC: GREY, Dermosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .2	Black (10YR21) moist; fine sandy clay loam; weak structure; dry when sampled
2A1	.2 to .3	Very dark greyish brown (10YR32) moist; fine sandy light clay; very few <2% subrounded quartz medium pebbles 6-20 mm; subangular blocky moderate 5-10mm structure; moderately moist when sampled
2B21	.3 to .6	Grey (5Y61) moist; few 2-10% medium 5-15mm distinct orange mottles; sandy light medium clay; very few <2% subrounded quartz medium pebbles 6-20 mm; angular blocky moderate 10- 20mm structure; moderately moist when sampled
2B22	.6 to 1.1	Yellowish red (5YR56) moist; few 2-10% medium 5-15mm distinct yellow mottles, common 10- 20% medium 5-15mm prominent red mottles; sandy light medium clay; common 10-20% subrounded quartz medium pebbles 6-20 mm; weak structure; moderately moist when sampled
2B23	1.1 to 3.3	Grey (2.5Y50) moist; many 20-50% coarse 15-30mm distinct brown mottles; light medium clay; subangular blocky moderate 5-10mm structure; moderately moist when sampled

Field Tests:

Depth	PH-2	PH-3
.1	5.1	2.4
.3	5.7	3.0
.6	5.2	3.6
.8	5.4	3.6
1	5.3	3.9
1.25	5.6	4.2
1.5	5.8	5.0
1.75	5.9	4.7
2	6.2	6.3
2.25	6.2	6.3
2.5	6.6	6.7
2.75	6.7	7.2
3	7.0	7.0

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 118 **Observation:** 1

Location: GDA 94 ZONE 55 372646mE 8117841mN Lat: -17.01995 Long: 145.8035

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: alluvial fan **Element:** plain

Surface Condition: Firm, Surface crust

Disturbances: Cultivation - Rainfed

Classifications:

ASC: ORTHIC, Tenosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .2	Dark greyish brown (10YR42) moist; fine sandy light clay; subangular blocky moderate 5-10mm structure; dry when sampled; clear to
B21	.2 to .7	Greyish brown (10YR52) moist; common 10-20% medium 5-15mm distinct orange mottles; fine sandy light clay; very few <2% subrounded quartz medium pebbles 6-20 mm; platy weak 2-5mm structure; moderately cemented continuous platy cultivation pan; dry when sampled; gradual to
2B2	.7 to 1	Grey (10YR61) moist; few 2-10% medium 5-15mm distinct orange mottles, very few <2% coarse 15-30mm prominent red mottles; sandy light medium clay; few 2-10% subrounded quartz medium pebbles 6-20 mm; subangular blocky weak 5-10mm structure; moderately moist when sampled; gradual to
3B2	1 to 1.4	Light grey (10YR72) moist; few 2-10% medium 5-15mm distinct orange mottles, few 2-10% medium 5-15mm distinct red mottles; coarse sandy clay loam; common 10-20% subrounded quartz medium pebbles 6-20 mm; subangular blocky weak 10-20mm structure; moderately moist when sampled; clear to
4B2	1.4 to 2	Red (2.5YR46) moist; common 10-20% coarse 15-30mm prominent red mottles, very few <2% medium 5-15mm distinct orange mottles; medium clay; subangular blocky strong 5-10mm structure; few 2-10% medium 2-6mm ferruginous nodules; moderately moist when sampled

Field Tests:

Depth	PH-2	PH-3
.1	4.7	2.1
.3	4.6	3.3
.6	4.7	3.2
.8	4.7	3.0
1	4.8	3.0
1.25	4.7	3.1
1.5	4.7	2.9
1.75	4.8	2.8
2	4.6	3.0
	PH-2:	pH using electrode probe
	PH-3:	pH of hydrogen peroxide extract

Project: NQAS **Site:** 119 **Observation:** 1

Location: GDA 94 ZONE 55 372331mE 8117409mN Lat: -17.02383 Long: 145.80051

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: tidal flat **Element:** supratidal flat

Surface Condition: Surface crust

Disturbances: Cultivation - Rainfed

Classifications:

ASC: BROWN, Dermosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .2	Brown (10YR43) moist; very few <2% medium 5-15mm faint orange mottles; fine sandy light clay; subangular blocky moderate 5-10mm structure; very few <2% medium 2-6mm ferruginous soft segregations; moderately cemented continuous platy cultivation pan; dry when sampled
B21	.2 to .7	Brown (10YR53) moist; very few <2% medium 5-15mm distinct red mottles, very few <2% medium 5-15mm distinct grey mottles; heavy light medium clay; angular blocky moderate 10- 20mm structure; few 2-10% medium 2-6mm ferruginous nodules; dry when sampled
2B21	.7 to 1.1	Grey (10YR51) moist; few 2-10% medium 5-15mm faint orange mottles; sandy light clay; angular blocky moderate 10-20mm structure; very few <2% medium 2-6mm ferruginous soft segregations; moderately moist when sampled
3A	1.1 to 2.6	Black (10YR21) moist; light light clay; massive structure; moist when sampled
4D	2.6 to 3.8	Grey (10YR51) moist; clay loam, coarse sandy; common 10-20% subrounded quartz medium pebbles 6-20 mm; massive structure; wet when sampled
5B2	3.8 to 4.4	Light brownish grey (2.5Y62) moist; few 2-10% coarse 15-30mm distinct yellow mottles, few 2- 10% coarse 15-30mm distinct red mottles, very few <2% medium 5-15mm distinct orange mottles; fine sandy light medium clay; weak structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		5.1	3.2
.3		4.2	2.8
.6		4.2	3.0
.8		5.1	3.3
1		6.2	2.2
1.25	4	6.9	1.2
1.5	4	6.8	1.2
1.75	4	6.8	1.2
2	4	6.6	1.1
2.25	4	6.6	1.2
2.5	4	6.6	1.4
2.75	4	6.5	1.3
3	4	6.5	1.3
3.25	4	6.7	1.5
3.5	4	6.7	1.5
4		6.3	4.
4.25		6.4	6.0
4.4		6.5	6.2

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS**Site:** 120**Observation:** 1

Location: GDA 94

ZONE

55

372044mE

8117121mN

Lat: -17.02642

Long: 145.7978

Described By: S (Shane) Pointon (POIS)

Landscape:**Landform Pattern:** alluvial plain**Element:** terrace flat**Surface Condition:** Hard setting, Surface crust**Disturbances:** Cultivation - Rainfed**Classifications:****ASC:** GREY, Dermosol**Profile Morphology:**

Horizon	Depth (m)	Description
A1	0 to .2	Greyish brown (10YR52) moist; very few <2% medium 5-15mm faint orange mottles; fine sandy light clay; very few <2% subrounded quartz medium pebbles 6-20 mm; subangular blocky moderate 5-10mm structure; dry when sampled; clear to
B21	.2 to .4	Dark greyish brown (10YR42) moist; few 2-10% medium 5-15mm distinct dark mottles, very few <2% medium 5-15mm distinct orange mottles; coarse sandy light medium clay; few 2-10% subrounded quartz medium pebbles 6-20 mm; subangular blocky moderate 5-10mm structure; very few <2% medium 2-6mm ferruginous soft segregations; moderately moist when sampled; clear to
B22	.4 to .6	Greyish brown (2.5Y52) moist; very few <2% medium 5-15mm prominent orange mottles, very few <2% medium 5-15mm faint yellow mottles; coarse sandy light medium clay; few 2-10% subrounded quartz medium pebbles 6-20 mm; subangular blocky weak 5-10mm structure; very few <2% medium 2-6mm ferruginous soft segregations; moderately moist when sampled; clear to
B23	.6 to .8	Very dark greyish brown (10YR32) moist; few 2-10% medium 5-15mm distinct orange mottles; light medium clay; very few <2% subrounded quartz medium pebbles 6-20 mm; subangular blocky moderate 10-20mm structure; very few <2% medium 2-6mm ferruginous soft segregations; moderately moist when sampled; clear to
B24	.8 to 1	Greenish grey (5GY51) moist; very few <2% medium 5-15mm distinct orange mottles; light medium clay; very few <2% subrounded quartz medium pebbles 6-20 mm; weak structure; moderately moist when sampled; clear to
2D	1 to 1.3	Grey (10YR51) moist; coarse sandy light clay; few 2-10% subrounded quartz medium pebbles 6- 20 mm; weak structure; moist when sampled; clear to
3A	1.3 to 2.3	Very dark grey (10YR31) moist; light light clay; very few <2% subrounded quartz medium pebbles 6-20 mm; weak structure; moist when sampled; clear to
4D	2.3 to 2.8	Dark grey (10YR41) moist; loamy coarse sand; many 20-50% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled; abrupt to
5B2	2.8 to 3.6	Greenish grey (5GY61) moist; common 10-20% coarse 15-30mm distinct brown mottles; medium clay; lenticular moderate 20-50mm structure; very few <2% medium 2-6mm manganiferous soft segregations; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.9	2.6
.3		5.7	3.6
.6		5.8	3.8
.8		5.9	3.3
1		6.4	3.1
1.25		6.4	4.0
1.5	4	6.2	1.5
1.75	4	6.0	1.3
2	4	6.0	1.3
2.25	4	6.0	1.2
2.5	4	6.0	1.4
2.75	4	6.2	1.6
3	4	6.9	2.0
3.25		7.2	6.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS**Site:** 121**Observation:** 1

Location: GDA 94

ZONE

55

372003mE

8116861mN

Lat: -17.02877

Long: 145.7974

Described By: S (Shane) Pointon (POIS)

Landscape:**Landform Pattern:** alluvial plain**Element:** levee**Surface Condition:** Hard setting**Disturbances:** Cultivation - Rainfed**Classifications:****ASC:** ORTHIC, Tenosol**Profile Morphology:**

Horizon	Depth (m)	Description
A1	0 to .2	Dark yellowish brown (10YR34) moist; fine sandy clay loam; subangular blocky strong 5-10mm structure; moderately moist when sampled
B21	.2 to .5	Light yellowish brown (10YR64) moist; few 2-10% fine <5mm distinct orange mottles, few 2-10% fine <5mm faint grey mottles; silty clay loam; angular blocky weak 10-20mm structure; moderately moist when sampled
2B21	.5 to .8	Light grey (10YR72) moist; common 10-20% medium 5-15mm prominent red mottles; fine sandy light clay; angular blocky moderate 10-20mm structure; common 10-20% medium 2-6mm ferruginous nodules; moderately moist when sampled
3B21	.8 to 1.3	Light grey (10YR71) moist; few 2-10% coarse 15-30mm distinct yellow mottles; fine sandy light clay; few 2-10% angular charcoal cobbles 60-200 mm; massive structure; wet when sampled
4D	1.3 to 1.7	Dark grey (10YR41) moist; sandy light clay; very few <2% subrounded quartz medium pebbles 6- 20 mm; massive structure; wet when sampled
5D	1.7 to 2.8	Grey (10YR51) moist; coarse sand; many 20-50% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled
6D	2.8 to 2.9	Dark grey (10YR41) moist; fine sandy light clay; very few <2% subrounded quartz medium pebbles 6-20 mm; massive structure; wet when sampled
7D	2.9 to 3.6	Light olive brown (2.5Y54) moist; coarse sand; many 20-50% subrounded quartz large pebbles 20-60 mm; single grain structure; wet when sampled
8B2	3.6 to 4.4	Light grey (5Y71) moist; few 2-10% medium 5-15mm distinct orange mottles; light clay; massive structure; very few <2% medium 2-6mm ferruginous soft segregations; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.4	4.8
.3		4.3	6.5
.6		4.3	4.3
.8		4.3	3.2
1		4.6	2.3
1.25		5.0	1.5
1.5	4	5.8	1.8
1.75	4	6.1	1.8
2	4	5.7	1.9
2.25	4	5.9	2.7
2.5	4	5.9	1.1
2.75	4	6.1	1.2
3	4	5.9	2.5
3.25		6.2	2.6
3.5		6.3	2.8
3.75		6.3	2.8
4		6.3	2.8
4.25		6.3	2.4

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 122 **Observation:** 1

Location: GDA 94 ZONE 55 372169mE 8115652mN Lat: -17.0397 Long: 145.79889

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: alluvial plain **Element:** channel bench

Slope: 0 %

Surface Condition: Hard setting

Disturbances: No effective disturbance except grazing by hoofed animals, Cultivation - Rainfed

Classifications:

ASC: BROWN, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .2	Dark greyish brown (10YR42) moist; clay loam, fine sandy; platy weak 5-10mm structure; moderately cemented continuous platy cultivation pan; dry when sampled; gradual to
B21	.2 to .8	Yellowish brown (10YR54) moist; common 10-20% medium 5-15mm distinct orange mottles; sandy light clay; platy weak 5-10mm structure; moderately cemented continuous platy cultivation pan; dry when sampled; gradual to
2D	.8 to 1	Greenish grey (5G61) moist; very few <2% medium 5-15mm faint orange mottles; sandy clay loam; weak structure; moderately moist when sampled; gradual to
3D	1 to 1.5	Grey (10YR61) moist; sand; few 2-10% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled; clear to
4D	1.5 to 2.7	Grey (10YR61) moist; coarse sand; many 20-50% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled; abrupt to
5B2	2.7 to 3.5	Greenish grey (5BG61) moist; very few <2% coarse 15-30mm prominent yellow mottles, very few <2% coarse 15-30mm prominent red mottles; medium clay; subangular blocky weak 10-20mm structure; few 2-10% coarse 6-20mm ferruginous nodules; moist when sampled

Field Tests:

Depth	PH-2	PH-3
.1	5.3	5.0
.3	5.2	4.9
.6	5.5	3.5
.8	6.1	3.8
1	6.3	4.8
1.25	6.2	3.8
1.5	6.1	2.6
1.75	6.0	2.7
2	6.0	1.3
2.25	6.0	1.2
2.5	6.0	2.0
2.75	6.9	3.6
3	6.9	3.4

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 123 **Observation:** 1

Location: GDA 94 ZONE 55 372174mE 8115323mN Lat: -17.04268 Long: 145.79892

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: alluvial plain **Element:** channel bench

Slope: 0 %

Surface Condition: Firm, Hard setting

Disturbances: Extensive clearing

Classifications:

ASC: OXYAQUIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .4	Brown (10YR43) moist; very few <2% fine <5mm faint orange mottles; light clay; granular weak 5-10mm structure; dry when sampled; gradual to
B21	.4 to 1	Brown (7.5YR43) moist; common 10-20% medium 5-15mm distinct orange mottles; clay loam, fine sandy; subangular blocky strong 5-10mm structure; very few <2% medium 2-6mm ferromanganiferous nodules; moderately moist when sampled; gradual to
B22	1 to 1.5	Grey (10YR61) moist; few 2-10% medium 5-15mm faint orange mottles; fine sandy light clay; angular blocky weak 10-20mm structure; moderately moist when sampled; gradual to
2D	1.5 to 1.8	Greyish brown (2.5Y52) moist; sand; very few <2% subrounded quartz medium pebbles 6-20 mm; single grain structure; moist when sampled; clear to
3D	1.8 to 3.2	Light brownish grey (10YR62) moist; coarse sand; many 20-50% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled; clear to
4D	3.2 to 4.8	Dark grey (N40) moist; loamy sand; very few <2% subrounded quartz cobbles 60-200 mm; single grain structure; wet when sampled; clear to
5D	4.8 to 5	Grey (10YR51) moist; coarse sand; common 10-20% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled; abrupt to
6B2	5 to 6	Bluish grey (5B61) moist; many 20-50% very coarse >30mm prominent brown mottles; medium clay; subangular blocky weak 10-20mm structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1		4.7	3.0	3		6.4	4.1
.3		4.9	2.6	3.25		6.3	2.4
.6		4.5	2.8	3.5		6.3	2.2
.8		5.1	2.6	3.75	4	6.3	1.9
1		5.0	2.3	4	4	6.4	1.8
1.25		5.2	2.8	4.25	4	6.1	1.8
1.5		4.6	2.4	4.5	4	6.2	1.3
1.75		5.2	3.0	4.75	4	6.1	2.1
2		6.0	3.0	5	4	6.1	1.7
2.25		6.0	2.3	5.5		6.3	2.8
2.5		6.2	4.2	6		6.2	3.4
2.75		6.2	2.4				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 124 **Observation:** 1

Location: GDA 94 ZONE 55 372861mE 8125964mN Lat: -16.94655 Long: 145.80598

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Slope: 1 %

Surface Condition: Firm, Surface crust

Disturbances: Cultivation - Rainfed

Classifications:

ASC: GREY, Vertosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .3	Black (10YR21) moist; coarse sandy light clay; very few <2% subrounded gravel large pebbles 20-60 mm; angular blocky weak 10-20mm structure; moderately moist when sampled; gradual to
B21	.3 to .5	Dark grey (10YR41) moist; very few <2% medium 5-15mm distinct orange mottles; light medium clay; angular blocky moderate 10-20mm structure; moderately moist when sampled; gradual to
B22	.5 to 1.1	Grey (10YR61) moist; common 10-20% coarse 15-30mm prominent orange mottles; light medium clay; lenticular moderate 10-20mm structure; few 2-10% medium 2-6mm ferruginous soft segregations; moist when sampled; gradual to
2D	1.1 to 1.4	Dark grey (10YR41) moist; very few <2% medium 5-15mm faint yellow mottles; light clay; massive structure; moist when sampled; gradual to
3A	1.4 to 2.4	Black (10YR21) moist; light clay; massive structure; wet when sampled; gradual to
4B2	2.4 to 3.4	Grey (N60) moist; few 2-10% coarse 15-30mm distinct yellow mottles; light clay; massive structure; wet when sampled; gradual to
5D	3.4 to 4.3	Grey (N60) moist; light clay; very few <2% subrounded quartz medium pebbles 6-20 mm; massive structure; wet when sampled; gradual to
6D	4.3 to 4.5	Grey (2.5Y60) moist; coarse sandy clay loam; few 2-10% subrounded quartz medium pebbles 6- 20 mm; single grain structure; moderately moist when sampled; abrupt to
7B2	4.5 to 4.9	Very dark greyish brown (10YR32) moist; few 2-10% coarse 15-30mm faint yellow mottles; medium clay; lenticular moderate 20-50mm structure; moderately moist when sampled; gradual to
8B2	4.9 to 6	Grey (2.5Y60) moist; many 20-50% coarse 15-30mm distinct brown mottles; medium clay; subangular blocky weak 10-20mm structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1		5.6	2.2	3	4	6.2	1.3
.3		5.7	2.6	3.25	3	6.4	1.9
.6		4.7	2.8	3.5	3	6.6	2.4
.8		4.6	2.7	3.75	3	6.9	6.3
1		4.6	2.7	4	3	7.1	6.3
1.25	2	5.1	2.2	4.25	3	7.3	5.3
1.5	2	4.8	1.3	4.5	2	7.4	4.4
1.75	3	4.9	1.3	4.75	2	7.7	5.7
2	4	4.9	1.0	5	2	7.8	7.5
2.25	4	5.0	1.2	5.5	2	7.8	7.0
2.5	4	5.8	1.3	6	2	8.0	6.3
2.75	4	6.0	1.6				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 125 **Observation:** 1

Location: GDA 94 ZONE 55 373387mE 8126020mN Lat: -16.94607 Long: 145.81092

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: alluvial fan **Element:** plain

Surface Condition: Hard setting

Disturbances: Cultivation - Rainfed

Classifications:

ASC: GREY, Kurosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .3	Very dark grey (10YR31) moist; clay loam; very few <2% subrounded quartz medium pebbles 6- 20 mm; subangular blocky moderate 5-10mm structure; dry when sampled; gradual to
A2	.3 to .5	Grey (10YR51) moist; few 2-10% fine <5mm faint yellow mottles; clay loam, coarse sandy; common 10-20% subrounded quartz medium pebbles 6-20 mm; subangular blocky weak structure; moderately moist when sampled; clear to
B21	.5 to 1.1	Light grey (10YR72) moist; common 10-20% medium 5-15mm distinct orange mottles; light medium clay; angular blocky moderate 5-10mm structure; moderately moist when sampled; clear to
2D	1.1 to 1.5	Light grey (10YR72) moist; coarse sand; abundant 50-90% subrounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled; abrupt to
3B2	1.5 to 1.7	Grey (10YR51) moist; very few <2% medium 5-15mm faint orange mottles; light medium clay;lenticular moderate 20-50mm structure; moist when sampled; clear to
4A	1.7 to 3.3	Very dark brown (10YR22) moist; clay loam; massive structure; wet when sampled; diffuse to
5B	3.3 to 5.9	Very dark greyish brown (10YR32) moist; light clay; massive structure; wet when sampled; clear to
6B	5.9 to 7.5	Dark grey (10YR41) moist; light clay; massive structure; wet when sampled; gradual to
7D	7.5 to 8.5	Grey (5Y51) moist; loamy coarse sand; many 20-50% subrounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1		4.7	3.4	3.5	4	6.9	1.3
.3		4.6	2.6	3.75	4	7.0	1.3
.6		4.5	2.8	4	4	6.9	1.3
.8		4.7	2.7	4.25	4	7.1	2.0
1		4.8	3.1	4.5	4	7.1	1.3
1.25		4.7	3.5	4.75	4	7.1	1.3
1.5		5.0	3.4	5	4	7.1	1.3
1.75	4	5.2	1.4	5.5	4	7.1	1.3
2	4	5.5	1.2	6	4	7.3	1.3
2.25	4	6.0	1.1	6.5	4	7.0	1.3
2.5	4	6.3	1.1	7	4	7.1	1.2
2.75	4	6.6	1.2	7.5	4	7.1	1.1
3	4	6.7	1.2	8	4	7.1	1.2
3.25	4	6.9	1.2	8.5	4	7.0	1.1

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 126 **Observation:** 1

Location: GDA 94 ZONE 55 373508mE 8126510mN Lat: -16.94165 Long: 145.81209

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: alluvial fan **Element:** plain

Surface Condition: Recently cultivated

Disturbances: Cultivation - Irrigated, past or present

Classifications:

ASC: ORTHIC, Tenosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .4	Dark greyish brown (2.5Y42) moist; sandy clay loam; massive structure; dry when sampled; gradual to
B21	.4 to .8	Greyish brown (2.5Y52) moist; common 10-20% medium 5-15mm faint orange mottles; clay loam, fine sandy; weak structure; moderately moist when sampled; gradual to
2B21	.8 to 1.7	Light brownish grey (10YR62) moist; few 2-10% medium 5-15mm faint orange mottles; light medium clay; subangular blocky moderate 5-10mm structure; moderately moist when sampled; gradual to
2B22	1.7 to 2.4	Dark grey (10YR41) moist; common 10-20% medium 5-15mm distinct orange mottles; coarse sandy light medium clay; very few <2% subrounded quartz small pebbles 2-6 mm; weak structure; wet when sampled; abrupt to
3D	2.4 to 2.7	Greyish brown (10YR52) moist; coarse sand; many 20-50% subrounded quartz small pebbles 2- 6 mm; single grain structure; wet when sampled; abrupt to
4B2	2.7 to 3.1	Greenish grey (5GY61) moist; very few <2% medium 5-15mm distinct orange mottles; coarse sandy clay loam; common 10-20% subrounded quartz small pebbles 2-6 mm; weak structure; moderately moist when sampled; gradual to
5B2	3.1 to 3.8	Grey (10YR51) moist; few 2-10% coarse 15-30mm faint orange mottles; coarse sandy light clay; few 2-10% subrounded quartz small pebbles 2-6 mm; massive structure; moderately moist when sampled; gradual to
6B2	3.8 to 4.4	Grey (2.5Y61) moist; few 2-10% coarse 15-30mm distinct orange mottles; coarse sandy medium clay; few 2-10% subrounded quartz small pebbles 2-6 mm; weak structure; moderately moist when sampled

Field Tests:

Depth	PH-2	PH-3
.1	5.1	2.8
.3	5.3	2.4
.6	5.7	3.5
.8	5.8	3.2
1	5.8	3.0
1.25	5.3	2.7
1.5	5.0	2.5
1.75	4.8	2.7
2	4.7	2.4
2.25	4.8	2.6
2.5	5.0	2.8
2.75	5.1	2.8
3	5.7	2.8
3.25	6.5	3.2
3.5	6.6	3.4
3.75	6.6	5.8
4	6.8	4.5
4.25	6.8	4.7

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 127 **Observation:** 1

Location: GDA 94 ZONE 55 373215mE 8126517mN Lat: -16.94157 Long: 145.80934

Described By: S (Shane) Pointon (POIS)

Landscape:

Landform Pattern: alluvial fan **Element:** plain

Surface Condition: Firm, Hard setting

Disturbances: Cultivation - Rainfed

Classifications:

ASC: STRATIC, Rudosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .5	Dark grey (10YR41) moist; few 2-10% medium 5-15mm distinct orange mottles; clay loam, sandy; weak structure; moderately moist when sampled; clear to
2D	.5 to 1	Pale brown (10YR63) moist; few 2-10% medium 5-15mm distinct orange mottles; loamy sand; single grain structure; moderately moist when sampled; abrupt to
3D	1 to 1.5	Greyish brown (2.5Y52) moist; clay loam; weak structure; moist when sampled; clear to
4D	1.5 to 2	Light brownish grey (10YR62) moist; coarse sand; few 2-10% subrounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled; abrupt to
5D	2 to 4.7	Dark grey (2.5Y41) moist; silty light clay; massive structure; wet when sampled; abrupt to
6D	4.7 to 6	Grey (N60) moist; very few <2% coarse 15-30mm faint grey mottles; coarse sandy light clay; few 2-10% subrounded quartz small pebbles 2-6 mm; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		5.0	2.3
.3		5.5	2.9
.6		5.1	1.6
.8		5.0	2.6
1		4.8	3.1
1.25	4	5.3	1.3
1.5	4	5.5	1.2
1.75	4	5.8	1.3
2	4	6.0	1.8
2.25	4	6.2	1.2
2.5	4	6.2	1.6
2.75	4	6.9	1.7
3	4	7.5	1.8
3.25	4	7.7	5.4
3.5	4	7.9	6.7
3.75	4	8.0	7.2
4	4	8.2	7.3
4.25	4	8.3	7.4
4.5	4	8.3	7.4
4.75	4	8.3	7.5
5	4	7.8	7.5
5.5	4	7.9	7.2
6	4	8.2	6.8

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 128 **Observation:** 1

Location: GDA 94 ZONE 55 372875mE 8125694mN Lat: -16.94906 Long: 145.80609

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: tidal flat

Element: tidal flat

Runoff: Very slow

Permeability: Very slowly permeable

Drainage: Very poorly drained

Surface Condition: Soft

Disturbances: No effective disturbance

Classifications:

ASC: INTERTIDAL, Hydrosol

Vegetation:

Tallest Stratum: Mid-high open forest (6.01-12m)

Species: *Lumnitzera racemosa* (black mangrove)

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .25	Very dark greyish brown (10YR32) moist; clay loam; very few <2% angular quartz medium pebbles 6-20 mm; massive structure; wet when sampled; clear to
B2	.25 to .45	Dark grey (10YR41) moist; medium clay; very few <2% angular quartz small pebbles 2-6 mm; massive structure; moderately moist when sampled; clear to
2B2	.45 to .85	Greenish grey (10Y51) moist; light medium clay; few 2-10% subangular quartz small pebbles 2-6 mm; few 2-10% angular quartz small pebbles 2-6 mm; massive structure; moist when sampled; diffuse to
3C1	.85 to 2	Dark grey (2.5Y41) moist; light medium clay; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	5.9	3.1
.3	1	5.9	3.4
.6	3	7.8	2.4
.8	2	7.2	3.8
1	2	7.1	5.5
1.25	4	5.5	2.5
1.5	4	5.6	1.0
1.75	4	5.4	1.1
2	4	6.0	1.1

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon 3C1 Organic leaf material

Project: NQAS **Site:** 129 **Observation:** 1

Location: GDA 94 ZONE 55 373136mE 8125349mN Lat: -16.95219 Long: 145.80852

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: tidal flat

Element: tidal flat

Runoff: Very slow

Permeability: Very slowly permeable

Drainage: Very poorly drained

Slope: No record

Surface Condition: Surface crust

Disturbances: No effective disturbance

Classifications:

ASC: INTERTIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
P2	0 to .35	Very dark greyish brown (10YR32) moist; fibric loam; massive structure; wet when sampled; clear to
C1	.35 to .7	Black (10YR21) moist; common 10-20% medium 5-15mm faint brown mottles; light clay; massive structure; wet when sampled; diffuse to
2P2	.7 to 1.5	Dark grey (10YR41) moist; fibric peat; massive structure; wet when sampled; clear to
3C1	1.5 to 1.6	Dark grey (10YR41) moist; coarse sand; very few <2% angular quartz small pebbles 2-6 mm; single grain structure; wet when sampled

Field Tests:

Depth	PH-2	PH-3
.1	5.9	3.7
.3	5.8	4.3
.6	4.6	3.7
.8	4.7	3.8
1	4.7	1.3
1.25	4.8	1.3
1.5	4.9	1.2
	PH-2:	pH using electrode probe
	PH-3:	pH of hydrogen peroxide extract

Horizon Notes:

Horizon	P2	Roots
Horizon	C1	Roots
Horizon	2P2	Roots

Project: NQAS **Site:** 130 **Observation:** 1

Location: GDA 94 ZONE 55 372838mE 8124651mN Lat: -16.95848 Long: 145.80568

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial fan

Element: plain

Disturbances: Extensive clearing

Classifications:

ASC: REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A	0 to .15	Dark greyish brown (10YR42) moist; coarse sandy loam; strong structure; dry when sampled; clear to
B2	.15 to .6	Greyish brown (10YR52) moist; coarse sandy clay loam; platy strong 2-5mm next size peds structure; dry when sampled; clear to
C1	.6 to 1.3	Dark grey (10YR41) moist; clay loam, coarse sandy; massive structure; moist when sampled; diffuse to
2C	1.3 to 1.6	Dark greyish brown (10YR42) moist; medium clay; massive structure; wet when sampled; clear to
3C	1.6 to 2.7	Very dark greyish brown (10YR32) moist; sapric clay loam; massive structure; many 20-50% fine <2mm organic (humified) soft segregations; wet when sampled; diffuse to
4C	2.7 to 3.5	Bluish grey (10B51) moist; clay loam, coarse sandy; massive structure; wet when sampled
5D	3.5 to 3.6	Grey (N60) moist; coarse sandy loam; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	2	5.2	2.4
.3	2	5.2	2.2
.6	2	4.7	3.6
.8	2	4.7	3.6
1	1	4.7	4.1
1.25	1	4.6	3.6
1.5	2	4.6	1.5
1.75	4	4.7	1.4
2	4	5.2	1.2
2.25	4	5.8	1.4
2.5	4	6.2	1.6
2.75	4	6.4	2.1
3	4	6.5	2.0
3.25	4	6.7	1.9
3.5	4	6.5	2.2
3.6	4	6.8	2.1

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 131 **Observation:** 1

Location: GDA 94 ZONE 55 372959mE 8124623mN Lat: -16.95874 Long: 145.80682

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial fan

Element: plain

Runoff: Slow

Permeability: Moderately permeable

Drainage: Rapidly drained

Classifications:

ASC: GREY, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
Ap	0 to .4	Black (10YR21) moist; coarse sandy loam; granular weak 2-5mm structure; dry when sampled; diffuse to
2C1	.4 to 1.2	Greyish brown (10YR52) moist; sand; few 2-10% angular quartz small pebbles 2-6 mm; single grain structure; dry when sampled; diffuse to
2C2	1.2 to 2.2	Grey (10YR61) moist; sand; few 2-10% angular quartz small pebbles 2-6 mm; single grain structure; moderately moist when sampled; gradual to
3C3	2.2 to 3.2	Grey (10YR61) moist; coarse sand; very abundant >90% angular quartz small pebbles 2-6 mm; single grain structure; wet when sampled; abrupt to
4D	3.2 to 4.6	Grey (N60) moist; coarse sandy heavy clay; massive structure; moderately moist when sampled

Field Tests:

Depth	PH-2	PH-3
.1	6.3	4.2
.3	6.3	4.8
.6	6.6	5.1
.8	6.5	5.5
1	6.5	5.3
1.25	6.5	4.5
1.5	6.1	5.2
1.75	6.3	5.2
2	5.6	5.0
2.25	5.4	5.0
2.5	5.6	4.2
3	5.5	5.0
3.25	5.7	2.0
3.5	6.2	2.7
3.75	6.5	3.4
4	6.6	4.5
4.25	6.5	4.4
4.5	6.6	4.5

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon	3C3	Coarse frags at 2.4-2.9 (no sample)
Horizon	3C3	organic layer at 2.2-2.3, and a dark transitional organic layer at 3.1-3.2m.

Project: NQAS **Site:** 132 **Observation:** 1

Location: GDA 94 ZONE 55 367754mE 8121565mN Lat: -16.98608 Long: 145.75776

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: tidal flat **Element:** supratidal flat

Permeability: Very slowly permeable

Drainage: Very poorly drained

Classifications:

ASC: REDOXIC, Hydrosol

Vegetation:

Tallest Stratum: (0.51-1m)

Species: Ceriops species

Profile Morphology:

Horizon	Depth (m)	Description
A	0 to .15	Brown (10YR5/3) moist; light clay; subangular blocky strong 2-5mm structure; common 10-20% medium 2-6mm manganiferous nodules; moist when sampled
B21	.15 to .35	Light greenish grey (10Y7/1) moist; many 20-50% medium 5-15mm prominent red mottles; light clay; subangular blocky strong 5-10mm structure; common 10-20% medium 2-6mm manganiferous nodules; moderately moist when sampled
B22	.35 to .6	Light grey (N7/0) moist; common 10-20% medium 5-15mm prominent red mottles, many 20-50% very coarse >30mm distinct brown mottles; heavy clay; subangular blocky weak 2-5mm structure; moderately moist when sampled
B23	.6 to 1.15	Olive (5Y5/3) moist; many 20-50% very coarse >30mm faint grey mottles; heavy clay; massive structure; moist when sampled
B24	1.15 to 3.25	Light grey (5Y7/1) moist; heavy clay; weak 5-10mm structure; dry when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	6.2	4.6
.3		5.4	4.5
.6		5.4	4.3
.8		5.8	4.6
1	2	6.2	2.4
1.25	2	6.4	6.5
1.5	2	6.5	5.8
1.75	2	6.6	6.5
2	2	6.8	6.1

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 133 **Observation:** 1

Location: GDA 94 ZONE 55 367792mE 8121562mN Lat: -16.98611 Long: 145.75812

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: tidal flat **Element:** supratidal flat

Permeability: Very slowly permeable

Drainage: Very poorly drained

Disturbances: No effective disturbance

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Vegetation:

Tallest Stratum: (1.01-3m)

Species: Ceriops species

Profile Morphology:

Horizon	Depth (m)	Description
A2	0 to .15	Black (10YR21) moist; few 2-10% medium 5-15mm distinct grey mottles; light clay; granular strong 2-5mm structure; very few <2% medium 2-6mm manganiferous nodules; very many >50% medium 2-6mm manganiferous soft segregations; moderately moist when sampled; clear to
B21	.15 to .35	Light greenish grey (10Y71) moist; many 20-50% coarse 15-30mm distinct brown mottles, many 20-50% very coarse >30mm prominent red mottles; medium clay; massive structure; very few <2% medium 2-6mm manganiferous nodules; few 2-10% medium 2-6mm manganiferous soft segregations; moist when sampled; diffuse to
B22	.35 to .7	Grey (N50) moist; many 20-50% very coarse >30mm distinct brown mottles; medium clay; massive structure; common 2-5mm roots; wet when sampled; clear to
D1	.7 to 1	Light greenish grey (10Y71) moist; many 20-50% very coarse >30mm distinct brown mottles, many 20-50% medium 5-15mm distinct dark mottles; heavy clay; massive structure; very many >50% medium 2-6mm manganiferous soft segregations; common 10-20% medium 2-6mm manganiferous nodules; dry when sampled

Field Tests:

Depth	PH-2	PH-3
.1	6.4	7.5
.3	5.1	3.1
.6	6.4	1.6
.8	6.7	6.4
1	7.0	7.2
	PH-2: pH using electrode probe	
	PH-3: pH of hydrogen peroxide extract	

Project: NQAS **Site:** 134 **Observation:** 1

Location: GDA 94 ZONE 55 367904mE 8121655mN Lat: -16.98528 Long: 145.75917

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: tidal flat **Element:** intertidal flat

Permeability: Very slowly permeable

Drainage: Very poorly drained

Disturbances: No effective disturbance

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Vegetation:

Tallest Stratum: Low closed forest (3.01-6m)

Species: Ceriops species; Rhizophora stylosa (spotted mangrove, red mangrove)

Profile Morphology:

Horizon	Depth (m)	Description
A	0 to .1	Dark greyish brown (10YR42) moist; fibric light clay; massive structure; common 1-2mm roots; wet when sampled; gradual to
A2	.1 to .6	Dark greyish brown (10YR42) moist; fibric clay loam; massive structure; common 1-2mm roots; wet when sampled; diffuse to
B1	.6 to 1	Light greenish grey (10Y71) moist; medium clay; massive structure; common 1-2mm roots; wet when sampled; diffuse to
B2	1 to 2	Olive yellow (2.5Y66) moist; many 20-50% very coarse >30mm distinct grey mottles, few 2-10% medium 5-15mm distinct red mottles; heavy clay; massive structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	6.6	3.2
.3	4	6.7	1.5
.6	4	6.7	1.5
.8	4	6.8	1.3
1	4	6.8	1.9
1.25	4	7.0	1.6
1.5	3	7.5	1.9
1.75	1	7.4	1.7
2	1	7.3	1.7

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon B2 some organic inclusions

Project: NQAS **Site:** 135 **Observation:** 1

Location: GDA 94 ZONE 55 369265mE 8119401mN Lat: -17.00573 Long: 145.77182

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial fan **Element:** plain

Surface Condition: Hard setting

Disturbances: No record

Classifications:

ASC: GREY, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .3	Brown (10YR53) moist; heavy clay loam, sandy; angular blocky weak 2-5mm structure; dry when sampled; clear to
B21	.3 to .5	Olive yellow (2.5Y66) moist; common 10-20% medium 5-15mm faint orange mottles, very few <2% medium 5-15mm distinct red mottles; fine sandy clay loam; angular blocky weak 2-5mm structure; dry when sampled; clear to
B22	.5 to .9	Light greenish grey (5GY81) moist; few 2-10% medium 5-15mm distinct orange mottles, few 2- 10% medium 5-15mm distinct red mottles; clay loam, fine sandy; angular blocky weak 5-10mm structure; dry when sampled; gradual to
B23	.9 to 2.85	Light greenish grey (10Y71) moist; common 10-20% coarse 15-30mm distinct red mottles, few 2- 10% medium 5-15mm distinct brown mottles; clay loam, sandy; massive structure; moderately moist when sampled; gradual to
B24	2.85 to 3.8	Light greenish grey (10BG71) moist; few 2-10% coarse 15-30mm distinct brown mottles; coarse sandy medium clay; massive structure; wet when sampled; diffuse to
B25	3.8 to 5.5	Light greenish grey (10BG71) moist; very few <2% fine <5mm faint brown mottles; coarse sandy light clay; massive structure; wet when sampled; abrupt to
2B2	5.5 to 6	Many 20-50% coarse 15-30mm distinct red mottles, many 20-50% coarse 15-30mm distinct brown mottles, common 10-20% coarse 15-30mm prominent orange mottles; heavy clay; massive structure; dry when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1		4.9	2.8	3	1	6.3	4.8
.3		4.6	3.1	3.25	1	6.5	4.4
.4		4.6	3.5	3.5	1	6.6	5.1
.6		4.7	4.3	3.75	1	6.5	5.0
.8	1	4.7	3.9	4	1	6.5	4.6
1	1	4.3	3.1	4.25	1	6.7	5.0
1.25	1	4.7	4.0	4.5	1	6.6	5.3
1.5	1	5.9	3.1	4.75	1	6.5	5.1
1.75	1	4.8	4.0	5	1	6.4	5.4
2	1	4.9	4.0	5.25	2	6.3	5.3
2.25	1	5.5	4.5	5.5	3	6.7	7.1
2.5	1	5.2	3.3	5.75	3	6.8	7.3
2.75	1	5.7	4.9	6	3	6.5	7.1

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon B25 mottles only in lower part of horizon

Project: NQAS **Site:** 136 **Observation:** 1

Location: GDA 94 ZONE 55 369315mE 8119442mN Lat: -17.00536 Long: 145.77229

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: tidal flat

Element: tidal creek

Drainage: Very poorly drained

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Vegetation:

Tallest Stratum: Mid-high closed forest (6.01-12m)

Species: *Bruguiera exaristata* (rib-fruited mangrove)

Profile Morphology:

Horizon	Depth (m)	Description
A2	0 to .1	Brown (10YR43) moist; clay loam, fine sandy; angular blocky strong <2mm structure; moderately moist when sampled; clear to
B2	.1 to .7	Greyish brown (2.5Y52) moist; common 10-20% medium 5-15mm faint brown mottles; clay loam, fine sandy; massive structure; few >5mm roots; moderately moist when sampled; diffuse to
C1	.7 to 2	Dark grey (2.5Y41) moist; clay loam, fine sandy; massive structure; few >5mm roots; wet when sampled; diffuse to
C2	2 to 3.2	Dark grey (2.5Y41) moist; fine sandy light medium clay; massive structure; few 1-2mm roots; wet when sampled; diffuse to
C3	3.2 to 3.8	Dark grey (2.5Y41) moist; sandy light medium clay; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	5.7	3.2
.3		5.6	3.0
.6		5.7	3.4
.8		5.6	3.9
1	4	5.9	1.5
1.25	4	5.8	1.3
1.5	4	5.7	1.3
1.75	4	6.1	1.2
2	4	5.8	1.3
2.25	4	6.1	1.2
2.5	4	6.2	1.3
2.75	4	6.1	1.5
3	4	6.8	1.8
3.25	4	6.4	1.5
3.5	1	5.8	1.3
3.75	4	6.1	1.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 137 **Observation:** 1

Location: GDA 94 ZONE 55 368667mE 8119922mN Lat: -17.00098 Long: 145.76624

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: tidal flat

Element: tidal flat

Drainage: Very poorly drained

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Vegetation:

Tallest Stratum: Mid-high closed forest (6.01-12m)

Species: *Bruguiera exaristata* (rib-fruited mangrove); *Excoecaria agallocha* (milky mangrove, blind-your-eye)

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .1	Very dark brown (10YR22) moist; loam; angular blocky moderate <2mm structure; moderately moist when sampled; abrupt to
B21	.1 to .4	Brown (10YR43) moist; common 10-20% medium 5-15mm faint brown mottles; light clay; angular blocky moderate 2-5mm structure; moist when sampled; diffuse to
B22	.4 to .75	Grey (5Y51) moist; many 20-50% coarse 15-30mm prominent brown mottles; sandy light clay; angular blocky weak 5-10mm structure; wet when sampled; gradual to
B3	.75 to 1	Brown (10YR53) moist; sandy light clay; massive structure; wet when sampled; clear to
C1	1 to 2.2	Dark grey (10YR41) moist; sandy light clay; massive structure; common 1-2mm roots; wet when sampled; clear to
2C2	2.2 to 3.1	Dark grey (10YR41) moist; clayey sand; very few <2% angular quartz small pebbles 2-6 mm; single grain structure; wet when sampled; clear to
2C3	3.1 to 3.85	Dark greyish brown (10YR42) moist; loamy sand; very few <2% subangular quartz large pebbles 20-60 mm; many 20-50% angular quartz medium pebbles 6-20 mm; single grain structure; wet when sampled; sharp to
3D1	3.85 to 4.8	Greenish grey (10GY61) moist; many 20-50% very coarse >30mm prominent brown mottles, few 2-10% coarse 15-30mm prominent dark mottles; heavy clay; massive structure; weak 5-10mm structure; few 2-10% coarse 6-20mm manganiferous laminae; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		5.7	4.6
.3	1	5.5	4.8
.6		5.5	5.0
.8		6.2	4.9
1		6.5	3.2
1.25	4	6.1	1.0
1.5	4	6.3	1.0
1.75	4	6.1	1.0
2	4	6.3	1.3
2.25	4	6.1	1.3
2.5	4	6.1	1.0
2.75	4	6.0	1.0
3	4	5.9	1.7
3.25		6.1	1.0
3.5		6.1	1.2
3.75		6.0	1.5
4		6.4	6.6
4.25		6.2	8.1
4.5		5.9	7.8
4.75		6.1	8.1

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 138 **Observation:** 1

Location: GDA 94 ZONE 55 368598mE 8119948mN Lat: -17.00075 Long: 145.76559

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: tidal flat **Element:** fill-top

Surface Condition: Hard setting

Disturbances: Highly disturbed e.g. mining, urban

Classifications:

ASC: SPOLIC, Anthroposol

Profile Morphology:

Horizon	Depth (m)	Description
M	0 to .4	Strong brown (7.5YR56) moist; light clay; massive structure; dry when sampled
B21	.4 to .65	Dark greyish brown (10YR42) moist; clay loam, sandy; angular blocky weak 2-5mm structure; dry when sampled
B22	.65 to 1.2	Light grey (5Y71) dry; few 2-10% fine <5mm faint brown mottles; clay loam, sandy; angular blocky weak 5-10mm structure; dry when sampled
C1	1.2 to 1.6	Very dark greyish brown (10YR32) moist; sandy light clay; massive structure; wet when sampled
C2	1.6 to 2	Very dark grey (5Y31) moist; sandy light clay; massive structure; wet when sampled
2C3	2 to 3.6	Dark greyish brown (10YR42) moist; loamy sand; single grain structure; wet when sampled
2C4	3.6 to 4.3	Greyish brown (2.5Y52) moist; loamy sand; few 2-10% angular quartz medium pebbles 6-20 mm; single grain structure; wet when sampled
2C5	4.3 to 5.15	Olive grey (5Y42) moist; loamy sand; very few <2% angular quartz medium pebbles 6-20 mm; single grain structure; wet when sampled
3C6	5.15 to 5.5	Very dark grey (2.5Y31) moist; light clay; massive structure; wet when sampled
4D1	5.5 to 6	Greenish grey (10Y61) moist; many 20-50% very coarse >30mm prominent brown mottles; heavy clay; massive structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1		5.5	6.5	3.25		6.3	3.5
.3		5.3	4.1	3.5		6.0	3.1
.6		5.4	4.0	3.75		6.1	1.6
.8		5.4	3.8	4		6.4	2.7
1		5.5	4.5	4.25		6.3	2.8
1.25		6.0	4.6	4.5		6.3	1.6
1.5		6.2	1.9	4.75		6.4	3.4
1.75		6.1	1.4	5		6.2	3.1
2		6.1	2.3	5.25	4	6.4	0.9
2.25		6.0	1.4	5.5	4	6.8	7.1
2.5		5.9	3.0	5.75	4	6.1	6.7
2.75		6.2	2.5	6	4	6.6	7.1
3		6.0	2.2				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 139 **Observation:** 1

Location: GDA 94 ZONE 55 368339mE 8119693mN Lat: -17.00304 Long: 145.76314

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial plain

Element: drainage depression

Disturbances: Cultivation - Rainfed

Classifications:

ASC: SULFIDIC, SUPRATIDAL, Hydrosol

Vegetation:

Tallest Stratum: Low sedgeland (<0.25)

Species: Suaeda australis

Profile Morphology:

Horizon	Depth (m)	Description
Ap	0 to .45	Dark greyish brown (2.5Y42) moist; very few <2% fine <5mm faint brown mottles; sandy light clay; angular blocky weak 2-5mm structure; moderately moist when sampled; gradual to
B2	.45 to .7	Grey (5Y51) moist; very few <2% medium 5-15mm faint brown mottles; clay loam, sandy; angular blocky weak 5-10mm structure; moist when sampled; clear to
C1	.7 to .95	Dark greyish brown (10YR42) moist; very few <2% fine <5mm faint brown mottles; sandy light clay; massive structure; very few <2% medium 2-6mm ferruginous root linings; wet when sampled; gradual to
C2	.95 to 1.2	Very dark grey (5Y31) moist; sandy light clay; massive structure; common 1-2mm roots; wet when sampled; clear to
C3	1.2 to 1.8	Greenish grey (10Y51) moist; loamy sand; single grain structure; wet when sampled; diffuse to
C4	1.8 to 3	Greenish grey (10Y51) moist; sand; single grain structure; wet when sampled; sharp to
2D1	3 to 3.6	Greenish grey (10GY61) moist; many 20-50% very coarse >30mm distinct brown mottles, many 20-50% very coarse >30mm prominent red mottles; heavy clay; massive structure; many 20-50% coarse 6-20mm earthy soft segregations; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		5.5	4.3
.3		5.7	4.7
.6		4.8	4.4
.8		5.1	3.8
1	4	5.1	1.1
1.25	4	5.2	1.2
1.5	4	5.2	1.1
1.75	4	5.4	1.0
2	4	5.3	1.2
2.25	4	5.2	1.4
2.5	4	5.4	1.1
2.75	4	5.4	1.3
3	4	5.4	1.2
3.25		6.5	4.1
3.5		6.8	5.2

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 140 **Observation:** 1

Location: GDA 94 ZONE 55 368432mE 8119560mN Lat: -17.00424 Long: 145.76401

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial fan

Element: drainage depression

Disturbances: Highly disturbed e.g. mining, urban

Classifications:

ASC: GREY, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .08	Greyish brown (10YR52) moist; clay loam; angular blocky moderate 2-5mm structure; common <1mm roots; dry when sampled; sharp to
B2	.08 to .2	Greenish grey (10Y61) moist; common 10-20% medium 5-15mm prominent brown mottles; medium clay; angular blocky weak 2-5mm structure; moderately moist when sampled; abrupt to
2B21	.2 to .65	Yellowish brown (10YR56) moist; few 2-10% medium 5-15mm faint pale mottles, many 20-50% coarse 15-30mm prominent dark mottles; medium clay; angular blocky moderate 10-20mm structure; few 2-10% coarse 6-20mm manganiferous nodules; moderately moist when sampled; diffuse to
2B22	.65 to 1.3	Greenish grey (10Y61) moist; few 2-10% coarse 15-30mm prominent dark mottles, many 20-50% very coarse >30mm prominent brown mottles; heavy clay; angular blocky weak 10-20mm structure; very few <2% medium 2-6mm manganiferous nodules; very few <2% coarse 6-20mm manganiferous nodules; moderately moist when sampled
2B23	1.3 to 2.5	Greenish grey (10GY61) moist; many 20-50% very coarse >30mm prominent brown mottles; heavy clay; massive structure; moderately moist when sampled
2B24	2.5 to 3.3	Light grey (N70) moist; few 2-10% very coarse >30mm prominent brown mottles; heavy clay; massive structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		5.2	4.1
.3	2	5.2	6.9
.6	2	5.7	7.5
.8	2	5.8	7.5
1	2	5.9	8.6
1.25	2	5.9	8.5
1.5	2	6.1	6.5
1.75	2	6.4	5.5
2	2	6.9	7.4
2.25	2	6.8	8.3
2.5		7.2	6.8
2.75		7.1	5.6
3		7.3	6.1
3.25		6.9	5.5

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 141 **Observation:** 1

Location: GDA 94 ZONE 55 367752mE 8119426mN Lat: -17.00541 Long: 145.75761

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial fan **Element:** channel bench

Disturbances: Highly disturbed e.g. mining, urban

Classifications:

ASC: SULFIDIC, OXYAQUIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A	0 to .6	Brown (10YR43) moist; sand; common 10-20% subangular quartz medium pebbles 6-20 mm; single grain structure; dry when sampled
B2	.6 to .85	Dark greyish brown (10YR42) moist; common 10-20% coarse 15-30mm prominent brown mottles; clay loam, sandy; angular blocky moderate 2-5mm structure; moist when sampled
C1	.85 to 1.2	Dark greyish brown (2.5Y42) moist; clayey sand; massive structure; wet when sampled
C2	1.2 to 1.65	Dark grey (5Y41) moist; sandy clay loam; massive structure; wet when sampled
2C3	1.65 to 2	Olive brown (2.5Y44) moist; loamy sand; wet when sampled
3C4	2 to 2.3	Olive brown (2.5Y44) moist; gravel; many 20-50% angular quartz small pebbles 2-6 mm; many 20-50% angular quartz medium pebbles 6-20 mm; many 20-50% angular quartz large pebbles 20-60 mm; single grain structure; wet when sampled
4D1	2.3 to 3	Yellowish brown (10YR56) moist; few 2-10% medium 5-15mm prominent red mottles, very few <2% coarse 15-30mm prominent pale mottles; fine sandy light medium clay; massive structure; moderately moist when sampled
4D2	3 to 3.3	Light grey (N70) moist; many 20-50% coarse 15-30mm prominent orange mottles, very few <2% medium 5-15mm prominent red mottles; fine sandy light medium clay; massive structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	5.6	3.5
.3	1	5.7	3.3
.6	1	5.6	2.2
.8		5.5	3.1
1		6.1	1.7
1.25	4	6.2	3.3
1.4	2	6.2	2.4
1.5	1	6.0	1.8
1.75	1	5.7	2.5
2	1	5.4	3.0
2.25	1	5.6	3.7
2.5	3	5.6	4.0
2.75	1	5.6	3.4
3		5.5	4.2
3.25		5.7	4.9

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 142 **Observation:** 1

Location: GDA 94 ZONE 55 367253mE 8119139mN Lat: -17.00798 Long: 145.75291

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial fan

Element: channel bench

Classifications:

ASC: OXYAQUIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .3	Dark greyish brown (10YR42) moist; light clay; angular blocky moderate 2-5mm structure; moderately moist when sampled
B2	.3 to .4	Brown (10YR43) moist; few 2-10% medium 5-15mm prominent red mottles; sandy clay loam; angular blocky moderate 2-5mm structure; moderately moist when sampled
2C1	.4 to 2.2	Greyish brown (2.5Y52) moist; gravel; many 20-50% subangular quartz medium pebbles 6-20 mm; few 2-10% subangular quartz cobbles 60-200 mm; single grain structure; wet when sampled
3D1	2.2 to 3.25	Light grey (N70) moist; many 20-50% very coarse >30mm prominent red mottles, many 20-50% very coarse >30mm prominent brown mottles; heavy clay; massive structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	5.5	3.4
.3	1	6.0	5.6
.6		5.4	3.9
.8		5.6	3.4
1		5.1	2.3
1.25		5.4	2.0
1.5		5.2	3.3
1.75	2	6.2	1.6
2		5.6	3.3
2.25	4	5.8	3.9
2.5		5.9	3.9
2.75		5.3	3.5
3		5.7	4.3
3.25		5.7	4.8

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon 2C1 SCL inclusions at 1.7m

Project: NQAS **Site:** 143 **Observation:** 1

Location: GDA 94 ZONE 55 367246mE 8119147mN Lat: -17.00791 Long: 145.75284

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial fan

Element: channel bench

Classifications:

ASC: OXYAQUIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .2	Dark greyish brown (2.5Y42) moist; clay loam, sandy; angular blocky moderate 5-10mm structure; wet when sampled; clear to
C1	.2 to .8	Greyish brown (2.5Y52) moist; loamy sand; few 2-10% subangular quartz large pebbles 20-60 mm; few 2-10% subangular quartz small pebbles 2-6 mm; single grain structure; wet when sampled; abrupt to
2C2	.8 to 1.2	Greyish brown (2.5Y52) moist; sandy clay loam; massive structure; wet when sampled; abrupt to
3C3	1.2 to 1.5	Olive grey (5Y52) moist; loamy sand; single grain structure; wet when sampled; clear to
3C4	1.5 to 1.9	Dark greyish brown (2.5Y42) moist; loamy sand; single grain structure; wet when sampled; gradual to
4C5	1.9 to 2.4	Olive (5Y53) moist; gravel; common 10-20% subangular quartz small pebbles 2-6 mm; common 10-20% subangular quartz large pebbles 20-60 mm; many 20-50% subangular quartz medium pebbles 6-20 mm; single grain structure; wet when sampled; abrupt to
5D1	2.4 to 3.3	Greenish grey (10G61) moist; common 10-20% medium 5-15mm prominent brown mottles; heavy clay; angular blocky weak 5-10mm structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	5.8	2.3
.3	1	6.5	2.4
.6	1	5.9	2.7
.8		5.9	2.3
1		6.1	3.5
1.25		6.2	3.1
1.5		6.1	2.7
1.75		5.9	1.2
2		5.8	1.7
2.25		6.1	2.6
2.5		5.9	2.5
2.75		6.0	4.4
3		6.4	5.1
3.25		6.3	5.1

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 144 **Observation:** 1

Location: GDA 94 ZONE 55 369009mE 8121224mN Lat: -16.98924 Long: 145.76953

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: tidal flat **Element:** intertidal flat

Surface Condition: Soft

Disturbances: No effective disturbance except grazing by hoofed animals

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Vegetation:

Tallest Stratum: Mid-high closed forest (6.01-12m)

Species: Rhizophora stylosa (spotted mangrove, red mangrove)

Profile Morphology:

Horizon	Depth (m)	Description
C1	0 to .75	Very dark greyish brown (2.5Y32) moist; coarse sandy clay loam; few 2-10% angular quartz medium pebbles 6-20 mm; massive structure; common 2-5mm roots; wet when sampled; gradual to
C2	.75 to 1.6	Very dark grey (2.5Y31) moist; light clay; massive structure; common <1mm roots; wet when sampled; clear to
2D1	1.6 to 2.05	Greenish grey (5GY51) moist; medium clay; massive structure; wet when sampled; clear to
2D2	2.05 to 2.65	Greenish grey (10Y51) moist; many 20-50% coarse 15-30mm prominent brown mottles; medium clay; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	6.5	1.4
.3	1	6.8	0.9
.6	2	6.9	0.8
.8	4	7.2	0.9
1	4	7.0	0.9
1.25	4	7.0	1.0
1.5	4	7.0	1.5
1.75	4	7.1	1.2
2	4	7.2	1.4
2.25	4	7.2	2.0
2.5	1	7.4	3.8
2.65	1	7.6	5.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 145 **Observation:** 1

Location: GDA 94 ZONE 55 368739mE 8121097mN Lat: -16.99037 Long: 145.76698

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: tidal flat **Element:** intertidal flat

Surface Condition: Soft

Disturbances: No effective disturbance

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Vegetation:

Tallest Stratum: Mid-high closed forest (6.01-12m)

Species: Rhizophora stylosa (spotted mangrove, red mangrove)

Profile Morphology:

Horizon	Depth (m)	Description
P2	0 to 2	Very dark greyish brown (10YR32) moist; sapric clay loam; massive structure; common >5mm roots; wet when sampled; clear to
2D1	2 to 2.2	Dark grey (2.5Y41) moist; medium clay; massive structure; moist when sampled; gradual to
2D2	2.2 to 2.5	Greenish grey (10Y51) moist; many 20-50% very coarse >30mm prominent brown mottles; medium clay; massive structure; moist when sampled
2D3	2.5 to 2.6	Greenish grey (10Y51) moist; few 2-10% medium 5-15mm prominent red mottles; medium clay; massive structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	4	5.6	0.9
.3	4	6.1	0.9
.6	4	6.4	1.0
.8	4	6.5	1.0
1	4	6.6	1.0
1.25	4	6.6	0.8
1.5	4	6.5	0.8
1.75	4	6.7	1.0
2	4	6.8	1.3
2.1	4	6.8	1.0
2.25	2	6.8	1.8
2.5	4	6.8	1.7
2.6	1	6.9	3.9

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 146 **Observation:** 1

Location: GDA 94 ZONE 55 368485mE 8120983mN Lat: -16.99139 Long: 145.76459

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: tidal flat

Element: supratidal flat

Disturbances: No effective disturbance

Classifications:

ASC: SULFIDIC, SUPRATIDAL, Hydrosol

Vegetation:

Tallest Stratum: (0.26-0.5m)

Species: Ceriops species

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .1	Dark greyish brown (10YR42) moist; clay loam; angular blocky weak 2-5mm structure; moist when sampled
B2	.1 to .3	Olive grey (5Y52) moist; many 20-50% coarse 15-30mm prominent brown mottles; light clay; massive structure; common <1mm roots; wet when sampled
2D1	.3 to 1	Grey (N50) moist; common 10-20% coarse 15-30mm prominent dark mottles, many 20-50% very coarse >30mm prominent brown mottles; medium clay; massive structure; common <1mm roots; wet when sampled
2D2	1 to 1.4	Yellowish brown (10YR54) moist; common 10-20% coarse 15-30mm prominent pale mottles, common 10-20% coarse 15-30mm prominent orange mottles, few 2-10% medium 5-15mm prominent red mottles; medium heavy clay; massive structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	5.8	2.8
.3	4	6.5	1.1
.6	4	6.8	1.2
.8	4	6.8	1.3
1	4	6.7	1.5
1.25	4	6.7	1.6
1.4	1	6.8	1.7

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon	A1	coarse organic matter present
Horizon	2D1	Dark organic matter staining

Project: NQAS **Site:** 147 **Observation:** 1

Location: GDA 94 ZONE 55 368318mE 8120948mN Lat: -16.99169 Long: 145.76302

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial fan

Element: plain

Classifications:

ASC: GREY, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .15	Dark greyish brown (10YR42) moist; light clay; angular blocky moderate 2-5mm structure; dry when sampled
A2	.15 to .4	Light olive brown (2.5Y54) moist; light clay; angular blocky moderate 2-5mm structure; many 20-50% medium 2-6mm manganiferous nodules; dry when sampled
2B	.4 to 1.05	Greenish grey (5GY61) moist; common 10-20% coarse 15-30mm prominent red mottles, many 20-50% very coarse >30mm prominent brown mottles; medium heavy clay; few 2-10% subangular quartz medium pebbles 6-20 mm; massive structure; dry when sampled
B	1.05 to 2.6	Greenish grey (10GY61) moist; many 20-50% very coarse >30mm prominent brown mottles, few 2-10% coarse 15-30mm prominent red mottles; medium heavy clay; massive structure; moderately moist when sampled
B	2.6 to 3.2	Greenish grey (10GY61) moist; many 20-50% very coarse >30mm prominent brown mottles, few 2-10% coarse 15-30mm prominent dark mottles; medium heavy clay; massive structure; few 2- 10% coarse 6-20mm manganiferous soft segregations; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		5.1	2.6
.3	3	5.1	4.7
.6	3	4.6	1.6
.8	3	5.3	3.4
1	3	5.7	4.2
1.25		6.1	4.8
1.5		6.2	5.2
1.75		6.6	7.1
2		6.8	5.5
2.25		6.8	5.5
2.5	1	6.6	5.8
2.75	1	6.6	5.8
3		7.1	5.6

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Observation Notes:

Vegetation Mixed trees just beyond upper extent of mangroves

Project: NQAS **Site:** 148 **Observation:** 1

Location: GDA 94 ZONE 55 373045mE 8125727mN Lat: -16.94877 Long: 145.80769

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial fan **Element:** plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
Ap	0 to .18	Dark grey (10YR41) moist; light clay; angular blocky moderate 2-5mm structure; moderately moist when sampled; abrupt to
2A1	.18 to .5	Black (10YR21) moist; sapric medium clay; angular blocky moderate 2-5mm structure; moist when sampled; clear to
2A2	.5 to .75	Very dark greyish brown (10YR32) moist; sapric medium clay; very few <2% angular quartz small pebbles 2-6 mm; angular blocky moderate 2-5mm structure; few 2-10% medium 2-6mm ferruginous root linings; moist when sampled; clear to
B21	.75 to 1.05	Grey (5Y51) moist; common 10-20% coarse 15-30mm prominent orange mottles; medium clay; few 2-10% angular quartz small pebbles 2-6 mm; massive structure; few 2-10% medium 2-6mm ferruginous root linings; moist when sampled; gradual to
B22	1.05 to 1.5	Dark grey (10YR41) moist; few 2-10% fine <5mm prominent brown mottles; sandy light clay; few 2-10% angular quartz small pebbles 2-6 mm; massive structure; wet when sampled; gradual to
2B22	1.5 to 2.3	Grey (5Y51) moist; sandy light clay; wet when sampled; gradual to
3C	2.3 to 3.3	Greyish brown (10YR52) moist; few 2-10% medium 5-15mm faint brown mottles; coarse sandy light clay; few 2-10% angular quartz small pebbles 2-6 mm; massive structure; moist when sampled; diffuse to
4C	3.3 to 3.6	Light greenish grey (10GY71) moist; common 10-20% coarse 15-30mm prominent brown mottles; sandy medium clay; few 2-10% angular quartz medium pebbles 6-20 mm; massive structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		5.3	3.8
.3		5.3	3.9
.6		4.4	3.3
.8		5.1	3.7
1		5.5	3.2
1.25		5.0	2.9
1.5		4.7	4.2
1.75		5.0	3.6
2	4	4.6	1.6
2.25	4	5.1	1.6
2.5		5.3	3.5
2.75	1	5.8	3.7
3	1	5.9	5.0
3.25	1	6.1	5.4
3.5	1	6.2	5.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon	Ap	mildly sodic
Horizon	2A2	Very sodic
Horizon	B22	KSCL at 1.8-1.9

Project: NQAS **Site:** 149 **Observation:** 1

Location: GDA 94 ZONE 55 373115mE 8125721mN Lat: -16.94882 Long: 145.80835

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial fan

Element: plain

Disturbances: Cultivation - Rainfed

Classifications:

ASC: REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
Ap	0 to .6	Very dark grey (10YR31) moist; sapric light clay; very few <2% angular quartz small pebbles 2-6 mm; angular blocky weak 2-5mm structure; dry when sampled; gradual to
A2	.6 to 1.05	Dark greyish brown (10YR42) moist; few 2-10% medium 5-15mm faint brown mottles; sapric medium heavy clay; angular blocky moderate 2-5mm structure; few 2-10% medium 2-6mm ferruginous root linings; moist when sampled; sharp to
B21	1.05 to 1.5	Grey (5Y51) moist; few 2-10% coarse 15-30mm prominent orange mottles; medium clay; angular blocky weak 2-5mm structure; few 2-10% medium 2-6mm ferruginous root linings; moist when sampled; diffuse to
B22	1.5 to 2.2	Light brownish grey (10YR62) moist; sandy clay loam; very few <2% angular quartz medium pebbles 6-20 mm; massive structure; wet when sampled; diffuse to
C1	2.2 to 3.1	Grey (5Y61) moist; coarse sandy clay loam; massive structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.9	3.0
.3		4.5	2.7
.6		5.0	3.0
.8		4.9	3.3
1	1	5.0	2.8
1.25	1	5.1	2.5
1.5	1	5.3	2.0
1.75	1	5.4	2.2
2	1	5.2	2.4
2.25	1	5.2	2.8
2.5	1	5.5	2.6
2.75	1	5.1	3.1
3	2	5.0	2.2

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 150 **Observation:** 1

Location: GDA 94 ZONE 55 366213mE 8135690mN Lat: -16.85834 Long: 145.74413

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: tidal flat **Element:** tidal creek

Surface Condition: Soft

Disturbances: No effective disturbance

Classifications:

ASC: INTERTIDAL, Hydrosol

Vegetation:

Tallest Stratum: Low open forest (3.01-6m)

Species: *Avicennia marina* (Grey Mangrove); *Lumnitzera racemosa* (black mangrove); *Excoecaria agallocha* (milky mangrove, blind-your-eye)

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .1	Dark grey (10YR41) moist; light clay; angular blocky moderate 2-5mm structure; wet when sampled; clear to
B21	.1 to .4	Dark grey (10YR41) moist; many 20-50% very coarse >30mm prominent brown mottles; medium clay; angular blocky weak 5-10mm structure; few 2-10% medium 2-6mm ferruginous root linings; wet when sampled; clear to
B22	.4 to .6	Dark grey (10YR41) moist; common 10-20% coarse 15-30mm prominent brown mottles; sandy medium clay; massive structure; few 2-10% medium 2-6mm ferruginous root linings; wet when sampled; clear to
B23	.6 to .8	Dark grey (N40) moist; many 20-50% very coarse >30mm prominent orange mottles; medium clay; massive structure; many 20-50% coarse 6-20mm ferruginous soft segregations; wet when sampled; clear to
C1	.8 to 1.1	Black (10YR20) moist; light clay; massive structure; wet when sampled; clear to
2C1	1.1 to 1.4	Dark greyish brown (10YR42) moist; loamy sand; single grain structure; wet when sampled
2C2	1.4 to 1.75	Very dark grey (2.5Y31) moist; loamy sand; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	5.8	3.4
.3	1	5.8	3.6
.6	1	6.1	4.0
.8	1	6.7	2.8
1	4	6.8	2.6
1.25	2	6.7	1.1
1.5	4	6.5	1.5
1.75	2	6.7	1.6

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 151 **Observation:** 1

Location: GDA 94 ZONE 55 366969mE 8136238mN Lat: -16.85343 Long: 145.75126

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: beach ridge plain **Element:** fill-top

Disturbances: Highly disturbed e.g. mining, urban

Classifications:

ASC: Anthroposol

Profile Morphology:

Horizon	Depth (m)	Description
A	0 to .3	Dark grey (10YR41) moist; clay loam; single grain structure; angular blocky weak <2mm structure; dry when sampled; clear to
B2	.3 to 1.8	Dark yellowish brown (10YR44) moist; many 20-50% very coarse >30mm prominent brown mottles, many 20-50% very coarse >30mm prominent red mottles; light clay; massive structure; dry when sampled; clear to
C1	1.8 to 3.1	Very dark grey (10YR31) moist; medium clay; massive structure; common >5mm roots; wet when sampled; diffuse to
C2	3.1 to 4.4	Very dark grey (5Y31) moist; medium clay; massive structure; common <1mm roots; wet when sampled; sharp to
2C3	4.4 to 6	Greenish grey (10Y51) moist; loamy sand; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	5.8	3.8
.3	1	6.0	2.2
.6	2	5.5	4.0
.8	4	5.2	4.4
1	4	7.3	8.0
1.25	4	8.2	8.0
1.5	1	8.3	5.9
1.75	4	7.3	5.3
2	2	7.3	2.5
2.5	4	7.1	1.9
2.75	4	6.9	1.6
3	4	7.8	1.7
3.25	4	7.2	1.5
3.5	4	7.5	1.8
3.75	4	7.6	1.5
4	4	7.6	1.6
4.25	4	7.9	1.8
4.5	4	8.3	1.4
4.75	4	7.8	1.7
5	4	7.5	1.8
5.25	4	8.2	1.3
5.5	4	7.9	1.4
5.75	4	7.7	1.5

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon	B2	glass fragments at 0.4, 0.9, 1.7m.
Horizon	2C3	small ZLC lens at base.

Project: NQAS **Site:** 152 **Observation:** 1

Location: GDA 94 ZONE 55 372620mE 8118372mN Lat: -17.01521 Long: 145.80328

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: tidal flat

Element: intertidal flat

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Vegetation:

Tallest Stratum: Dwarf closed forest (1.01-3m)

Species: Ceriops species

Profile Morphology:

Horizon	Depth (m)	Description
B1	0 to .2	Dark greyish brown (10YR42) moist; common 10-20% medium 5-15mm prominent brown mottles; sandy clay loam; few 2-10% angular quartz small pebbles 2-6 mm; massive structure; wet when sampled
P1	.2 to 1	Very dark grey (10YR31) moist; fibric loam; few 2-10% angular quartz small pebbles 2-6 mm; massive structure; wet when sampled
C1	1 to 1.6	Very dark grey (10YR31) moist; fibric clay loam; few 2-10% angular quartz small pebbles 2-6 mm; massive structure; wet when sampled
2C2	1.6 to 2	Dark grey (2.5Y41) moist; coarse sandy loam; common 10-20% angular quartz small pebbles 2-6 mm; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		6.0	4.4
.3	4	5.7	1.1
.6	4	6.4	1.1
.8	4	6.7	1.3
1	4	6.6	1.2
1.25	4	6.5	1.1
1.5	4	6.6	1.5
1.75	4	6.5	1.4
2	4	6.6	1.6

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Observation Notes:

Vegetation Ceriops australis

Project: NQAS **Site:** 153 **Observation:** 1

Location: GDA 94 ZONE 55 372569mE 8118443mN Lat: -17.01457 Long: 145.8028

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial fan

Element: plain

Disturbances: Limited clearing

Classifications:

ASC: REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .15	Very dark grey (10YR31) moist; clay loam, sandy; angular blocky moderate <2mm structure; dry when sampled; clear to
B21	.15 to .5	Dark greyish brown (10YR42) moist; few 2-10% coarse 15-30mm prominent orange mottles, few 2-10% coarse 15-30mm prominent dark mottles; sandy light clay; angular blocky weak 2-5mm structure; dry when sampled; gradual to
B22	.5 to .85	Dark greyish brown (10YR42) moist; many 20-50% very coarse >30mm prominent orange mottles; sandy light clay; angular blocky weak 2-5mm structure; dry when sampled; gradual to
B23	.85 to 1.5	Grey (10YR51) moist; few 2-10% medium 5-15mm prominent brown mottles, many 20-50% medium 5-15mm prominent red mottles; medium clay; massive structure; common 1-2mm roots; dry when sampled; gradual to
2B21	1.5 to 2	Brown (10YR43) moist; many 20-50% coarse 15-30mm prominent grey mottles; clay loam, sandy; few 2-10% subrounded quartz small pebbles 2-6 mm; single grain structure; dry when sampled; abrupt to
3C1	2 to 2.6	Grey (10YR51) moist; common 10-20% coarse 15-30mm faint brown mottles; medium clay; dry when sampled; clear to
4B21	2.6 to 3.05	Grey (10YR51) moist; few 2-10% coarse 15-30mm prominent brown mottles; coarse sandy light clay; common 10-20% subrounded quartz small pebbles 2-6 mm; massive structure; dry when sampled; sharp to
4B22	3.05 to 3.4	Grey (10YR51) moist; few 2-10% medium 5-15mm prominent brown mottles; clayey coarse sand; many 20-50% subrounded quartz small pebbles 2-6 mm; common 10-20% subrounded quartz medium pebbles 6-20 mm; massive structure; dry when sampled; clear to
4D1	3.4 to 4.1	Grey (5Y51) moist; common 10-20% very coarse >30mm prominent brown mottles; medium clay; massive structure; dry when sampled; diffuse to
4D2	4.1 to 4.9	Light yellowish brown (2.5Y64) moist; common 10-20% coarse 15-30mm prominent grey mottles, many 20-50% very coarse >30mm prominent red mottles; heavy clay; massive structure; dry when sampled
4D3	4.9 to 5.4	Bluish grey (5B61) moist; many 20-50% coarse 15-30mm prominent red mottles, many 20-50% coarse 15-30mm prominent orange mottles; heavy clay; massive structure; few <1mm roots; dry when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	1	5.6	2.8	2.75	1	5.0	3.6
.3	1	5.0	2.4	3		5.2	2.7
.6	1	4.8	2.6	3.25		4.7	3.6
.8		4.5	2.9	3.5		4.3	3.1
1		4.7	2.6	3.75		4.7	3.6
1.25		4.6	2.6	4		4.7	3.3
1.5		4.6	2.5	4.25		4.6	3.4
1.75		4.7	3.0	4.5		4.8	4.6
2		4.8	2.8	4.75		4.8	3.9
2.25		4.7	2.7	5	4	4.8	2.0
2.5	1	4.5	2.6	5.25	1	5.0	4.4

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 154 **Observation:** 1

Location: GDA 94 ZONE 55 371707mE 8118365mN Lat: -17.01523 Long: 145.7947

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial fan

Element: drainage depression

Site Notes:

Photo Path Photos taken

Site No samples taken, similar to site 153

Observation Notes:

Observation Vertical exposed face of creek bank

Project: NQAS **Site:** 155 **Observation:** 1

Location: GDA 94 ZONE 55 371649mE 8118263mN Lat: -17.01615 Long: 145.79415

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: tidal flat **Element:** tidal creek

Surface Condition: Soft

Disturbances: No effective disturbance

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Vegetation:

Tallest Stratum: Tall closed forest (12.01-20m)

Species: Rhizophora stylosa (spotted mangrove, red mangrove); Bruguiera species

Profile Morphology:

Horizon	Depth (m)	Description
P1	0 to 1.3	Very dark greyish brown (10YR32) moist; fibric light clay; few 2-10% angular quartz small pebbles 2-6 mm; massive structure; wet when sampled
C	1.3 to 1.5	Very dark greyish brown (2.5Y32) moist; loamy coarse sand; few 2-10% angular quartz small pebbles 2-6 mm; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	4	6.3	1.5
.3	4	6.4	1.2
.6	4	6.5	1.3
.8	4	6.5	1.2
1	4	6.6	1.2
1.25	4	6.5	1.1
1.5	4	6.3	1.2

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon P1 coarse frags in lenses

Project: NQAS **Site:** 156 **Observation:** 1

Location: GDA 94 ZONE 55 371106mE 8117514mN Lat: -17.02288 Long: 145.78901

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: tidal flat

Element: intertidal flat

Surface Condition: Soft

Disturbances: No effective disturbance

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Vegetation:

Tallest Stratum: Low open forest (3.01-6m)

Species: Bruguiera species

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .2	Dark grey (10YR41) moist; very few <2% medium 5-15mm prominent brown mottles; light clay; massive structure; few 2-10% medium 2-6mm ferruginous root linings; wet when sampled; sharp to
B2	.2 to .5	Grey (5Y51) moist; common 10-20% medium 5-15mm prominent orange mottles; medium clay; massive structure; wet when sampled; clear to
C1	.5 to .9	Black (10YR21) moist; fibric medium clay; massive structure; wet when sampled; diffuse to
C2	.9 to 1.5	Black (10YR21) moist; silty medium clay; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	6.1	4.1
.3	4	6.2	4.9
.6	4	6.7	1.0
.8	4	6.9	1.0
1	4	6.8	1.0
1.25	4	7.0	1.2
1.5	4	6.6	1.0

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 157 **Observation:** 1

Location: GDA 94 ZONE 55 370620mE 8116201mN Lat: -17.03472 Long: 145.78436

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: tidal flat

Element: tidal creek

Disturbances: No effective disturbance

Classifications:

ASC: SULFIDIC, OXYAQUIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
C1	0 to .5	Dark yellowish brown (10YR44) moist; sand; single grain structure; wet when sampled; diffuse to
C2	.5 to .9	Dark grey (2.5Y41) moist; sandy clay loam; few 2-10% angular quartz small pebbles 2-6 mm; massive structure; few <1mm roots; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.15	1	5.6	4.6
.3	1	4.9	3.6
.6	1	5.0	2.0
.8	1	5.6	1.5
.9	1	5.4	1.8

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 158 **Observation:** 1

Location: GDA 94 ZONE 55 371202mE 8116800mN Lat: -17.02934 Long: 145.78987

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: tidal flat **Element:** Tidal Flat

Surface Condition: Soft

Disturbances: No effective disturbance

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Vegetation:

Tallest Stratum: Tall open forest (12.01-20m)

Species: Bruguiera species; Excoecaria agallocha (milky mangrove, blind-your-eye)

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .03	Dark yellowish brown (10YR44) moist; few 2-10% medium 5-15mm faint brown mottles; sandy clay loam; single grain structure; moist when sampled; sharp to
2A2	.03 to .4	Dark greyish brown (2.5Y42) moist; few 2-10% medium 5-15mm faint brown mottles; medium clay; weak structure; massive structure; wet when sampled; clear to
2B2	.4 to .75	Grey (2.5Y51) moist; many 20-50% coarse 15-30mm prominent orange mottles; medium clay; massive structure; wet when sampled; gradual to
2C1	.75 to 1.1	Very dark grey (10YR31) moist; fibric light clay; massive structure; common 1-2mm roots; wet when sampled; diffuse to
2C2	1.1 to 1.8	Very dark grey (5Y31) moist; medium clay; massive structure; common 1-2mm roots; wet when sampled; clear to
3C3	1.8 to 2	Dark grey (5Y41) moist; loamy sand; few 2-10% angular quartz small pebbles 2-6 mm; single grain structure; common 1-2mm roots; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.02	3	4.6	5.3
.1	1	5.4	3.6
.3		6.0	4.6
.6		6.5	4.8
.8		6.2	4.7
1	4	6.8	1.6
1.25	4	6.6	1.3
1.5	4	6.5	1.4
1.75	4	6.6	1.3
2	4	6.4	1.4

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 159 **Observation:** 1

Location: GDA 94 ZONE 55 371066mE 8116868mN Lat: -17.02872 Long: 145.78859

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: tidal flat

Element: intertidal flat

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Vegetation:

Tallest Stratum: Tall open forest (12.01-20m)

Species: Excoecaria agallocha (milky mangrove, blind-your-eye)

Profile Morphology:

Horizon	Depth (m)	Description
A	0 to .1	Dark greyish brown (10YR42) moist; loamy sand; massive structure; wet when sampled; sharp to
B21	.1 to .45	Grey (5Y51) moist; many 20-50% coarse 15-30mm prominent orange mottles; medium clay; massive structure; wet when sampled; clear to
B22	.45 to .7	Greenish grey (10Y51) moist; few 2-10% fine <5mm prominent orange mottles, few 2-10% medium 5-15mm faint orange mottles; medium clay; massive structure; common <1mm roots; wet when sampled; clear to
C1u	.7 to 1.1	Very dark grey (5Y31) moist; fibric light medium clay; massive structure; common 1-2mm roots; wet when sampled
C2u	1.1 to 1.4	Dark grey (5Y41) moist; loamy sand; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.05	1	6.7	3.3
.3		6.8	4.3
.6	1	6.5	1.7
.8	1	6.6	1.9
1	4	7.0	1.2
1.25	4	6.8	1.5
1.4	4	6.7	1.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 160 **Observation:** 1

Location: GDA 94 ZONE 55 371013mE 8116522mN Lat: -17.03184 Long: 145.78807

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: tidal flat

Element: intertidal flat

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .1	Dark greyish brown (10YR42) moist; clay loam; massive structure; very few <2% fine <2mm ferruginous root linings; wet when sampled
B22	.1 to .5	Grey (5Y51) moist; many 20-50% coarse 15-30mm prominent orange mottles; medium clay; wet when sampled
B23	.5 to .7	Dark greyish brown (2.5Y42) moist; light medium clay; massive structure; wet when sampled
C1	.7 to 1.9	Very dark grey (5Y31) moist; light clay; massive structure; common >5mm roots; wet when sampled
2C2	1.9 to 2	Dark grey (5Y41) moist; loamy coarse sand; few 2-10% angular quartz small pebbles 2-6 mm; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.05	2	5.2	2.7
.3		5.6	4.0
.6		6.1	1.3
.8	4	6.2	1.1
1	4	6.0	1.2
1.25	4	6.2	1.0
1.5	4	6.1	1.0
1.75	4	6.0	1.1
2	4	6.0	1.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 161 **Observation:** 1

Location: GDA 94 ZONE 55 371186mE 8116162mN Lat: -17.03511 Long: 145.78968

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial fan **Element:** drainage depression

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .3	Dark greyish brown (10YR42) moist; sandy clay loam; few 2-10% angular other medium pebbles 6-20 mm; angular blocky strong 2-5mm structure; few 2-10% medium 2-6mm manganiferous nodules; dry when sampled; clear to
A12	.3 to .8	Very dark greyish brown (10YR32) moist; very few <2% medium 5-15mm prominent brown mottles; fine sandy clay loam; angular blocky weak 2-5mm structure; common 10-20% medium 2-6mm manganiferous nodules; dry when sampled; clear to
B1e	.8 to 1.2	Greenish grey (10Y61) moist; few 2-10% medium 5-15mm prominent red mottles, many 20-50% very coarse >30mm prominent brown mottles; sandy clay loam; angular blocky weak 2-5mm structure; dry when sampled; diffuse to
B21e	1.2 to 1.5	Greenish grey (5GY61) moist; common 10-20% coarse 15-30mm prominent brown mottles; medium clay; massive structure; dry when sampled; diffuse to
B22e	1.5 to 2.9	Grey (N50) moist; many 20-50% coarse 15-30mm prominent red mottles, many 20-50% coarse 15-30mm prominent brown mottles; medium heavy clay; massive structure; moderately moist when sampled; sharp to
B23e	2.9 to 3.45	Grey (N50) moist; few 2-10% very coarse >30mm prominent red mottles, common 10-20% very coarse >30mm prominent brown mottles; sandy medium clay; few 2-10% subrounded quartz medium pebbles 6-20 mm; massive structure; wet when sampled; clear to
B24e	3.45 to 5.4	Grey (N50) moist; common 10-20% very coarse >30mm prominent brown mottles; sandy medium clay; massive structure; wet when sampled; diffuse to
B25e	5.4 to 6.25	Strong brown (7.5YR46) moist; few 2-10% medium 5-15mm distinct grey mottles; sandy medium clay; massive structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	2	6.3	3.3	3.25	1	5.9	5.8
.3		5.9	3.8	3.5		6.5	5.0
.6		5.2	3.6	3.75		6.2	3.1
.8		5.2	3.8	4		6.1	5.2
1		5.0	3.5	4.25		6.2	5.0
1.25		4.9	3.1	4.5		6.2	4.4
1.5		5.1	1.8	4.75		6.1	4.4
1.75		5.1	3.7	5		5.9	1.7
2		4.8	3.2	5.25		6.4	3.1
2.25		4.5	3.3	5.5		6.3	2.4
2.5		4.5	3.0	5.75		6.4	4.8
2.75		5.0	3.1	6		6.5	4.7
3	1	5.3	5.6	6.25		6.6	5.1

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon B23e fragments at 3.0m

Project: NQAS **Site:** 162 **Observation:** 1

Location: GDA 94 ZONE 55 370988mE 8116636mN Lat: -17.03081 Long: 145.78785

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: tidal flat

Element: channel bench

Classifications:

ASC: SULFURIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .2	Dark greyish brown (10YR42) moist; light clay; angular blocky moderate 2-5mm structure; dry when sampled; clear to
A2	.2 to .5	Greyish brown (10YR52) moist; common 10-20% medium 5-15mm distinct orange mottles; light medium clay; angular blocky moderate 2-5mm structure; dry when sampled
B21	.5 to .8	Grey (5Y51) moist; common 10-20% medium 5-15mm distinct orange mottles; fine sandy light medium clay; massive structure; dry when sampled
B22	.8 to 1.15	Grey (5Y51) moist; common 10-20% medium 5-15mm prominent red mottles, many 20-50% medium 5-15mm distinct orange mottles; medium clay; massive structure; dry when sampled
2B21	1.15 to 1.4	Dark greyish brown (2.5Y42) moist; very few <2% fine <5mm faint yellow jarosite (from pyrite) mottles; medium clay; massive structure; moist when sampled
2C1	1.4 to 1.9	Dark grey (2.5Y41) moist; medium clay; massive structure; common <1mm roots; wet when sampled
3C2	1.9 to 2.2	Light brownish grey (2.5Y62) moist; loamy sand; single grain structure; wet when sampled
3C3	2.2 to 3.7	Dark grey (5Y41) moist; loamy coarse sand; many 20-50% angular quartz medium pebbles 6-20 mm; very few <2% subrounded quartz large pebbles 20-60 mm; single grain structure; wet when sampled; abrupt to
4D1	3.7 to 4.3	Light greenish grey (10Y71) moist; common 10-20% coarse 15-30mm distinct orange mottles; medium clay; massive structure; wet when sampled
4D2	4.3 to 4.8	Dark red (2.5YR36) moist; common 10-20% medium 5-15mm prominent orange mottles; medium clay; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	4.6	2.9
.3	1	4.6	3.1
.6		4.7	3.5
.8		4.8	3.7
1		4.7	3.8
1.25	4	3.6	1.9
1.5	4	4.1	1.9
1.75	4	5.0	1.3
2	4	5.6	1.1
2.25	4	6.0	1.0
2.5	4	6.2	2.0
2.75	4	6.1	1.9
3	4	6.1	1.6
3.25	1	6.1	1.4
3.5	1	6.2	1.4
3.75	1	5.8	1.3
4	1	6.1	4.6
4.25	1	6.2	1.9
4.5		6.1	5.0
4.75		6.0	2.6

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 163 **Observation:** 1

Location: GDA 94 ZONE 55 371187mE 8116466mN Lat: -17.03236 Long: 145.78971

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial fan

Element: drainage depression

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .2	Dark greyish brown (10YR42) moist; common 10-20% medium 5-15mm prominent orange mottles; sandy clay loam; granular moderate 10-20mm structure; dry when sampled; abrupt to
A2	.2 to .5	Dark greyish brown (10YR42) moist; common 10-20% medium 5-15mm prominent orange mottles, common 10-20% medium 5-15mm prominent grey mottles; sandy clay loam; platy strong 5-10mm structure; dry when sampled; sharp to
2A	.5 to .8	Dark greyish brown (10YR42) moist; sandy loam; single grain structure; dry when sampled; sharp to
3B21	.8 to 1	Dark grey (10YR41) moist; common 10-20% medium 5-15mm prominent brown mottles, very few <2% fine <5mm faint yellow jarosite (from pyrite) mottles; medium clay; angular blocky moderate 5-10mm structure; moderately moist when sampled; clear to
3B22	1 to 1.45	Grey (2.5Y61) moist; few 2-10% medium 5-15mm prominent brown mottles; medium clay; angular blocky weak 5-10mm structure; moderately moist when sampled; abrupt to
3B23	1.45 to 1.65	Grey (2.5Y61) moist; sandy light clay; massive structure; wet when sampled; abrupt to
4C1	1.65 to 1.9	Dark grey (2.5Y41) moist; sandy light clay; massive structure; wet when sampled; clear to
4C2	1.9 to 2.7	Dark grey (2.5Y41) moist; loamy sand; single grain structure; wet when sampled; clear to
4C3	2.7 to 3.1	Dark grey (2.5Y41) moist; coarse sand; single grain structure; few >5mm roots; wet when sampled; abrupt to
4C4	3.1 to 3.3	Dark grey (2.5Y41) moist; coarse sand; abundant 50-90% angular quartz medium pebbles 6-20 mm; single grain structure; wet when sampled; sharp to
5D1	3.3 to 4.2	Light greenish grey (10Y71) moist; common 10-20% coarse 15-30mm prominent brown mottles; medium heavy clay; massive structure; moist when sampled; clear to
5D2	4.2 to 4.4	Light greenish grey (10Y71) moist; many 20-50% coarse 15-30mm distinct brown mottles; clayey sand; massive structure; moderately moist when sampled; clear to
5D3	4.4 to 4.6	Light greenish grey (10Y71) moist; many 20-50% coarse 15-30mm prominent brown mottles; medium heavy clay; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	1	4.5	3.2	2.5	4	5.1	1.2
.3	1	4.6	3.6	2.75	4	5.3	1.3
.6	1	4.9	3.6	3	4	5.1	1.0
.8	1	4.7	2.9	3.25	4	5.5	1.6
1		4.4	3.2	3.5	3	5.1	3.2
1.25		4.9	2.9	3.75	3	5.4	3.4
1.5	4	5.8	2.8	4	2	5.7	3.2
1.75	4	5.6	1.3	4.25	2	6.0	3.0
2	4	5.4	1.4	4.5	4	6.0	3.4
2.25	4	5.0	1.3				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 164 **Observation:** 1

Location: GDA 94 ZONE 55 371427mE 8116436mN Lat: -17.03264 Long: 145.79196

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial fan

Element: drainage depression

Classifications:

ASC: Anthropol

Profile Morphology:

Horizon	Depth (m)	Description
M1	0 to .15	Light brownish grey (10YR62) dry; dark greyish brown (10YR42) moist; sandy clay loam; common 10-20% angular consolidated rock (unidentified) medium pebbles 6-20 mm; single grain structure; dry when sampled; clear to
M2	.15 to .4	Light yellowish brown (10YR64) dry; brown (10YR43) moist; sandy clay loam; common 10-20% angular consolidated rock (unidentified) medium pebbles 6-20 mm; single grain structure; dry when sampled; clear to
M3	.4 to .75	Light brown (7.5YR64) dry; brown (10YR43) moist; sandy clay loam; common 10-20% angular consolidated rock (unidentified) medium pebbles 6-20 mm; single grain structure; dry when sampled; sharp to
B2	.75 to 1.2	Dark yellowish brown (10YR44) moist; few 2-10% very coarse >30mm distinct brown mottles; clay loam, fine sandy; angular blocky weak 5-10mm structure; dry when sampled
2B2	1.2 to 1.9	Dark grey (2.5Y41) moist; few 2-10% medium 5-15mm distinct brown mottles; medium clay; angular blocky moderate 2-5mm structure; moist when sampled
3D1	1.9 to 2.15	Greyish brown (10YR52) moist; common 10-20% medium 5-15mm prominent red mottles, common 10-20% coarse 15-30mm prominent brown mottles; light clay; weak structure; moist when sampled
3D2	2.15 to 2.4	Greyish brown (10YR52) moist; common 10-20% medium 5-15mm prominent red mottles, common 10-20% coarse 15-30mm prominent brown mottles; sandy clay loam; few 2-10% angular quartz medium pebbles 6-20 mm; granular weak 2-5mm structure; moderately moist when sampled
3D3	2.4 to 3.6	Greenish grey (10Y61) moist; common 10-20% coarse 15-30mm prominent red mottles, many 20-50% very coarse >30mm prominent brown mottles; medium heavy clay; angular blocky moderate 2-5mm structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	2	5.2	1.9
.3	2	5.8	3.5
.6	1	5.6	3.8
.8	1	4.8	2.9
1	1	4.8	3.7
1.25	1	4.9	3.0
1.5	2	5.2	2.9
1.75	2	5.1	3.4
2		5.1	3.3
2.25		4.9	3.4
2.5		5.0	3.4
2.75		4.9	3.0
3		4.8	3.1
3.25	2	4.9	1.5
3.5	1	5.0	2.8

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 165 **Observation:** 1

Location: GDA 94 ZONE 55 371536mE 8116576mN Lat: -17.03139 Long: 145.79299

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial fan

Element: drainage depression

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .1	Dark greyish brown (10YR42) moist; clay loam, fine sandy; granular weak structure; dry when sampled; abrupt to
A21p	.1 to .4	Dark greyish brown (10YR42) moist; few 2-10% fine <5mm faint brown mottles; clay loam, fine sandy; granular moderate structure; moderately moist when sampled; diffuse to
B21	.4 to 1.1	Light brownish grey (2.5Y62) moist; many 20-50% coarse 15-30mm distinct brown mottles; sandy light clay; weak structure; moderately moist when sampled
B22	1.1 to 2.2	Grey (5Y61) moist; common 10-20% medium 5-15mm faint brown mottles; sandy light medium clay; angular blocky moderate 5-10mm structure; moderately moist when sampled; sharp to
B23	2.2 to 3.15	Grey (5Y61) moist; few 2-10% medium 5-15mm prominent orange mottles; fine sandy light clay; massive structure; moderately moist when sampled
B24	3.15 to 3.4	Grey (N50) moist; clay loam, fine sandy; massive structure; moist when sampled
B25	3.4 to 3.75	Grey (2.5Y51) moist; fine sandy loam; single grain structure; wet when sampled
2C1	3.75 to 4.8	Dark grey (2.5Y41) moist; coarse sand; very few <2% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled
2C2	4.8 to 6	Brown (10YR53) moist; coarse sand; common 10-20% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled
2C3	6 to 6.85	Light brownish grey (10YR62) moist; coarse sand; very few <2% subrounded quartz large pebbles 20-60 mm; common 10-20% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled
3D	6.85 to 7.2	Greenish grey (10Y61) moist; many 20-50% coarse 15-30mm distinct brown mottles; medium clay; massive structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	1	5.2	3.8	3.75	4	5.1	5.3
.3	1	5.1	4.3	4	4	5.2	6.6
.6	1	5.2	3.9	4.25	4	5.3	6.8
.8		5.1	3.8	4.5	4	5.1	6.9
1		5.0	3.5	4.75	4	5.3	6.4
1.25	1	5.3	4.0	5	4	5.5	5.3
1.5	1	5.2	4.4	5.25	4	5.5	5.3
1.75	1	5.2	3.5	5.5	4	5.4	5.2
2		4.9	3.8	5.75	4	5.4	4.5
2.25		5.1	3.3	6	1	5.7	5.4
2.5		4.8	3.5	6.25	2	5.8	5.5
2.75		4.9	4.0	6.5	2	5.5	4.6
3		4.9	4.0	6.75	2	5.4	4.9
3.25		4.9	3.3	7	2	6.1	5.9
3.5		4.8	4.3	7.2	4	6.0	5.4

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon	2C3	some clay lenses
Horizon	3D	sodic? /silty

Project: NQAS **Site:** 166 **Observation:** 1

Location: GDA 94 ZONE 55 366279mE 8136984mN Lat: -16.84665 Long: 145.74483

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: beach ridge plain

Element: beach ridge

Profile Morphology:

Horizon	Depth (m)	Description
A21	0 to .2	Very dark greyish brown (10YR32) moist; loamy sand; single grain structure; dry when sampled; clear to
A22	.2 to .6	Very dark greyish brown (10YR32) moist; sand; single grain structure; dry when sampled; diffuse to
A23	.6 to 1.7	Yellowish brown (10YR56) moist; sand; single grain structure; dry when sampled; diffuse to
A24e	1.7 to 2.7	Pale brown (10YR63) moist; sand; single grain structure; dry when sampled; diffuse to
2B2	2.7 to 3.8	Grey (10YR61) moist; few 2-10% coarse 15-30mm prominent orange mottles; coarse sand; very few <2% subrounded quartz large pebbles 20-60 mm; few 2-10% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled; clear to
3C1	3.8 to 4.8	Grey (5Y51) moist; loamy sand; single grain structure; wet when sampled; clear to
3C2	4.8 to 5.15	Dark grey (5Y41) moist; loamy sand; single grain structure; wet when sampled; sharp to
4C3	5.15 to 5.8	Black (5Y2.5/1) moist; fine sandy light clay; massive structure; wet when sampled; abrupt to
5C4	5.8 to 6.4	Black (5Y2.5/1) moist; coarse sand; single grain structure; wet when sampled; diffuse to
5C5	6.4 to 7.2	Grey (5Y51) moist; coarse sand; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	1	5.8	4.5	3.75		6.3	4.9
.3	1	5.4	4.5	4		6.3	4.5
.6		6.4	5.1	4.25		6.3	3.7
.8		6.5	5.4	4.5		6.1	1.8
1		6.1	5.3	4.75	3	6.3	1.5
1.25		6.7	4.5	5	3	6.1	2.7
1.5		6.8	4.9	5.25	2	6.7	2.1
1.75		6.5	5.2	5.5	2	6.7	2.2
2		5.7	5.3	5.75	2	6.7	2.1
2.25		6.2	5.3	6	2	7.1	1.7
2.5		5.2	5.2	6.25	2	7.5	1.8
2.75		5.0	4.7	6.5	2	7.5	1.6
3		5.9	5.2	6.75	2	7.4	2.2
3.25		6.4	5.3	7	1	7.2	2.2
3.5		6.5	5.1	7.2	1	7.3	2.2

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon 2B2 2.9m = orange iron layer

Project: NQAS **Site:** 167 **Observation:** 1

Location: GDA 94 ZONE 55 366248mE 8136988mN Lat: -16.84661 Long: 145.74454

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: tidal flat

Element: tidal creek

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
C1	0 to .2	Very dark greyish brown (2.5Y32) moist; light clay; massive structure; many >5mm roots; wet when sampled
C2	.2 to .35	Dark grey (10YR41) moist; sandy light clay; massive structure; many >5mm roots; wet when sampled
C3	.35 to 1.25	Dark grey (2.5Y41) moist; fibric clay loam; massive structure; many >5mm roots; wet when sampled
C4	1.25 to 1.6	Dark grey (2.5Y41) moist; light clay; massive structure; common 2-5mm roots; wet when sampled
2C5	1.6 to 1.8	Dark grey (2.5Y41) moist; clayey sand; massive structure; common 2-5mm roots; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	5.4	3.8
.3	1	6.0	1.1
.6		5.8	0.7
.8	4	6.4	1.1
1	4	6.6	1.1
1.25	4	6.5	1.3
1.5	4	6.4	1.1
1.75	4	6.5	1.0

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 168 **Observation:** 1

Location: GDA 94 ZONE 55 366093mE 8136395mN Lat: -16.85196 Long: 145.74305

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: tidal flat

Element: intertidal flat

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .1	Brown (10YR43) moist; clay loam; granular weak structure; wet when sampled; abrupt to
A2	.1 to .2	Dark grey (10YR41) moist; medium clay; massive structure; wet when sampled; clear to
B21	.2 to .6	Very dark grey (10YR31) moist; many 20-50% medium 5-15mm distinct brown mottles; medium heavy clay; massive structure; wet when sampled; gradual to
B22	.6 to .9	Grey (10YR51) moist; few 2-10% coarse 15-30mm distinct brown mottles, many 20-50% coarse 15-30mm prominent yellow jarosite (from pyrite) mottles; light clay; weak structure; wet when sampled; clear to
C1	.9 to 1.7	Grey (5Y51) moist; medium heavy clay; weak structure; wet when sampled; clear to
C2	1.7 to 2.2	Dark grey (N40) moist; light medium clay; weak structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	4.9	3.0
.3		4.8	3.0
.6		4.8	3.8
.8		5.6	4.4
1	1	6.0	5.0
1.25	4	6.2	4.0
1.5	4	6.0	3.8
1.75	4	5.8	1.1
2	4	5.8	1.1
2.2	4	5.8	1.1

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon C1 sand lenses present

Project: NQAS **Site:** 169 **Observation:** 1

Location: GDA 94 ZONE 55 365613mE 8135664mN Lat: -16.85854 Long: 145.7385

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: beach ridge plain

Element: beach ridge

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .1	Dark brown (10YR33) moist; sand; single grain structure; dry when sampled; clear to
A12	.1 to .7	Dark yellowish brown (10YR44) moist; sand; single grain structure; dry when sampled; diffuse to
A21	.7 to 1.15	Brownish yellow (10YR66) moist; sand; single grain structure; dry when sampled; diffuse to
A22e	1.15 to 2.4	Very pale brown (10YR74) moist; coarse sand; few 2-10% subangular quartz small pebbles 2-6 mm; single grain structure; dry when sampled; diffuse to
B2s	2.4 to 3	Brownish yellow (10YR68) moist; coarse sand; wet when sampled; sharp to
3C1	3 to 3.1	Grey (10YR51) moist; very few <2% fine <5mm prominent yellow jarosite (from pyrite) mottles; sand; massive structure; wet when sampled; sharp to
4C2	3.1 to 3.6	Greyish brown (10YR52) moist; sandy clay loam; few 2-10% subangular quartz small pebbles 2-6 mm; single grain structure; wet when sampled; diffuse to
5C3	3.6 to 5.15	Brownish yellow (10YR66) moist; coarse sand; single grain structure; wet when sampled; sharp to
6C4	5.15 to 6.4	Grey (N50) moist; sand; few 2-10% subrounded quartz small pebbles 2-6 mm; very few <2% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled
7C5	6.4 to 6.75	Dark grey (N40) moist; silty medium clay; massive structure; wet when sampled
7C5	6.75 to 7.2	Grey (N50) moist; coarse sand; few 2-10% subrounded quartz small pebbles 2-6 mm; very few <2% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	1	4.9	3.5	3.5		5.2	1.7
.3	1	5.1	4.1	3.75		4.8	4.8
.6		4.9	4.5	4		4.8	4.8
.8		5.5	5.4	4.25		4.6	4.4
1		5.2	5.0	4.5		4.7	4.9
1.25		5.4	3.8	4.75		5.7	4.2
1.5		5.5	3.4	5		5.4	2.1
1.75		5.2	3.9	5.25	4	5.3	1.7
2		5.0	4.3	5.5	4	5.7	1.4
2.25		5.7	5.0	5.75	4	5.7	1.7
2.5		4.9	4.2	6	4	5.8	1.9
2.75		4.7	4.9	6.25	4	6.6	2.1
3		4.1	3.8	6.5	4	7.4	1.8
3.05		4.3	3.3	6.75	4	6.9	1.4
3.25		5.3	2.8	7	4	6.0	1.4
				7.2	4	5.9	2.0

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon	B2s	red mottle layer 2.95-3
Horizon	7C5	6.66-6.68m - organic layer - leaves - 2cm thick

Project: NQAS **Site:** 170 **Observation:** 1

Location: GDA 94 ZONE 55 373221mE 8122230mN Lat: -16.98038 Long: 145.80914

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial fan

Element: tidal flat

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .1	Very dark greyish brown (10YR32) moist; fibric loam; wet when sampled; abrupt to
A12	.1 to .2	Very dark grey (10YR31) moist; fibric clay loam; massive structure; wet when sampled; abrupt to
C1	.2 to .6	Grey (2.5Y51) moist; sandy clay loam; massive structure; wet when sampled; diffuse to
C2	.6 to 1.3	Very dark grey (2.5Y31) moist; sapric coarse sandy clay loam; single grain structure; wet when sampled; diffuse to
C3	1.3 to 2.4	Grey (2.5Y51) moist; clayey sand; single grain structure; wet when sampled
C4	2.4 to 3	Grey (2.5Y51) moist; coarse sandy loam; single grain structure; moist when sampled
C5	3 to 3.4	Grey (2.5Y51) moist; sandy light clay; massive structure; moderately moist when sampled
C6	3.4 to 3.6	Dark grey (2.5Y41) moist; medium heavy clay; massive structure; moderately moist when sampled
2D1	3.6 to 4.1	Greenish grey (5GY51) moist; many 20-50% very coarse >30mm prominent brown mottles; sandy medium clay; massive structure; dry when sampled
2D2	4.1 to 4.4	Greenish grey (5GY51) moist; common 10-20% coarse 15-30mm prominent brown mottles; sandy medium clay; massive structure; dry when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.6	3.3
.2	1	5.3	1.7
.3		5.5	1.7
.6		5.6	2.2
.8	3	5.1	1.2
1		5.3	1.7
1.25		6.0	2.6
1.5		5.0	1.3
1.75		5.8	1.1
2		5.8	1.4
2.25	4	5.7	1.6
2.5	4	5.8	1.9
2.75	4	5.7	1.7
3		5.9	1.6
3.25		6.0	2.8
3.5	2	6.1	4.7
3.75		6.1	5.0
4		6.2	5.3
4.25		6.2	5.2

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon C6 very heavy

Project: NQAS **Site:** 171 **Observation:** 1

Location: GDA 94 ZONE 55 373365mE 8122471mN Lat: -16.97821 Long: 145.81051

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial fan

Element: plain

Classifications:

ASC: OXYAQUIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .4	Dark greyish brown (10YR42) moist; few 2-10% medium 5-15mm faint brown mottles; clay loam, sandy; angular blocky moderate 2-5mm structure; dry when sampled; gradual to
B21	.4 to .8	Light brownish grey (2.5Y62) moist; sandy clay loam; massive structure; dry when sampled; diffuse to
B22	.8 to 1	Brown (10YR53) moist; clayey sand; massive structure; moderately moist when sampled; diffuse to
2C1	1 to 1.6	Brown (10YR53) moist; coarse sand; few 2-10% subrounded quartz small pebbles 2-6 mm; single grain structure; moderately moist when sampled; sharp to
3C2	1.6 to 2	Dark grey (2.5Y41) moist; sandy clay loam; massive structure; moderately moist when sampled; clear to
3C3	2 to 3.3	Greenish grey (10GY61) moist; many 20-50% coarse 15-30mm prominent brown mottles; medium heavy clay; few 2-10% rounded other small pebbles 2-6 mm; massive structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.5	2.2
.3		4.5	2.6
.6		5.2	3.7
.8		5.6	2.8
1		5.6	3.9
1.25		5.5	4.6
1.5		5.3	4.5
1.75	4	5.9	1.6
2		6.6	2.0
2.25		6.5	3.9
2.5	4	6.7	5.7
2.75	4	6.5	6.0
3	4	6.4	5.8
3.25	4	6.4	6.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 172 **Observation:** 1

Location: GDA 94 ZONE 55 373497mE 8122189mN Lat: -16.98077 Long: 145.81173

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial fan

Element: drainage depression

Classifications:

ASC: GREY, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
Ap	0 to .25	Very dark greyish brown (10YR32) moist; few 2-10% medium 5-15mm distinct brown mottles; clay loam, sandy; angular blocky strong 2-5mm structure; dry when sampled; clear to
B2	.25 to .5	Greyish brown (10YR52) moist; few 2-10% medium 5-15mm prominent brown mottles; sandy medium clay; massive structure; dry when sampled; clear to
2B21	.5 to 1.65	Grey (2.5Y61) moist; common 10-20% medium 5-15mm prominent brown mottles; coarse sandy light medium clay; few 2-10% angular quartz small pebbles 2-6 mm; massive structure; dry when sampled; gradual to
2B22	1.65 to 2.2	Yellowish brown (10YR56) moist; common 10-20% coarse 15-30mm distinct grey mottles; sandy clay loam; few 2-10% angular quartz small pebbles 2-6 mm; massive structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	4.8	3.0
.3		5.1	4.4
.6		5.2	4.2
.8		5.2	3.2
1		5.3	4.1
1.25		5.4	4.9
1.5		5.4	4.3
1.75		5.5	3.2
2		5.2	3.8
2.2	2	5.3	5.0

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 173 **Observation:** 1

Location: GDA 94 ZONE 55 373557mE 8121667mN Lat: -16.98549 Long: 145.81227

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: tidal flat

Element: intertidal flat

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
C1	0 to .5	Very dark greyish brown (10YR32) moist; fibric loam; massive structure; wet when sampled; gradual to
C2u	.5 to .9	Very dark greyish brown (10YR32) moist; fibric peat; massive structure; wet when sampled; gradual to
2C3u	.9 to 1.3	Dark grey (10YR41) moist; sandy loam; single grain structure; common <1mm roots; wet when sampled; diffuse to
2C4u	1.3 to 2.1	Dark grey (10YR41) moist; coarse sandy clay loam; single grain structure; common <1mm roots; wet when sampled; sharp to
3D1	2.1 to 2.5	Light greenish grey (5GY81) moist; few 2-10% medium 5-15mm distinct brown mottles; medium heavy clay; massive structure; few 1-2mm roots; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	6.3	2.4
.3	1	6.2	2.2
.6	4	6.4	1.1
.8	4	6.6	1.1
1	4	6.8	1.4
1.25	4	6.9	1.3
1.5	4	6.6	1.2
1.75	4	7.0	1.1
2	4	6.9	1.2
2.25	3	6.8	1.7
2.5	3	6.7	1.6

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 174 **Observation:** 1

Location: GDA 94 ZONE 55 365376mE 8138442mN Lat: -16.83342 Long: 145.73644

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: beach ridge plain **Element:** beach ridge

Permeability: Highly permeable

Drainage: Rapidly drained

Depth to Water: 2.8

Disturbances: Extensive clearing

Classifications:

ASC: TENOSOLIC, OXYAQUIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .15	Very dark grey (10YR31) moist; sand; single grain structure; dry when sampled; diffuse to
A2	.15 to .7	Very dark greyish brown (10YR32) moist; sand; single grain structure; dry when sampled; diffuse to
B21	.7 to 1.3	Dark yellowish brown (10YR44) moist; sand; single grain structure; dry when sampled; diffuse to
B22	1.3 to 2.9	Light yellowish brown (2.5Y64) moist; sand; very few <2% subrounded quartz small pebbles 2-6 mm; single grain structure; dry when sampled; diffuse to
B23	2.9 to 4.1	Light yellowish brown (2.5Y64) moist; coarse sand; few 2-10% subangular quartz small pebbles 2-6 mm; single grain structure; wet when sampled; diffuse to
C1	4.1 to 4.5	Light olive grey (5Y62) moist; loamy sand; single grain structure; wet when sampled; gradual to
C2	4.5 to 5	Greenish grey (10Y61) moist; loamy sand; single grain structure; wet when sampled; gradual to
2C3	5 to 6	Very dark grey (N30) moist; silty loam; very few <2% angular shell medium pebbles 6-20 mm; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	1	6.3	3.9	3.25		4.9	3.7
.3		6.3	4.4	3.5		5.8	4.8
.6		5.7	4.6	3.75		6.2	4.9
.8		6.1	4.6	4		6.4	5.0
1		6.0	5.0	4.25		6.3	5.0
1.25		6.6	5.4	4.5		6.6	5.1
1.5		6.4	5.4	4.75		6.8	5.2
1.75		6.7	5.4	5	1	7.0	2.7
2		6.8	5.3	5.25	1	7.4	6.8
2.25		6.9	5.0	5.5	3	7.8	6.7
2.5		7.0	5.7	5.75	3	8.0	6.3
2.75		6.0	5.1	6	3	8.0	6.4
3		4.9	4.0				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon	A2	Hydrophobic, organic acid
Horizon	2C3	sand lenses present

Project: NQAS **Site:** 175 **Observation:** 1

Location: GDA 94 ZONE 55 365445mE 8138250mN Lat: -16.83516 Long: 145.73708

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: beach ridge plain **Element:** tidal creek

Surface Condition: Soft

Disturbances: No effective disturbance

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Vegetation:

Tallest Stratum: Mid-high closed forest (6.01-12m)

Species: Rhizophora stylosa (spotted mangrove, red mangrove)

Profile Morphology:

Horizon	Depth (m)	Description
C1	0 to .7	Very dark grey (10YR31) moist; fibric loam; massive structure; common >5mm roots; wet when sampled; gradual to
C2w	.7 to 1.55	Very dark grey (2.5Y31) moist; silty light clay; massive structure; common 1-2mm roots; wet when sampled; abrupt to
2C3w	1.55 to 1.6	Dark grey (2.5Y41) moist; sand; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		5.7	3.7
.3		5.9	2.8
.6	3	6.6	0.3
.8	4	6.5	0.5
1	4	6.4	0.5
1.25	4	6.3	0.6
1.5	4	6.3	0.7
1.6	4	6.4	0.6

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon	C1	lots of organic matter
Horizon	2C3w	not enough sample to retain; fell out of auger at depth

Project: NQAS **Site:** 176 **Observation:** 1

Location: GDA 94 ZONE 55 365505mE 8137274mN Lat: -16.84399 Long: 145.73758

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: beach ridge plain

Element: plain

Disturbances: Limited clearing

Classifications:

ASC: TENOSOLIC, OXYAQUIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .2	Very dark grey (10YR31) moist; loamy sand; single grain structure; dry when sampled; clear to
A21	.2 to .4	Greyish brown (10YR52) moist; sand; single grain structure; dry when sampled; diffuse to
A22e	.4 to 1.2	Brownish yellow (10YR68) moist; sand; single grain structure; dry when sampled; clear to
A23e	1.2 to 1.7	Light yellowish brown (2.5Y64) moist; sand; many 20-50% subrounded quartz small pebbles 2-6 mm; single grain structure; dry when sampled; diffuse to
C1	1.7 to 2.3	Grey (5Y51) moist; sand; very few <2% subrounded quartz small pebbles 2-6 mm; single grain structure; dry when sampled; diffuse to
C2	2.3 to 3.8	Greenish grey (10Y61) moist; sand; single grain structure; wet when sampled
C3	3.8 to 4.7	Dark greenish grey (10Y41) moist; sand; single grain structure; wet when sampled
2C4	4.7 to 5.1	Dark greenish grey (10Y31) moist; clayey sand; very few <2% angular shell small pebbles 2-6 mm; single grain structure; wet when sampled
2C5	5.1 to 6	Dark greenish grey (10Y31) moist; silty light clay; very few <2% angular shell small pebbles 2-6 mm; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	1	5.0	1.9	3.25		5.7	2.7
.3		5.8	4.3	3.5	1	5.9	2.7
.6		5.8	4.7	3.75	4	6.0	2.
.8		6.0	4.7	4		6.4	3.2
1		5.6	4.5	4.25	4	6.6	3.5
1.25		5.8	4.0	4.5	1	6.9	3.7
1.5		5.5	4.5	4.75	4	8.0	4.7
1.75		5.3	4.0	5	4	8.6	7.1
2		5.4	4.2	5.25	4	8.3	7.1
2.25		5.4	4.3	5.5	4	8.4	6.9
2.5		5.4	2.6	5.75	4	8.7	6.9
2.75	1	5.5	3.8	6	4	8.7	6.8
3	1	5.6	2.8				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Observation Notes:

Vegetation Acacia, Bloodwood, Pandanus, Melaleucas

Horizon Notes:

Horizon 2C5 sand lenses present

Project: NQAS **Site:** 177 **Observation:** 1

Location: GDA 94 ZONE 55 371920mE 8117715mN Lat: -17.02111 Long: 145.79666

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: beach ridge plain

Element: beach ridge

Classifications:

ASC: REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .4	Dark grey (10YR41) moist; very few <2% fine <5mm distinct brown mottles; medium clay; very few <2% subrounded charcoal small pebbles 2-6 mm; few 2-10% subangular quartz small pebbles 2-6 mm; subangular blocky moderate 5-10mm structure; moderately moist when sampled; clear to
B2	.4 to 1	Grey (10YR51) moist; few 2-10% medium 5-15mm faint brown mottles; medium clay; very few <2% subrounded charcoal small pebbles 2-6 mm; few 2-10% subangular quartz small pebbles 2- 6 mm; weak structure; moist when sampled; clear to
C1	1 to 1.3	Dark grey (2.5Y41) moist; medium clay; few 2-10% subangular quartz small pebbles 2-6 mm; weak structure; wet when sampled; abrupt to
2C2	1.3 to 1.7	Dark grey (2.5Y41) moist; coarse sand; many 20-50% subangular quartz medium pebbles 6-20 mm; few 2-10% subangular quartz small pebbles 2-6 mm; single grain structure; wet when sampled; clear to
2C3	1.7 to 2.6	Light brownish grey (2.5Y62) moist; coarse sand; many 20-50% subangular quartz medium pebbles 6-20 mm; few 2-10% subangular quartz small pebbles 2-6 mm; single grain structure; wet when sampled; abrupt to
3D1	2.6 to 3.7	Bluish grey (10B61) moist; many 20-50% very coarse >30mm prominent orange mottles, common 10-20% very coarse >30mm prominent gley mottles; medium heavy clay; massive structure; wet when sampled; diffuse to
3D2	3.7 to 4.8	Greenish grey (10BG51) moist; many 20-50% very coarse >30mm prominent brown mottles, many 20-50% very coarse >30mm prominent gley mottles, many 20-50% very coarse >30mm prominent orange mottles; medium heavy clay; weak structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.5	3.2
.3		5.0	3.2
.6		4.5	3.7
.8	1	5.0	3.1
1	1	5.1	2.5
1.25		5.3	3.1
1.5		5.8	3.8
1.75		5.7	4.9
2		5.6	4.9
2.25		5.4	4.7
2.5		5.6	4.9
2.75	4	6.2	2.3
3	3	5.6	3.9
3.25	4	6.5	4.8
3.5	4	6.5	5.6
3.75	4	6.5	5.7
4	4	6.8	5.6
4.25	4	7.0	5.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 178 **Observation:** 1

Location: GDA 94 ZONE 55 372000mE 8116533mN Lat: -17.0318 Long: 145.79735

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial fan **Element:** drainage depression

Disturbances: Cultivation - Rainfed

Classifications:

ASC: DERMOSOLIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .2	Dark greyish brown (10YR42) moist; clay loam; subangular blocky strong 2-5mm structure; dry when sampled; clear to
A12	.2 to .55	Dark greyish brown (10YR42) moist; few 2-10% medium 5-15mm faint brown mottles; clay loam; subangular blocky moderate 2-5mm structure; dry when sampled; gradual to
B2	.55 to .9	Brown (10YR53) moist; few 2-10% medium 5-15mm distinct red mottles, common 10-20% medium 5-15mm distinct brown mottles; clay loam; subangular blocky weak 2-5mm structure; dry when sampled; sharp to
2B21	.9 to 1.1	Very dark grey (10YR31) moist; common 10-20% medium 5-15mm distinct red mottles; sandy light clay; subangular blocky moderate 2-5mm structure; moderately moist when sampled; clear to
2B22	1.1 to 1.6	Yellowish brown (10YR56) moist; many 20-50% coarse 15-30mm prominent grey mottles; sandy clay loam; subangular blocky moderate 2-5mm structure; moist when sampled; clear to
2B23	1.6 to 1.9	Grey (N60) moist; many 20-50% coarse 15-30mm prominent orange mottles; clay loam, sandy; massive structure; wet when sampled; clear to
2B24	1.9 to 2.3	Grey (N60) moist; few 2-10% medium 5-15mm distinct brown mottles; clay loam, sandy; massive structure; wet when sampled; sharp to
3C1	2.3 to 2.5	Very dark grey (2.5Y31) moist; sandy loam; single grain structure; wet when sampled; clear to
3C2	2.5 to 3.05	Black (N2.5/0) moist; sandy loam; few 2-10% subangular quartz small pebbles 2-6 mm; single grain structure; wet when sampled
3C3	3.05 to 4.3	Greenish grey (10Y51) moist; sand; few 2-10% subangular quartz small pebbles 2-6 mm; very few <2% subangular quartz medium pebbles 6-20 mm; single grain structure; wet when sampled
3C4	4.3 to 5.7	Light yellowish brown (10YR64) moist; coarse sand; abundant 50-90% subangular quartz small pebbles 2-6 mm; single grain structure; wet when sampled
3C5	5.7 to 6.35	Brownish yellow (10YR68) moist; coarse sand; common 10-20% subangular quartz small pebbles 2-6 mm; single grain structure; wet when sampled
4C6	6.35 to 6.9	Dark greyish brown (2.5Y42) moist; few 2-10% fine <5mm faint brown mottles; silty medium clay; massive structure; wet when sampled
5D1	6.9 to 7.2	Bluish grey (5B61) moist; many 20-50% medium 5-15mm prominent brown mottles; heavy clay; massive structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	3	5.2	4.6
.3	4	5.7	5.0
.6	2	5.3	5.1
.8	2	5.2	4.6
1	2	4.6	3.1
1.25	1	4.3	3.2
1.5	1	4.0	2.8
1.75	1	4.2	3.0
2	1	4.6	2.2
2.25	4	5.7	3.1
2.5	4	5.0	1.8
2.75	4	5.1	1.8
3	4	5.1	1.8
3.25	4	5.2	2.4
3.5	1	5.3	2.4
3.75	4	5.4	2.6

Project: NQAS Site: 178 Observation: 1

Depth	H2O2-	PH-2	PH-3
4	1	5.2	2.7
4.25	1	4.5	3.5
4.5	1	5.0	4.0
4.75	1	5.3	3.4
5	1	5.0	4.0
5.25	1	5.1	5.1
5.5	1	4.9	3.7
5.75	1	5.2	4.5
6	1	5.1	4.9
6.25	2	5.1	2.4
6.5	4	6.6	5.7
6.75	4	6.6	5.1
7	4	6.8	6.5
7.2	4	6.8	6.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon	3C2	sand lenses present, also some organic matter
Horizon	3C4	CKS lens at 5.4-5.6
Horizon	4C6	some organic matter

Project: NQAS **Site:** 179 **Observation:** 1

Location: GDA 94 ZONE 55 365068mE 8136754mN Lat: -16.84866 Long: 145.73345

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial plain **Element:** supratidal flat

Disturbances: No effective disturbance

Classifications:

ASC: SULFIDIC, SUPRATIDAL, Hydrosol

Vegetation:

Tallest Stratum: Mid-high closed forest (6.01-12m)

Species: Avicennia marina (Grey Mangrove)

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .1	Brown (10YR43) moist; very few <2% fine <5mm prominent red mottles; clay loam; granular moderate <2mm structure; moist when sampled; sharp to
B21	.1 to .3	Dark greyish brown (2.5Y43) moist; common 10-20% coarse 15-30mm prominent brown mottles; medium clay; subangular blocky moderate 2-5mm structure; wet when sampled; clear to
B22	.3 to 1.15	Brown (10YR53) moist; many 20-50% coarse 15-30mm prominent orange mottles; medium heavy clay; weak structure; massive structure; wet when sampled; clear to
2C1u	1.15 to 1.7	Very dark grey (2.5Y31) moist; medium clay; massive structure; wet when sampled; sharp to
3C2u	1.7 to 1.8	Very dark grey (10YR31) moist; sand; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	4.5	2.8
.3		4.4	3.0
.6	1	5.7	4.0
.8	1	6.2	4.7
1	1	6.6	5.3
1.25	3	6.7	1.6
1.5	4	6.7	1.6
1.65	4	6.6	2.2
1.75	4	6.6	1.5

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 180 **Observation:** 1

Location: GDA 94 ZONE 55 365225mE 8138066mN Lat: -16.83681 Long: 145.735

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: beach ridge plain **Element:** tidal creek

Disturbances: No effective disturbance

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Vegetation:

Tallest Stratum: Mid-high closed forest (6.01-12m)

Species: Rhizophora species

Profile Morphology:

Horizon	Depth (m)	Description
A2	0 to .2	Pale brown (10YR63) moist; sand; single grain structure; moderately moist when sampled; sharp to
C1	.2 to .85	Brown (10YR43) moist; clay loam, sandy; very few <2% subangular quartz small pebbles 2-6 mm; massive structure; common 1-2mm roots; moist when sampled; gradual to
C2	.85 to 1.1	Greyish brown (10YR52) moist; loamy sand; very few <2% subangular quartz small pebbles 2-6 mm; single grain structure; wet when sampled; clear to
C3	1.1 to 2	Greenish grey (10Y51) moist; sand; few 2-10% subangular quartz small pebbles 2-6 mm; very few <2% subangular quartz small pebbles 2-6 mm; single grain structure; wet when sampled; sharp to
2C4	2 to 2.15	Dark greenish grey (5GY41) moist; silty clay loam; massive structure; few <1mm roots; wet when sampled; sharp to
3C5	2.15 to 3.2	Greenish grey (10Y61) moist; sand; few 2-10% subangular quartz small pebbles 2-6 mm; few 2- 10% subangular quartz medium pebbles 6-20 mm; single grain structure; wet when sampled; sharp to
4C6	3.2 to 3.95	Greenish grey (10Y51) moist; silty clay loam; massive structure; wet when sampled; clear to
4C7	3.95 to 4.1	Greenish grey (10Y51) moist; light clay; fine sandy; very few <2% subangular quartz medium pebbles 6-20 mm; massive structure; wet when sampled; clear to
5C8	4.1 to 4.8	Grey (N50) moist; sand; many 20-50% subangular quartz small pebbles 2-6 mm; very few <2% subangular quartz medium pebbles 6-20 mm; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1		6.1	4.2	2.5	4	6.9	1.7
.3		6.0	3.1	2.75	4	7.2	1.4
.6		6.0	4.1	3	4	7.0	1.4
.8	4	5.7	1.0	3.25	4	6.9	1.5
1	4	6.2	1.2	3.5	4	6.8	1.6
1.25	4	6.2	1.3	3.75	4	6.9	1.6
1.5	4	6.3	1.5	4	4	6.9	1.6
1.75	4	6.5	1.5	4.25	4	7.0	1.8
2	4	6.7	1.4	4.5	4	7.2	1.7
2.1	4	6.6	1.3	4.75	4	7.4	1.8
2.25	4	6.6	1.5				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon C1 organic matter present

Project: NQAS **Site:** 181 **Observation:** 1

Location: GDA 94 ZONE 55 364869mE 8137844mN Lat: -16.8388 Long: 145.73165

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Limited clearing

Classifications:

ASC: REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .2	Very dark grey (10YR31) moist; sandy loam; few 2-10% subangular quartz small pebbles 2-6 mm; granular moderate 2-5mm structure; dry when sampled; abrupt to
B2	.2 to 1.1	Pale yellow (2.5Y73) moist; many 20-50% medium 5-15mm distinct orange mottles; medium heavy clay; few 2-10% subangular quartz small pebbles 2-6 mm; subangular blocky weak 5- 10mm structure; common <1mm roots; moderately moist when sampled; clear to
2C1	1.1 to 1.55	Grey (2.5Y61) moist; sand; common 10-20% subangular quartz small pebbles 2-6 mm; very few <2% subangular quartz medium pebbles 6-20 mm; single grain structure; common <1mm roots; wet when sampled; gradual to
2C2	1.55 to 3.05	Dark grey (N40) moist; sand; single grain structure; wet when sampled; clear to
2C3	3.05 to 5.2	Grey (N50) moist; sand; single grain structure; wet when sampled; clear to
2C4	5.2 to 5.9	Bluish grey (5B51) moist; sand; very few <2% angular quartz small pebbles 2-6 mm; single grain structure; wet when sampled; abrupt to
3C5	5.9 to 6	Dark greenish grey (10Y41) moist; silty medium clay; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1		6.0	3.7	3.25	4	6.4	1.1
.3		5.6	4.1	3.5	4	6.6	1.6
.6		5.6	3.7	3.75	4	6.6	1.5
.8		5.6	4.0	4	4	6.5	1.6
1		5.5	3.9	4.25	4	6.5	1.5
1.25		6.1	3.6	4.5	4	6.6	1.6
1.5		6.2	2.7	4.75	4	6.8	1.5
1.75	4	6.1	1.6	5	4	6.9	1.4
2	4	6.4	1.4	5.25	4	6.4	1.2
2.25	4	6.5	1.2	5.5	4	6.4	1.1
2.5	4	6.1	1.6	5.75	4	6.6	1.1
2.75	4	6.0	1.6	6	4	7.2	1.3
3	4	6.3	1.7				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Observation Notes:

Vegetation Melalauca and Pandanus

Horizon Notes:

Horizon 2C2 Clay lenses at 2.9-3.0

Horizon 2C3 clay lenses at 5.2-5.3

Project: NQAS **Site:** 182 **Observation:** 1

Location: GDA 94 ZONE 55 364803mE 8137810mN Lat: -16.8391 Long: 145.73103

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial plain **Element:** tidal creek

Surface Condition: Surface crust

Disturbances: No effective disturbance

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Vegetation:

Tallest Stratum: Mid-high closed forest (6.01-12m)

Species: Bruguiera species; Rhizophora species

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .15	Dark greyish brown (10YR42) moist; clay loam, coarse sandy; common 10-20% subangular quartz small pebbles 2-6 mm; massive structure; common 1-2mm roots; wet when sampled; gradual to
B2	.15 to .7	Brown (10YR53) moist; common 10-20% coarse 15-30mm distinct brown mottles; coarse sandy light clay; many 20-50% subangular quartz small pebbles 2-6 mm; massive structure; common 1- 2mm roots; wet when sampled; gradual to
C1	.7 to 1.2	Dark grey (2.5Y41) moist; coarse sandy light clay; very few <2% subrounded quartz large pebbles 20-60 mm; many 20-50% subangular quartz small pebbles 2-6 mm; massive structure; common 1-2mm roots; wet when sampled; gradual to
2C2	1.2 to 1.4	Dark grey (2.5Y41) moist; coarse sand; many 20-50% subangular quartz small pebbles 2-6 mm; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	6.3	4.3
.3		6.4	4.8
.6		6.6	4.7
.8	4	6.6	1.5
1	4	6.8	1.4
1.25	4	6.6	1.3
1.4	4	6.3	1.6

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 183 **Observation:** 1

Location: GDA 94 ZONE 55 366294mE 8127719mN Lat: -16.93038 Long: 145.74442

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: chenier plain **Element:** plain

Disturbances: Highly disturbed e.g. mining, urban

Classifications:

ASC: OXYAQUIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
M	0 to .2	Grey (5Y61) moist; common 10-20% medium 5-15mm prominent brown mottles; medium heavy clay; massive structure; dry when sampled; sharp to
A1	.2 to .8	Very dark grey (10YR31) moist; sandy clay loam; granular strong <2mm structure; dry when sampled; clear to
B21	.8 to 1.1	Dark grey (10YR41) moist; sandy clay loam; massive structure; dry when sampled; gradual to
B22	1.1 to 1.45	Grey (2.5Y51) moist; sandy clay loam; common 10-20% subangular quartz small pebbles 2-6 mm; single grain structure; moderately moist when sampled; clear to
B23	1.45 to 1.6	Grey (2.5Y51) moist; common 10-20% medium 5-15mm prominent brown mottles; sandy clay loam; common 10-20% subangular quartz small pebbles 2-6 mm; massive structure; moist when sampled; sharp to
2B24	1.6 to 2.1	Grey (5Y51) moist; very few <2% medium 5-15mm faint brown mottles; silty medium clay; wet when sampled; sharp to
2B25	2.1 to 2.2	Very dark grey (5Y31) moist; silty medium clay; massive structure; many <1mm roots; wet when sampled; sharp to
3C1	2.2 to 2.4	Dark grey (N40) moist; many 20-50% very coarse >30mm prominent brown mottles; sandy clay loam; very few <2% angular shell very weak small pebbles 2-6 mm; massive structure; wet when sampled; clear to
4C2	2.4 to 2.8	Very dark greyish brown (10YR32) moist; sapric medium clay; massive structure; wet when sampled; diffuse to
5C3	2.8 to 3.75	Very dark greyish brown (10YR32) moist; sapric light clay; massive structure; abundant <1mm roots; wet when sampled; diffuse to
6D1	3.75 to 4.35	Bluish grey (5B61) moist; many 20-50% fine <5mm distinct brown mottles; medium heavy clay; massive structure; many 20-50% medium 2-6mm earthy concretions; moist when sampled; diffuse to
6D2	4.35 to 4.8	Bluish grey (5B61) moist; many 20-50% coarse 15-30mm prominent red mottles, many 20-50% very coarse >30mm prominent brown mottles; medium heavy clay; massive structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	4	6.4	5.8	2.25	4	6.8	5.7
.3	1	6.4	3.9	2.5	4	6.2	1.8
.6	1	5.7	2.2	2.75	4	6.7	1.5
.8	1	5.3	3.3	3	4	7.1	1.6
1	1	5.4	3.4	3.25	4	7.1	1.6
1.25		5.6	3.4	3.5	4	7.5	1.8
1.5	1	6.5	4.7	3.75	4	7.5	1.8
1.75	1	7.1	5.9	4	4	7.5	3.8
1.95	1	7.1	5.9	4.25	4	7.6	3.6
2	1	7.1	4.6	4.5	1	7.8	5.2
2.15	1	7.0	2.3	4.75	2	8.5	6.8

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon	2B24	Sand lens at 2.0-2.1m.
Horizon	2B24	Sodic
Horizon	2B25	roots in layers
Horizon	4C2	colour darkens through horizon
Horizon	6D1	roots and channels, dark staining

Project: NQAS **Site:** 184 **Observation:** 1

Location: GDA 94 ZONE 55 367254mE 8129064mN Lat: -16.91828 Long: 145.75351

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: chenier plain

Element: swale

Classifications:

ASC: REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .5	Black (10YR21) moist; few 2-10% medium 5-15mm distinct brown mottles; sapric medium clay; subangular blocky moderate 5-10mm structure; moderately moist when sampled
B21	.5 to 1	Grey (5Y51) moist; common 10-20% medium 5-15mm prominent brown mottles; medium clay; very few <2% quartz small pebbles 2-6 mm; massive structure; moist when sampled
B22	1 to 1.35	Grey (5Y51) moist; many 20-50% very coarse >30mm prominent brown mottles; medium clay; massive structure; wet when sampled
C1	1.35 to 1.85	Dark greenish grey (10Y41) moist; few 2-10% medium 5-15mm faint brown mottles; medium clay; very few <2% angular shell small pebbles 2-6 mm; very few <2% angular shell medium pebbles 6-20 mm; massive structure; wet when sampled
C2	1.85 to 2.6	Dark greenish grey (10Y41) moist; medium clay; very few <2% angular shell small pebbles 2-6 mm; very few <2% angular shell medium pebbles 6-20 mm; massive structure; wet when sampled
2D1	2.6 to 3.1	Olive brown (2.5Y44) moist; many 20-50% coarse 15-30mm prominent grey mottles, many 20- 50% coarse 15-30mm prominent brown mottles; medium heavy clay; massive structure; wet when sampled
2D2	3.1 to 3.6	Bluish grey (5B61) moist; many 20-50% very coarse >30mm prominent brown mottles, many 20- 50% very coarse >30mm prominent red mottles; medium heavy clay; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		6.1	3.3
.3	4	6.9	6.7
.6	4	7.8	7.7
.8	4	7.6	7.6
1	4	7.6	6.6
1.25	4	7.4	5.7
1.5	4	7.4	7.0
1.75	4	7.3	6.7
2	4	7.3	6.6
2.25	4	7.6	6.7
2.5	4	7.5	2.6
2.75	4	7.3	3.6
3		7.2	6.8
3.25		7.3	6.8
3.5		7.3	7.2

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Observation Notes:

Vegetation Melaleuca, Pandanus

Horizon Notes:

Horizon B22 Sandy lenses present

Project: NQAS **Site:** 185 **Observation:** 1

Location: GDA 94 ZONE 55 367505mE 8128999mN Lat: -16.91889 Long: 145.75586

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: chenier plain **Element:** supratidal flat

Disturbances: Highly disturbed e.g. mining, urban

Classifications:

ASC: REDOXIC, Hydrosol

Vegetation:

Tallest Stratum: Mid-high closed forest (6.01-12m)

Species: *Avicennia marina* (Grey Mangrove); *Bruguiera* species

Profile Morphology:

Horizon	Depth (m)	Description
O	0 to .1	Black (10YR21) moist; loam; granular strong structure; moist when sampled; clear to
B21	.1 to .6	Very dark grey (2.5Y31) moist; few 2-10% medium 5-15mm faint brown mottles; medium clay; massive structure; moist when sampled; abrupt to
B22	.6 to 1.05	Grey (2.5Y61) moist; common 10-20% coarse 15-30mm distinct brown mottles; medium clay; massive structure; wet when sampled; diffuse to
2B23	1.05 to 1.5	Grey (2.5Y61) moist; many 20-50% very coarse >30mm prominent brown mottles; medium clay; common 10-20% angular shell small pebbles 2-6 mm; few 2-10% angular shell medium pebbles 6-20 mm; massive structure; wet when sampled; diffuse to
2C1	1.5 to 2.5	Grey (2.5Y51) moist; medium clay; few 2-10% angular shell small pebbles 2-6 mm; very few <2% angular shell small pebbles 2-6 mm; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		6.1	4.6
.3		6.2	4.4
.6		6.7	5.6
.8		6.6	5.3
1	1	7.0	6.2
1.25		7.8	6.2
1.5	2	7.5	6.8
1.75	2	7.5	6.7
2	2	7.3	6.3
2.25	2	7.4	6.2
2.5	3	7.6	7.0

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 186 **Observation:** 1

Location: GDA 94 ZONE 55 365646mE 8127537mN Lat: -16.93199 Long: 145.73832

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: plain

Element: drainage depression

Classifications:

ASC: GREY, Dermosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .15	Reddish brown (5YR44) moist; clay loam; subangular blocky strong 2-5mm structure; dry when sampled; clear to
A2	.15 to .3	Brown (10YR53) moist; fine sandy clay loam; polyhedral strong 2-5mm structure; dry when sampled; abrupt to
B21	.3 to .8	Greenish grey (10Y61) moist; few 2-10% medium 5-15mm prominent orange mottles; fine sandy light clay; platy moderate 5-10mm structure; dry when sampled; clear to
B22	.8 to 1.75	Grey (5Y51) moist; common 10-20% medium 5-15mm prominent orange mottles; fine sandy medium clay; massive structure; dry when sampled; diffuse to
B23	1.75 to 2.3	Grey (5Y61) moist; many 20-50% coarse 15-30mm prominent brown mottles; fine sandy clay loam; very few <2% subrounded quartz medium pebbles 6-20 mm; massive structure; dry when sampled; diffuse to
D1	2.3 to 3.1	Brownish yellow (10YR68) moist; few 2-10% coarse 15-30mm distinct grey mottles, many 20- 50% coarse 15-30mm prominent red mottles; medium heavy clay; massive structure; dry when sampled; diffuse to
D2	3.1 to 4.4	Light grey (N70) moist; many 20-50% very coarse >30mm prominent red mottles, few 2-10% coarse 15-30mm distinct brown mottles; heavy clay; massive structure; dry when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	6.4	3.1
.3	1	4.8	2.9
.6		4.8	2.9
.8		4.9	3.3
1		4.8	3.3
1.25		5.0	3.5
1.5		5.0	3.6
1.75		5.7	3.5
2		5.3	3.5
2.25		5.5	3.4
2.5		5.6	3.6
2.75		5.6	3.7
3		5.1	4.3
3.25		5.2	4.7
3.5		5.5	4.4
3.75		5.6	4.7
4		6.0	4.2
4.25		6.0	4.1

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Observation Notes:

Observation Some expansion of material

Horizon Notes:

Horizon B21 mottles are root channels
Horizon B22 mottles are root channels

Project: NQAS **Site:** 187 **Observation:** 1

Location: GDA 94 ZONE 55 365495mE 8129848mN Lat: -16.9111 Long: 145.73704

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial plain

Element: swamp

Classifications:

ASC: DERMOSOLIC, EXTRATIDAL, Hydrosol

Vegetation:

Tallest Stratum: Mid-high open forest (6.01-12m)

Species: Melaleuca quinquenervia (swamp paperbark, paper-barked tea-tree, broad-leaved tea-tree)

Lower Stratum: Very tall closed tussock grassland (1.01-3m)

Species: Phragmites australis (common reed, feather grass)

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .1	Dark grey (10YR41) moist; light clay; granular moderate 2-5mm structure; dry when sampled; clear to
B2ia	.1 to .7	Dark grey (10YR41) moist; few 2-10% fine <5mm distinct yellow jarosite (from pyrite) mottles; light clay; massive structure; dry when sampled; gradual to
2B2	.7 to 1.2	Dark grey (10YR41) moist; few 2-10% medium 5-15mm distinct brown mottles; clay loam, fine sandy; platy moderate 2-5mm structure; dry when sampled; diffuse to
3D1	1.2 to 1.6	Grey (2.5Y61) moist; many 20-50% coarse 15-30mm prominent orange mottles, many 20-50% very coarse >30mm prominent red mottles; light medium clay; massive structure; dry when sampled; diffuse to
3D2	1.6 to 2.4	Light grey (N70) moist; many 20-50% very coarse >30mm prominent orange mottles, few 2-10% medium 5-15mm prominent red mottles; medium clay; single grain structure; dry when sampled; gradual to
4D3	2.4 to 3.15	White (N80) moist; few 2-10% medium 5-15mm prominent orange mottles, few 2-10% medium 5-15mm prominent red mottles; sandy loam; single grain structure; dry when sampled; sharp to
5D3	3.15 to 4.1	Light greenish grey (10Y71) moist; few 2-10% medium 5-15mm distinct brown mottles, common 10-20% medium 5-15mm prominent red mottles; medium heavy clay; massive structure; dry when sampled; diffuse to
5D4	4.1 to 4.3	Grey (N60) moist; medium heavy clay; massive structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	4.8	2.0
.3	1	4.8	2.0
.6		4.8	2.3
.8		4.8	2.9
1		4.8	2.7
1.25		4.8	2.9
1.5	1	4.4	2.9
1.75		4.7	3.2
2	1	4.7	3.0
2.25		4.9	3.2
2.5		5.0	3.4
2.75		4.5	3.3
3		4.4	3.2
3.25	1	4.9	3.4
3.5	1	4.9	3.0
3.75	3	5.6	3.9
4	2	5.5	3.9
4.25	1	5.7	3.7

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 188 **Observation:** 1

Location: GDA 94 ZONE 55 369552mE 8128054mN Lat: -16.92754 Long: 145.77503

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: chenier plain **Element:** fill-top

Disturbances: Highly disturbed e.g. mining, urban

Classifications:

ASC: SPOLIC, Anthropol

ASC: SULFIDIC, OXYAQUIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
M	0 to 1.1	Yellowish red (5YR58) moist; clay loam; many 20-50% angular shale small pebbles 2-6 mm; very few <2% granite large pebbles 20-60 mm; massive structure; dry when sampled; clear to
B21	1.1 to 1.35	Yellowish brown (10YR56) moist; coarse sand; single grain structure; moist when sampled; clear to
B22	1.35 to 1.6	Olive brown (2.5Y44) moist; many 20-50% very coarse >30mm distinct gley mottles; clayey sand; single grain structure; wet when sampled; clear to
2P1	1.6 to 2	Very dark grey (2.5Y31) moist; fibric peat; single grain structure; wet when sampled; sharp to
3C1	2 to 2.4	Dark grey (2.5Y41) moist; coarse sand; common 10-20% angular shell small pebbles 2-6 mm; few 2-10% angular shell medium pebbles 6-20 mm; single grain structure; very few <2% fine <2mm organic (humified) weak laminae; wet when sampled; diffuse to
4C2	2.4 to 3.1	Dark greenish grey (10Y31) moist; silty light clay; few 2-10% angular shell small pebbles 2-6 mm; massive structure; wet when sampled; gradual to
4C3	3.1 to 3.7	Dark greenish grey (10Y31) moist; sandy clay loam; common 10-20% angular shell medium pebbles 6-20 mm; few 2-10% angular shell small pebbles 2-6 mm; very few <2% angular shell large pebbles 20-60 mm; massive structure; wet when sampled; diffuse to
4C4	3.7 to 4.8	Dark greenish grey (10Y31) moist; silty light clay; very few <2% angular shell small pebbles 2-6 mm; very few <2% angular shell large pebbles 20-60 mm; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	3	7.4	5.4	2.5	3	8.2	4.7
.3	3	7.6	7.9	2.75	3	8.6	6.0
.6	3	7.2	7.3	3	3	8.7	6.5
.8		6.4	7.0	3.25	3	8.6	6.5
1		6.9	5.4	3.5	3	8.5	6.3
1.25		7.0	5.2	3.75	3	8.4	5.8
1.5		7.4	5.8	4	3	8.3	5.6
1.75	3	5.3	1.2	4.25	3	8.9	6.8
2		7.5	1.5	4.5	3	8.9	6.9
2.25		8.1	5.3	4.75	3	8.7	6.9

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Observation Notes:

Observation Fill to 1.1m

Vegetation Xylocarpus moluccensis seed and fruit at 1.9m

Horizon Notes:

Horizon	B22	mottles in lenses
Horizon	2P1	Xylocarpus seed and fruit observed
Horizon	3C1	seg is organic lens at 2.2m
Horizon	4C2	shell lens at 2.65m in addition to other CFs

Project: NQAS **Site:** 189 **Observation:** 1

Location: GDA 94 ZONE 55 366047mE 8129105mN Lat: -16.91784 Long: 145.74218

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial plain

Element: plain

Classifications:

ASC: REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .25	Very dark grey (10YR31) moist; sapric clay loam; granular strong structure; dry when sampled; sharp to
B21	.25 to .55	Dark grey (2.5Y41) moist; few 2-10% medium 5-15mm distinct brown mottles; clay loam; weak structure; dry when sampled; clear to
B22	.55 to .7	Grey (2.5Y51) moist; few 2-10% medium 5-15mm distinct brown mottles; coarse sandy clay loam; very few <2% subangular quartz small pebbles 2-6 mm; massive structure; moderately moist when sampled; sharp to
B23	.7 to 1.1	Light greenish grey (5GY71) moist; very few <2% medium 5-15mm distinct brown mottles, many 20-50% very coarse >30mm prominent brown mottles; light clay; many 20-50% subangular quartz small pebbles 2-6 mm; weak structure; moist when sampled; sharp to
2B24	1.1 to 1.5	Light grey (2.5Y72) moist; coarse sand; very few <2% subangular quartz small pebbles 2-6 mm; massive structure; wet when sampled; sharp to
3B25	1.5 to 1.65	Grey (5Y61) moist; common 10-20% medium 5-15mm distinct orange mottles; medium clay; sandy; massive structure; wet when sampled; clear to
3B26	1.65 to 1.85	Light grey (5Y72) moist; sand; very few <2% subrounded chert medium pebbles 6-20 mm; single grain structure; wet when sampled; sharp to
4C1	1.85 to 2.35	Very dark greyish brown (10YR32) moist; light medium clay; massive structure; wet when sampled; sharp to
4C2	2.35 to 2.7	Very dark grey (10YR31) moist; fibric light clay; massive structure; wet when sampled; diffuse to
4C3	2.7 to 3.1	Dark grey (2.5Y41) moist; medium clay; massive structure; wet when sampled; diffuse to
5D1	3.1 to 3.4	Greenish grey (5BG61) moist; few 2-10% medium 5-15mm faint brown mottles; medium clay; massive structure; wet when sampled; diffuse to
5D2	3.4 to 3.6	Greenish grey (5BG61) moist; many 20-50% medium 5-15mm distinct brown mottles; medium heavy clay; massive structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	4.9	2.6
.3	1	4.1	2.8
.6	1	4.0	2.2
.8	1	3.9	2.3
1	4	4.0	2.8
1.25	1	5.1	2.8
1.5	1	5.3	2.9
1.75	3	5.9	3.2
2	4	6.1	1.3
2.25	4	5.4	1.2
2.5	4	6.4	1.2
2.75	4	6.6	1.2
3	4	6.9	1.5
3.25	4	7.1	2.1
3.5	4	6.5	3.2

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon	3B25	clay and sand layers
Horizon	3B26	green clay lens present

Project: NQAS **Site:** 190 **Observation:** 1

Location: GDA 94 ZONE 55 366684mE 8128393mN Lat: -16.92432 Long: 145.74812

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: chenier plain **Element:** beach ridge

Surface Condition: No record

Disturbances: Highly disturbed e.g. mining, urban, Extensive clearing

Classifications:

ASC: STRATIC, Rudosol

ASC: Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .15	Very dark brown (10YR22) moist; sand; single grain structure; dry when sampled; gradual to
A21	.15 to .65	Dark yellowish brown (10YR44) moist; sand; single grain structure; dry when sampled; diffuse to
A22	.65 to .85	Light brownish grey (2.5Y63) moist; sand; single grain structure; dry when sampled; sharp to
B2	.85 to 1.15	Grey (5Y51) moist; common 10-20% medium 5-15mm prominent brown mottles; light clay; weak structure; moderately moist when sampled; sharp to
2C1	1.15 to 2.2	Grey (2.5Y61) moist; coarse sand; common 10-20% subrounded shell small pebbles 2-6 mm; single grain structure; wet when sampled; clear to
2C2	2.2 to 2.8	Grey (2.5Y51) moist; sand; few 2-10% subrounded shell small pebbles 2-6 mm; single grain structure; wet when sampled; sharp to
3C3	2.8 to 3.4	Very dark grey (N30) moist; fine sandy light medium clay; common 10-20% angular shell medium pebbles 6-20 mm; massive structure; wet when sampled; abrupt to
3C4	3.4 to 5.2	Dark greenish grey (10Y31) moist; sapric light medium clay; very few <2% angular shell small pebbles 2-6 mm; many 20-50% other cobbles 60-200 mm; wet when sampled
4C5	5.2 to 6	Greenish grey (10GY51) moist; very few <2% fine <5mm faint brown mottles; medium heavy clay; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	1	5.6	2.5	3.25	4	9.2	7.3
.3	1	5.9	3.0	3.5	4	9.1	4.2
.6	1	5.9	3.0	3.75	4	8.6	2.4
.8	1	6.0	2.6	4	4	9.4	3.6
1	1	4.8	3.0	4.25	4	8.9	3.2
1.25	1	5.7	4.5	4.5	4	8.7	4.5
1.5	1	6.1	4.9	4.75	4	8.7	1.8
1.75	1	4.2	4.8	5	4	8.9	4.8
2	1	6.1	2.4	5.25	4	8.8	
2.25	1	6.6	2.5	5.5	4	8.8	2.2
2.5	1	7.5	2.0	5.75	4	8.6	5.0
2.75	1	8.5	2.0	6	4	5.7	5.9
3	4	8.7	6.8				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Observation Notes:

Vegetation Melaleuca 8m

Horizon Notes:

Horizon A1 hydrophobic
Horizon 3C4 CFs: Shells in lens at 4.9-5.0m, OT = organics
Horizon 4C5 Mottle at 5.9m

Project: NQAS **Site:** 191 **Observation:** 1

Location: GDA 94 ZONE 55 365951mE 8129958mN Lat: -16.91013 Long: 145.74133

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: chenier plain **Element:** swale

Disturbances: Highly disturbed e.g. mining, urban

Classifications:

ASC: SULFIDIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A	0 to .2	Black (10YR21) moist; sapric clay loam; subangular blocky strong <2mm structure; dry when sampled
B21	.2 to .35	Dark grey (10YR41) moist; few 2-10% medium 5-15mm distinct brown mottles; medium heavy clay; subangular blocky weak 5-10mm structure; moderately moist when sampled
B22	.35 to .75	Light greenish grey (5GY71) moist; many 20-50% very coarse >30mm prominent orange mottles; medium clay; massive structure; moist when sampled
C1	.75 to 1	Grey (2.5Y51) moist; common 10-20% medium 5-15mm prominent brown mottles; medium clay; massive structure; common 1-2mm roots; moist when sampled
2C2	1 to 1.4	Very dark brown (10YR22) moist; sapric medium clay; massive structure; wet when sampled
3C3	1.4 to 1.6	Grey (2.5Y61) moist; medium clay; wet when sampled
3D1	1.6 to 1.8	Grey (N50) moist; medium clay; wet when sampled; diffuse to
4D2	1.8 to 2.4	Bluish grey (5B61) moist; common 10-20% medium 5-15mm prominent brown mottles, common 10-20% medium 5-15mm prominent red mottles; medium heavy clay; massive structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	3.9	2.7
.3	1	3.7	2.4
.6	1	3.4	2.2
.8	1	3.3	1.8
1	1	3.5	1.6
1.25	4	3.4	1.3
1.5	4	3.6	1.3
1.75	4	3.6	1.2
2	4	5.2	2.6
2.25	4	5.3	2.9

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon 4D2 oxidises white. Mottles colours are a mixture from 2.5Y82 to 2.5Y64.

Project: NQAS **Site:** 192 **Observation:** 1

Location: GDA 94 ZONE 55 370695mE 8117617mN Lat: -17.02193 Long: 145.78515

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: tidal flat

Element: intertidal flat

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .1	Very dark greyish brown (10YR32) moist; clay loam; angular blocky moderate 2-5mm structure; moderately moist when sampled; abrupt to
A12	.1 to .4	Very dark greyish brown (10YR32) moist; clay loam; moist when sampled; abrupt to
B2	.4 to .8	Dark grey (2.5Y41) moist; medium clay; massive structure; common <1mm roots; moist when sampled; clear to
C1	.8 to 2.3	Very dark greyish brown (10YR32) moist; sapric light clay; massive structure; wet when sampled; clear to
C2	2.3 to 4.3	Very dark grey (2.5Y31) moist; silty light medium clay; massive structure; wet when sampled
2D1	4.3 to 4.5	Very dark grey (2.5Y31) moist; common 10-20% medium 5-15mm prominent brown mottles; coarse sandy light clay; massive structure; wet when sampled; abrupt to
2D2	4.5 to 5.6	Greenish grey (5GY51) moist; common 10-20% coarse 15-30mm prominent brown mottles, few 2-10% coarse 15-30mm prominent red mottles, few 2-10% coarse 15-30mm prominent orange mottles; medium heavy clay; massive structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		4.7	2.3
.3		5.1	2.9
.6		6.1	3.2
.8		6.4	2.2
1		6.7	1.1
1.25	4	6.5	1.3
1.5	4	6.7	1.3
1.75	4	6.7	1.2
2	4	6.7	1.4
2.25	4	6.8	1.3
2.5	4	6.6	1.5
2.75	4	6.8	1.6
3	4	6.9	1.5
3.25	4	6.9	1.5
3.5	4	6.6	1.6
3.75	4	7.0	1.5
4	4	6.6	1.5
4.25	4	6.9	1.6
4.5	4	7.0	1.5
4.75	4	7.2	7.9
5	4	7.4	8.4
5.25	4	7.9	8.6
5.5		7.3	7.9

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 193 **Observation:** 1

Location: GDA 94 ZONE 55 370546mE 8119189mN Lat: -17.00772 Long: 145.78384

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial fan

Element: plain

Classifications:

ASC: EXTRATIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
Ap	0 to .1	Brown (10YR43) moist; clay loam; dry when sampled; clear to
A1	.1 to .5	Brown (10YR43) moist; light clay; subangular blocky weak 5-10mm structure; dry when sampled; gradual to
B21	.5 to 1	Light yellowish brown (2.5Y64) moist; common 10-20% medium 5-15mm distinct brown mottles; medium clay; subangular blocky weak 5-10mm structure; dry when sampled; diffuse to
B22	1 to 2	Medium Clay; moderately moist when sampled; diffuse to
B23	2 to 2.4	Bluish grey (5B51) moist; many 20-50% very coarse >30mm prominent brown mottles; medium clay; massive structure; moderately moist when sampled; diffuse to
2B24	2.4 to 3.2	Bluish grey (5B51) moist; many 20-50% very coarse >30mm prominent brown mottles, few 2- 10% medium 5-15mm distinct red mottles, common 10-20% medium 5-15mm prominent dark mottles; sandy medium clay; massive structure; dry when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	4.8	2.8
.3	1	5.4	3.5
.6	1	4.9	3.5
.8	1	4.7	3.1
1	1	4.9	3.3
1.25	1	4.9	3.3
1.5	1	5.3	3.6
1.75	1	5.8	3.9
2	1	6.1	4.1
2.25		6.5	5.5
2.5		6.7	7.8
2.75		6.9	8.0
3		7.0	5.9

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon 2B24 Dark mottles = magnesium

Project: NQAS **Site:** 194 **Observation:** 1

Location: GDA 94 ZONE 55 370766mE 8118639mN Lat: -17.0127 Long: 145.78588

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial fan

Element: tidal flat

Classifications:

ASC: SUPRATIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .1	Greyish brown (2.5Y53) moist; fine sandy clay loam; massive structure; moist when sampled; clear to
B2	.1 to .75	Bluish grey (5B61) moist; common 10-20% medium 5-15mm prominent orange mottles; medium clay; massive structure; moist when sampled; diffuse to
C1	.75 to 1.2	Greenish grey (5GY51) moist; few 2-10% medium 5-15mm faint brown mottles; clay loam, fine sandy; massive structure; wet when sampled; diffuse to
C2	1.2 to 2.4	Greenish grey (5GY51) moist; many 20-50% very coarse >30mm faint brown mottles; medium clay; massive structure; moderately moist when sampled; diffuse to
C3	2.4 to 3.5	Dark greenish grey (5GY41) moist; very few <2% medium 5-15mm faint brown mottles, very few <2% medium 5-15mm faint gley mottles; medium heavy clay; massive structure; dry when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		5.7	4.3
.3		6.8	5.2
.6		7.0	5.2
.8		7.0	5.4
1		7.1	5.3
1.25		7.0	4.8
1.5	3	6.7	
1.75		6.8	5.0
2		6.9	4.8
2.25		6.9	4.7
2.5	4	6.9	7.3
2.75	4	6.9	6.9
3	4	6.9	7.4
3.25	4	6.8	7.4
3.5	4	6.8	7.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 195 **Observation:** 1

Location: GDA 94 ZONE 55 370906mE 8118314mN Lat: -17.01564 Long: 145.78717

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial plain

Element: plain

Depth to Water: 1.2

Classifications:

ASC: YELLOW, Kandosol

ASC: SULFIDIC, OXYAQUIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
Ap	0 to .3	Dark greyish brown (10YR42) moist; light clay; sandy; very few <2% subrounded quartz small pebbles 2-6 mm; subangular blocky weak 5-10mm structure; dry when sampled; clear to
B21	.3 to .7	Brownish yellow (10YR66) moist; common 10-20% medium 5-15mm prominent red mottles; light clay; sandy; common 10-20% subangular quartz small pebbles 2-6 mm; subangular blocky weak 2-5mm structure; moderately moist when sampled; clear to
B22	.7 to 1.4	Yellowish red (5YR58) moist; many 20-50% coarse 15-30mm distinct red mottles; light clay; sandy; subangular blocky weak 2-5mm structure; moist when sampled; gradual to
2C1	1.4 to 3	Very dark greyish brown (10YR32) moist; sapric clay loam; massive structure; very many >50% very coarse 20-60mm organic (humified) fragments; wet when sampled; diffuse to
2C2	3 to 5.2	Dark grey (2.5Y41) moist; silty light clay; massive structure; few 2-10% coarse 6-20mm organic (humified) fragments; wet when sampled; clear to
3D1	5.2 to 5.6	Greenish grey (5G61) moist; common 10-20% coarse 15-30mm prominent orange mottles, very few <2% fine <5mm prominent red mottles; coarse sandy light clay; common 10-20% subangular quartz small pebbles 2-6 mm; massive structure; very few <2% coarse 6-20mm ferromanganiferous concretions; wet when sampled; sharp to
3D2	5.6 to 5.9	Grey (10YR61) moist; coarse sandy medium clay; few 2-10% subangular quartz small pebbles 2- 6 mm; single grain structure; moderately moist when sampled; sharp to
3D3	5.9 to 6	Light greenish grey (10GY71) moist; few 2-10% coarse 15-30mm prominent red mottles, few 2- 10% coarse 15-30mm prominent orange mottles, common 10-20% coarse 15-30mm distinct brown mottles; coarse sandy medium heavy clay; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1		4.9	3.3	3	4	6.8	1.2
.3		4.7	3.8	3.25	4	7.2	1.2
.6		4.7	3.7	3.5	4	7.0	1.5
.8		5.2	4.1	3.75	4	6.9	1.4
1		5.3	4.1	4	4	6.9	1.6
1.25		5.2	3.7	4.25	4	6.9	1.6
1.5	4	7.2	2.0	4.5	4	6.9	1.5
1.75	4	7.3	1.2	4.75	4	7.2	1.6
2	4	7.2	1.1	5		7.1	1.6
2.25	4	7.0	1.1	5.25		7.1	1.9
2.5	4	7.1	1.1	5.5		7.6	4.4
2.75	4	7.0	1.1	5.75		7.8	1.7
				6		7.6	7.4

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 196 **Observation:** 1

Location: GDA 94 ZONE 55 370104mE 8118637mN Lat: -17.01268 Long: 145.77966

Described By: JA (Jeremy) Manders (MANJ)

Landscape:

Landform Pattern: alluvial plain

Element: fill-top

Disturbances: Highly disturbed e.g. mining, urban

Classifications:

ASC: SPOLIC, Anthroposol

ASC: SULFIDIC, OXYAQUIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
M1	0 to .1	Greyish brown (2.5Y53) moist; clay loam; single grain structure; dry when sampled; sharp to
M2	.1 to .45	Dark greyish brown (2.5Y42) moist; few 2-10% fine <5mm prominent brown mottles, few 2-10% fine <5mm prominent red mottles; clay loam; subangular blocky moderate 2-5mm structure; dry when sampled; sharp to
M3	.45 to .95	Light olive brown (2.5Y54) moist; many 20-50% very coarse >30mm prominent red mottles; sandy clay loam; massive structure; dry when sampled; clear to
B2	.95 to 1.5	Olive grey (5Y42) moist; few 2-10% medium 5-15mm prominent dark mottles; sandy clay loam; massive structure; moist when sampled; sharp to
2C1	1.5 to 2	Grey (5Y51) moist; medium clay; massive structure; wet when sampled; clear to
3C2	2 to 3.2	Very dark grey (5Y31) moist; light clay; massive structure; wet when sampled; clear to
4C3	3.2 to 3.5	Light greenish grey (10Y71) moist; coarse sand; single grain structure; wet when sampled; clear to
5B21	3.5 to 4.3	Light greenish grey (5GY71) moist; many 20-50% very coarse >30mm faint orange mottles; clayey sand; single grain structure; wet when sampled; clear to
5B22	4.3 to 5.4	Light greenish grey (5GY71) moist; few 2-10% coarse 15-30mm faint orange mottles; coarse sand; single grain structure; wet when sampled; clear to
5B23	5.4 to 5.5	Light greenish grey (5GY71) moist; coarse sand; very few <2% subangular quartz large pebbles 20-60 mm; common 10-20% subangular quartz medium pebbles 6-20 mm; wet when sampled; clear to
6D1	5.5 to 5.8	Dark yellowish brown (10YR44) moist; common 10-20% medium 5-15mm prominent gley mottles, common 10-20% medium 5-15mm prominent orange mottles; medium heavy clay; massive structure; moderately moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	3	5.3	4.1	3	1	7.2	1.4
.3	4	5.0	4.0	3.25	4	7.1	1.4
.6	4	4.7	3.7	3.5	4	7.5	2.5
.8	1	4.3	3.0	3.75	4	6.9	5.0
1	1	4.6	3.2	4	4	6.8	5.4
1.25	4	5.9	2.8	4.25	4	7.0	5.0
1.5	4	6.3	3.0	4.5	4	7.0	5.2
1.75	4	6.9	3.7	4.75	4	7.2	5.3
2	4	7.0	2.6	5	1	6.8	4.6
2.25	1	7.4	1.3	5.25	1	6.8	4.6
2.5	1	7.1	1.4	5.5	1	7.1	5.0
2.75	1	7.3	1.5	5.75	3	6.9	6.8

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon 3C2 oxidises darker. Organic matter present

Project: NQAS **Site:** 197 **Observation:** 1

Location: GDA 94 ZONE 55 369475mE 8119057mN Lat: -17.00885 Long: 145.77378

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: tidal flat

Element: tidal flat

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .3	Greyish brown (2.5Y52) moist; sandy clay loam; very few <2% subangular quartz small pebbles 2-6 mm; massive structure; common 10-20% medium 2-6mm organic (humified) fragments; few 2-10% coarse 6-20mm organic (humified) fragments; wet when sampled; gradual to
B21	.3 to .5	Grey (N60) moist; few 2-10% medium 5-15mm distinct brown mottles; light medium clay; massive structure; few 2-10% medium 2-6mm organic (humified) fragments; wet when sampled; gradual to
2D1	.5 to 1.05	Light grey (N70) moist; many 20-50% coarse 15-30mm distinct brown mottles, few 2-10% fine <5mm distinct red mottles; heavy clay; very few <2% subangular quartz small pebbles 2-6 mm; massive structure; very few <2% coarse 6-20mm organic (humified) fragments; wet when sampled; clear to
2D2	1.05 to 1.45	Light greenish grey (10BG71) moist; many 20-50% coarse 15-30mm prominent red mottles, few 2-10% medium 5-15mm distinct brown mottles; medium clay; sandy; few 2-10% subangular quartz small pebbles 2-6 mm; massive structure; wet when sampled; abrupt to
2D3	1.45 to 2.1	Light greenish grey (10BG71) moist; few 2-10% medium 5-15mm prominent red mottles, few 2-10% medium 5-15mm prominent brown mottles; heavy clay; very few <2% subrounded sand medium pebbles 6-20 mm; few 2-10% subangular quartz small pebbles 2-6 mm; subangular blocky weak 5-10mm structure; very few <2% coarse 6-20mm ferruginous soft segregations; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	6.4	3.7
.3	4	7.0	1.5
.6	1	7.4	3.8
.8	1	7.3	4.6
1	2	7.4	2.4
1.25	1	7.4	3.9
1.5	1	7.2	5.8
1.75	1	7.4	4.6
2	1	7.2	5.4

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 198 **Observation:** 1

Location: GDA 94 ZONE 55 361537mE 8133539mN Lat: -16.87751 Long: 145.70011

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain **Element:** terrace flat

Classifications:

ASC: BROWN, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
Ap	0 to .1	Brown (10YR43) moist; clay loam; dry when sampled; clear to
A/B	.1 to 1.65	Yellowish brown (10YR54) moist; clay loam; weak 2-5mm structure; dry when sampled; diffuse to
B2	1.65 to 2.1	Greyish brown (2.5Y53) moist; few 2-10% medium 5-15mm prominent red mottles; clay loam; moderate 2-5mm structure; moderately moist when sampled; sharp to
2B2	2.1 to 2.6	Greyish brown (2.5Y53) moist; sand; few 2-10% subangular medium pebbles 6-20 mm; single grain structure; dry when sampled; sharp to
3B2	2.6 to 3.1	Light brownish grey (2.5Y63) moist; few 2-10% medium 5-15mm prominent brown mottles, common 10-20% coarse 15-30mm prominent orange mottles; clay loam; weak 2-5mm structure; moist when sampled; diffuse to
4C1	3.1 to 3.6	Very dark grey (2.5Y31) moist; fibric fine sandy clay loam; massive structure; wet when sampled; clear to
5C2	3.6 to 4.8	Dark grey (5Y41) moist; sand; single grain structure; wet when sampled; clear to
5C3	4.8 to 5.8	Greyish brown (2.5Y52) moist; coarse sand; common 10-20% angular medium pebbles 6-20 mm; very few <2% subangular chert large pebbles 20-60 mm; single grain structure; wet when sampled; sharp to
5C4	5.8 to 6.45	Dark grey (N40) moist; coarse sand; single grain structure; wet when sampled; sharp to
6C5	6.45 to 9.6	Very dark grey (5Y31) moist; fibric clay loam; wet when sampled; clear to
7C6	9.6 to 9.9	Very dark grey (5Y31) moist; coarse sandy loam; few 2-10% subangular medium pebbles 6-20 mm; massive structure; wet when sampled; abrupt to
8C7	9.9 to 11.3	Very dark grey (5Y31) moist; fibric clay loam; massive structure; wet when sampled; diffuse to
9C8	11.3 to 11.85	Dark grey (N40) moist; fine sandy light clay; massive structure; wet when sampled; abrupt to
10C9	11.85 to 14.4	Very dark grey (N30) moist; clayey sand; very few <2% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	3	5.4	3.3	4.75		7.2	2.0
.3	4	5.6	6.5	5		7.3	4.0
.6	4	5.3	3.4	5.25	3	5.4	2.8
.8	2	5.9	4.6	5.5	3	6.0	2.1
1	3	5.6	4.3	5.75	4	5.7	2.1
1.25	4	5.3	3.9	6	4	6.1	1.8
1.5		6.2	4.1	6.25	4	6.4	1.8
1.75		6.2	4.3	6.5	4	6.2	1.2
2		6.6	3.7	6.75	4	6.7	1.2
2.25		7.0	4.0	7	4	7.0	1.1
2.5		6.5	5.7	7.25	4	7.3	1.4
2.75		6.7	4.9	7.5	4	7.5	1.4
3	3	6.5	2.4	7.75	4	8.1	1.8
3.25	4	6.3	1.6	8	4	8.1	1.4
3.5	4	6.5	2.1	8.25	4	7.9	1.5
3.75	4	6.3	2.1	8.5	4	8.1	1.6
4		6.7	2.0	8.75	4	8.1	1.6
4.25		7.0	2.5	9	4	8.3	1.4
4.5		6.9	2.5	9.5	4	8.2	1.4

Project: NQAS **Site:** 198 **Observation:** 1

Depth	H2O2-	PH-2	PH-3
9.75	4	8.0	1.6
10	4	8.2	1.7
10.5	4	8.3	1.5
11	4	8.3	1.5
11.5	4	7.6	1.7
12	4	6.9	1.6
12.5	4	5.9	1.6
13	4	6.4	2.0
13.5	4	5.8	1.4
14	4	5.6	1.6
14.25	4	5.4	1..5

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Observation Notes:

Location Canefield. contact email msaviwa@ozemail.com.au

Horizon Notes:

Horizon	4C1	organic fragments present
Horizon	6C5	organic fragments and layers of 10YR42 organics present throughout horizon
Horizon	8C7	organic fragments present throughout horizon
Horizon	9C8	organic fragments present throughout horizon
Horizon	10C9	LC lens 12.4-12.5m. No organics

Project: NQAS **Site:** 199 **Observation:** 1

Location: GDA 94 ZONE 55 367971mE 8126113mN Lat: -16.94499 Long: 145.76007

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: chenier plain **Element:** tidal flat

Microrelief: Zero or none

Surface Condition: Soft

Disturbances: No effective disturbance

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Vegetation:

Tallest Stratum: Mid-high closed forest (6.01-12m)

Species: Lumnitzera racemosa (black mangrove)

Mid Stratum: Mid-high open forest (6.01-12m)

Species: Acacia

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .3	Dark grey (10YR41) moist; few 2-10% medium 5-15mm faint brown mottles; medium clay; massive structure; moist when sampled; clear to
B2	.3 to .75	Grey (2.5Y51) moist; common 10-20% coarse 15-30mm prominent red mottles; medium clay; massive structure; wet when sampled; abrupt to
C1	.75 to 1.1	Dark grey (N40) moist; sandy medium clay; many 20-50% rounded quartz small pebbles 2-6 mm; very few <2% rounded igneous rock(unidentified) medium pebbles 6-20 mm; massive structure; very few <2% very coarse 20-60mm argillaceous laminae; wet when sampled; diffuse to
C2	1.1 to 2.2	Dark grey (N40) moist; clayey sand; many 20-50% rounded quartz small pebbles 2-6 mm; few 2- 10% angular shell small pebbles 2-6 mm; few 2-10% angular shell medium pebbles 6-20 mm; single grain structure; very few <2% very coarse 20-60mm argillaceous laminae; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		6.2	5.1
.3		6.4	5.1
.6	1	6.2	5.3
.8	1	7.1	4.8
1	4	6.8	1.4
1.25	4	6.9	1.4
1.5		6.8	1.5
1.75	2	7.1	1.5
2	3	6.8	3.3
2.2	3	7.2	3.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Observation Notes:

Location Mangroves, near channel cnr Lions and Port Road. Area recently burnt.

Horizon Notes:

Horizon C1 Segregation at 1.1m
Horizon C2 seg at 1.8m

Project: NQAS **Site:** 200 **Observation:** 1

Location: GDA 94 ZONE 55 367425mE 8130604mN Lat: -16.90438 Long: 145.75521

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: beach ridge plain **Element:** intertidal flat

Microrelief: Zero or none

Depth to Water: .4

Surface Condition: Soft

Disturbances: No effective disturbance

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .1	Black (10YR21) moist; clay loam; massive structure; abundant 1-2mm roots; moist when sampled; clear to
A12	.1 to .55	Black (10YR21) moist; fibric clay loam; massive structure; wet when sampled; gradual to
C1	.55 to 1.05	Dark grey (N40) moist; medium clay; massive structure; wet when sampled; sharp to
2C2	1.05 to 1.2	Very dark grey (N30) moist; clayey coarse sand; many 20-50% subrounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	5.8	3.9
.3	2	6.0	3.5
.6	2	7.3	2.1
.8	1	8.0	3.3
1	4	7.3	1.4
1.2	4	6.5	1.1

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 201 **Observation:** 1

Location: GDA 94 ZONE 55 366747mE 8130824mN Lat: -16.90235 Long: 145.74886

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain **Element:** drainage depression

Depth to Water: .4

Surface Condition: Soft

Disturbances: Highly disturbed e.g. mining, urban

Classifications:

ASC: SULFIDIC, OXYAQUIC, Hydrosol

Vegetation:

Tallest Stratum: Low closed forest (3.01-6m)

Species: Pandanus species

Continuum mid to tallest Stratum Low isolated trees (3.01-6m)

Species: Melaleuca soecies

Profile Morphology:

Horizon	Depth (m)	Description
O2	0 to .35	Very dark grey (10YR31) moist; fibric sandy clay loam; single grain structure; abundant 1-2mm roots; moderately moist when sampled; abrupt to
B1	.35 to .7	Dark greyish brown (10YR42) moist; coarse sandy clay loam; few 2-10% subrounded gravel small pebbles 2-6 mm; single grain structure; wet when sampled; gradual to
B2	.7 to 1	Yellowish brown (10YR56) moist; common 10-20% very coarse >30mm distinct grey mottles; coarse sandy medium clay; massive structure; moist when sampled; clear to
2C1	1 to 1.25	Grey (N50) moist; light clay; massive structure; common 2-5mm roots; moist when sampled; sharp to
3C2	1.25 to 1.6	Greyish brown (2.5Y52) moist; clayey sand; very few <2% subrounded gravel small pebbles 2-6 mm; single grain structure; wet when sampled; clear to
4C3	1.6 to 1.7	Grey (N50) moist; medium clay; massive structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	4.6	2.0
.3	1	4.3	1.8
.6		4.4	3.0
.8		4.4	3.2
1	1	5.2	2.7
1.25	3	5.2	1.9
1.5	4	6.3	2.7
1.7	4	6.6	4.9

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Observation Notes:

Location Botanic Gardens, Arthur Street opp 'South Pacific Taw Kwon Do'. 100-150m in, off bend in track

Project: NQAS **Site:** 202 **Observation:** 1

Location: GDA 94 ZONE 55 367715mE 8129156mN Lat: -16.91748 Long: 145.75784

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: chenier plain **Element:** swale

Microrelief: Zero or none

Depth to Water: .4

Surface Condition: Soft

Disturbances: No effective disturbance

Classifications:

ASC: SULFIDIC, OXYAQUIC, Hydrosol

Vegetation:

Tallest Stratum: Mid-high closed forest (6.01-12m)

Species: Pandanus species

Continuum mid to tallest Stratum Low isolated trees (3.01-6m)

Species: Melaleuca soecies

Profile Morphology:

Horizon	Depth (m)	Description
P1	0 to .2	Black (10YR21) moist; sapric clay loam; weak structure; common >5mm roots; moderately moist when sampled; diffuse to
A1	.2 to .4	Very dark grey (10YR31) moist; clay loam, coarse sandy; many 20-50% subrounded quartz small pebbles 2-6 mm; massive structure; common 1-2mm roots; moist when sampled; diffuse to
C1	.4 to .9	Grey (2.5Y51) moist; few 2-10% medium 5-15mm distinct orange mottles; light clay; common 10- 20% subrounded quartz small pebbles 2-6 mm; massive structure; wet when sampled; sharp to
C2	.9 to 1	Grey (2.5Y51) moist; light clay; abundant 50-90% subrounded quartz small pebbles 2-6 mm; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		5.9	2.9
.3		5.1	3.4
.6	1	5.0	2.5
.8	3	4.9	2.1
1	2	5.2	2.4

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Observation Notes:

Location Severin St, 150m N of cnr with Grove St. GPS taken at road due to interference from trees.

Project: NQAS **Site:** 203 **Observation:** 1

Location: GDA 94 ZONE 55 361735mE 8132723mN Lat: -16.88489 Long: 145.70192

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain **Element:** valley-flat

Microrelief: Zero or none

Surface Condition: Soft

Disturbances: Highly disturbed e.g. mining, urban

Classifications:

ASC: BROWN, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A1c	0 to .5	Brown (10YR43) moist; clay loam; granular strong structure; few 2-10% medium 2-6mm manganiferous nodules; common 1-2mm roots; dry when sampled; clear to
B2	.5 to 2.2	Yellowish brown (10YR54) moist; fine sandy clay loam; massive structure; common 1-2mm roots; moderately moist when sampled; abrupt to
B3	2.2 to 2.6	Yellowish brown (10YR54) moist; clayey fine sand; single grain structure; moderately moist when sampled; sharp to
C1	2.6 to 3.1	Yellowish brown (10YR54) moist; sand; very few <2% subrounded metamorphic rock (unidentified) large pebbles 20-60 mm; many 20-50% subrounded gravel small pebbles 2-6 mm; moderately moist when sampled; sharp to
C2	3.1 to 3.9	Greyish brown (2.5Y53) moist; coarse sand; many 20-50% subrounded quartz small pebbles 2-6 mm; many 20-50% subrounded gravel small pebbles 2-6 mm; very few <2% subrounded gravel medium pebbles 6-20 mm; very few <2% subrounded metamorphic rock (unidentified) large pebbles 20-60 mm; single grain structure; wet when sampled; clear to
C3	3.9 to 4.45	Dark yellowish brown (10YR44) moist; sand; wet when sampled; sharp to
C4	4.45 to 5.2	Light olive brown (2.5Y54) moist; loamy coarse sand; many 20-50% subrounded gravel small pebbles 2-6 mm; many 20-50% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled; clear to
C5	5.2 to 6.7	Light olive brown (2.5Y54) moist; coarse sand; abundant 50-90% subrounded gravel small pebbles 2-6 mm; many 20-50% subrounded quartz small pebbles 2-6 mm; few 2-10% rounded quartz medium pebbles 6-20 mm; very few <2% rounded metamorphic rock (unidentified) medium pebbles 6-20 mm; few 2-10% subrounded platy metamorphic rock (unidentified) small pebbles 2-6 mm; single grain structure; wet when sampled; abrupt to
2C6	6.7 to 7.9	Dark greenish grey (10Y31) moist; few 2-10% medium 5-15mm faint dark mottles; fine sandy clay loam; few 2-10% coarse 6-20mm organic (humified) nodules; moist when sampled; gradual to
2C7	7.9 to 8.5	Dark grey (N40) moist; fine sandy clay loam; massive structure; many 20-50% medium 2-6mm organic (humified) soft segregations; moist when sampled; clear to
2C8	8.5 to 9.6	Black (N2.5/0) moist; fibric clay loam; massive structure; very many >50% medium 2-6mm organic (humified) soft segregations; moist when sampled; clear to
3C9	9.6 to 10	Dark greenish grey (10Y41) moist; clayey coarse sand; single grain structure; wet when sampled; clear to
4C10	10 to 11.3	Dark greenish grey (5GY41) moist; fibric clay loam; massive structure; few 2-10% medium 2- 6mm organic (humified) veins; wet when sampled; gradual to
4C11	11.3 to 11.7	Dark greenish grey (5GY41) moist; fine sandy clay loam; wet when sampled; gradual to
4C12	11.7 to 12.5	Grey (N50) moist; sandy clay loam; very few <2% subrounded quartz small pebbles 2-6 mm; massive structure; wet when sampled; clear to
4C13	12.5 to 13.65	Dark greenish grey (10Y41) moist; fibric sandy clay loam; massive structure; wet when sampled; abrupt to
5C14	13.65 to 15.5	Dark greenish grey (10GY41) moist; coarse sand; common 10-20% subrounded quartz large pebbles 20-60 mm; abundant 50-90% subrounded quartz medium pebbles 6-20 mm; single grain structure; few >5mm roots; wet when sampled; abrupt to
6C15	15.5 to 16.3	Yellowish brown (10YR56) moist; clayey coarse sand; common 10-20% rounded quartz large pebbles 20-60 mm; abundant 50-90% rounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled; sharp to
6C16	16.3 to 16.8	Yellowish brown (10YR56) moist; clayey coarse sand; common 10-20% subangular metamorphic rock (unidentified) large pebbles 20-60 mm; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	4	5.7	3.3	9	4	6.9	1.4
.3	4	5.4	4.3	9.25	4	6.8	1.6
.6	4	6.2	4.5	9.5	4	6.9	1.2
.8	3	6.5	4.3	9.75	4	6.7	2.0
1	3	6.1	4.6	10	4	6.9	1.5
1.25	3	6.1	4.1	10.25	4	6.8	1.5
1.5	3	5.8	4.5	10.5	4		1.4
1.75	4	5.8	4.5	10.75	4	6.9	1.5
2	4	5.9	4.2	11	4	6.8	1.4
2.25	4	5.8	3.9	11.5	4	6.6	2.0
2.5	4	5.7	4.1	11.75	4	6.8	1.6
2.75	4	6.1	3.0	12	4	6.8	1.8
3	1	6.2	6.8	12.25	4	6.5	1.8
3.25	2	6.3	5.5	12.5	4	6.7	1.5
3.5	2	6.4	6.0	12.75	4	6.4	1.3
3.75		6.4		13	4	6.4	1.3
4		6.5		13.25	4	6.1	1.5
4.25		6.6		13.5	4	6.1	1.3
4.5		6.2		13.75	4	5.8	1.3
4.75			6.2	14	4	5.4	1.3
6	2	6.6	4.9	14.25	4	5.3	1.6
6.25	2	6.5	5.0	14.5	4	5.0	1.5
6.5	2	6.1	4.1	14.75	4	4.9	1.4
6.75	3	6.3	1.8	15	4	4.9	1.3
7	4	6.4	3.3	15.25	4	5.2	0.9
7.25	4	6.4	2.4	15.5	2	5.4	1.3
7.5	4	6.5	1.8	15.75	4	5.4	6.0
7.75	4	6.5	2.1	16	4	5.9	6.1
8	4	6.7	1.9	16.25	4	6.4	1.8
8.25	4	6.8	1.4	16.5	4	5.8	1.9
8.5	4	6.8	1.4	16.75	2	5.7	1.9
8.75	4	6.8	1.5				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon	C2	medium pebbles in lens at 3.5m
Horizon	C4	iron stain at top of horizon
Horizon	5C14	Fine sand lens at 14.5-14.6m; Organic layer at 15.2-15.3m (solid wood)

Project: NQAS **Site:** 204 **Observation:** 1

Location: GDA 94 ZONE 55 362052mE 8131859mN Lat: -16.89272 Long: 145.70484

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain

Element: valley-flat

Classifications:

ASC: Tenosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .35	Yellowish brown (10YR56) moist; fine sandy clay loam; subangular blocky moderate 5-10mm structure; common 1-2mm roots; dry when sampled; gradual to
A12	.35 to 2.1	Dark yellowish brown (10YR44) moist; loamy fine sand; single grain structure; moderately moist when sampled; gradual to
B21	2.1 to 2.55	Dark yellowish brown (10YR44) moist; clayey fine sand; single grain structure; wet when sampled; clear to
B22	2.55 to 3.5	Brown (10YR43) moist; few 2-10% medium 5-15mm faint dark mottles, very few <2% medium 5- 15mm distinct orange mottles; clay loam, sandy; massive structure; wet when sampled; clear to
C1	3.5 to 4.1	Dark greenish grey (10Y41) moist; clayey fine sand; massive structure; wet when sampled; abrupt to
2C2	4.1 to 4.2	Dark greenish grey (10Y41) moist; coarse sand; single grain structure; wet when sampled; abrupt to
3C3	4.2 to 4.4	Dark greenish grey (10Y31) moist; clay loam; massive structure; many 20-50% medium 2-6mm organic (humified) soft segregations; wet when sampled; abrupt to
4C4	4.4 to 7.05	Yellowish brown (10YR54) moist; coarse sand; common 10-20% rounded quartz small pebbles 2-6 mm; common 10-20% subrounded gravel small pebbles 2-6 mm; very few <2% subangular metamorphic rock (unidentified) large pebbles 20-60 mm; very few <2% subangular quartz large pebbles 20-60 mm; wet when sampled; clear to
5C5	7.05 to 7.6	Dark greenish grey (10Y31) moist; fine sandy loam; massive structure; wet when sampled; sharp to
6C6	7.6 to 8.4	Greenish grey (5GY51) moist; loamy sand; common 10-20% rounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled; sharp to
7C7	8.4 to 9	Light brownish grey (2.5Y63) moist; coarse sand; common 10-20% subangular quartz small pebbles 2-6 mm; common 10-20% subangular gravel small pebbles 2-6 mm; single grain structure; uncemented continuous massive organic pan; wet when sampled; clear to
8C8	9 to 10.1	Greyish brown (2.5Y53) moist; sand; few 2-10% subrounded quartz small pebbles 2-6 mm; few 2-10% subrounded gravel small pebbles 2-6 mm; wet when sampled; gradual to
8C9	10.1 to 10.8	Pale yellow (2.5Y73) moist; coarse sand; many 20-50% subrounded metamorphic rock (unidentified) small pebbles 2-6 mm; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	3	5.1	3.1	5.75	3	6.6	7.4
.3	1	5.3	3.4	6	2	6.5	5.8
.6	1	4.9	3.6	6.25	1	7.0	5.4
.8	1	5.3	4.7	6.5	1	6.7	5.4
1	1	5.3	5.0	6.75	1	6.6	5.2
1.25	4	5.9	5.2	7	1	6.2	4.5
1.5	3	6.0	3.2	7.25	4	6.0	1.4
1.75	3	6.0	4.8	7.5		6.2	2.0
2	3	5.7	4.4	7.75		6.1	5.1
2.25	4	5.6	4.2	8		6.1	5.1
2.5	4	6.1	5.8	8.25		6.3	5.1
2.75	4	5.7	5.5	8.5		6.6	4.9
3	2	5.6	3.7	8.75		6.5	5.2
3.25	3	5.9	3.3	9		6.2	2.4
3.5	4	6.4	3.4	9.05	4	5.9	1.4
3.75	3	6.4	3.1	9.25		6.4	5.2
4	4	6.3	2.5	9.5		6.5	5.2
4.2	4	6.3	1.8	9.75		6.5	5.2
4.4	3	6.0	1.0	10		6.6	3.9
4.75	1	6.3	4.3	10.25		6.7	4.9
5	2	6.3	5.7	10.5		6.5	5.2
5.25	4	6.2	6.5	10.75		6.4	5.2
5.5	4	6.3	7.1				

PH-2: pH using electrode probe
 PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon	4C4	13 S ME/QZ in layer 6.9-7.0m. Iron stain at 7.05m
Horizon	5C5	iron staining at 7.6m
Horizon	7C7	iron stain at 8.7-9.0
Horizon	8C9	CFs at 10.4-10.5m

Project: NQAS **Site:** 205 **Observation:** 1

Location: GDA 94 ZONE 55 361795mE 8130796mN Lat: -16.90231 Long: 145.70237

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain **Element:** valley-flat

Classifications:

ASC: BROWN, Dermosol

Profile Morphology:

Horizon	Depth (m)	Description
Ap	0 to .3	Dark brown (7.5YR33) moist; clay loam; many 20-50% angular gravel medium pebbles 6-20 mm; subangular blocky weak 5-10mm structure; common 1-2mm roots; dry when sampled; sharp to
B21	.3 to .9	Brown (7.5YR44) moist; clay loam; platy moderate 5-10mm structure; common <1mm roots; dry when sampled; clear to
B22	.9 to 2	Dark yellowish brown (10YR46) moist; few 2-10% medium 5-15mm faint pale mottles; clayey fine sand; massive structure; moist when sampled; diffuse to
B23	2 to 3.15	Dark yellowish brown (10YR44) moist; few 2-10% medium 5-15mm faint dark mottles, few 2-10% medium 5-15mm faint brown mottles, very few <2% fine <5mm distinct dark mottles; clay loam, fine sandy; massive structure; wet when sampled; clear to
B24	3.15 to 3.35	Dark yellowish brown (10YR44) moist; few 2-10% medium 5-15mm distinct brown mottles; clayey sand; few 2-10% subrounded quartz small pebbles 2-6 mm; few 2-10% rounded metamorphic rock (unidentified) small pebbles 2-6 mm; single grain structure; moist when sampled; clear to
2C1	3.35 to 7.8	Brown (7.5YR44) moist; coarse sand; many 20-50% subrounded metamorphic rock (unidentified) large pebbles 20-60 mm; few 2-10% subrounded metamorphic rock (unidentified) medium pebbles 6-20 mm; few 2-10% subrounded quartz medium pebbles 6-20 mm; common 10-20% subrounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled; diffuse to
2C2	7.8 to 9.1	Dark brown (7.5YR34) moist; coarse sand; few 2-10% rounded metamorphic rock (unidentified) large pebbles 20-60 mm; abundant 50-90% rounded quartz small pebbles 2-6 mm; common 10- 20% subrounded metamorphic rock (unidentified) medium pebbles 6-20 mm; many 20-50% subrounded metamorphic rock (unidentified) small pebbles 2-6 mm; many 20-50% subrounded quartz small pebbles 2-6 mm; wet when sampled; diffuse to
2C3	9.1 to 9.5	Black (7.5YR2.5/1) moist; coarse sand; common 10-20% subrounded metamorphic rock (unidentified) large pebbles 20-60 mm; many 20-50% subrounded metamorphic rock (unidentified) medium pebbles 6-20 mm; abundant 50-90% subrounded metamorphic rock (unidentified) small pebbles 2-6 mm; wet when sampled; clear to
2C4	9.5 to 10.7	Brown (7.5YR44) moist; coarse sand; few 2-10% rounded metamorphic rock (unidentified) large pebbles 20-60 mm; few 2-10% rounded platy metamorphic rock (unidentified) large pebbles 20- 60 mm; many 20-50% subangular quartz small pebbles 2-6 mm; many 20-50% subangular gravel small pebbles 2-6 mm; wet when sampled; clear to
2C5	10.7 to 11.5	Yellowish brown (10YR54) moist; coarse sand; single grain structure; wet when sampled; diffuse to
2C6	11.5 to 12	Dark yellowish brown (10YR44) moist; coarse sand; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	4	5.8	4.5
.3	4	6.6	
.6	4	5.2	3.4
.8	4	5.9	4.0
1	4	6.2	5.0
1.25	4	6.5	2.0
1.5	4	6.6	4.8
1.75	2	6.5	7.9
2	3	6.3	4.0
2.25	3	6.0	4.6
2.5	3	5.7	3.7
2.75	4	5.8	5.0
3	4	5.7	4.7
3.25	4	5.8	3.0
3.5	3	6.1	2.7
3.75	2	6.2	4.7
4	2	6.4	3.9
4.25	2	6.4	2.8

Project: NQAS Site: 205 Observation: 1

Depth	H2O2-	PH-2	PH-3
4.5	2	6.5	5.2
4.75	4	6.4	6.2
5	4	6.1	6.7
5.25		6.0	
5.5		6.2	
5.75		6.1	
6	4	5.8	6.8
6.25	4	7.2	7.2
6.5	4	6.3	7.4
6.75	4	6.4	7.0
7	4	6.7	7.6
7.25	4	6.6	7.6
7.5	4	6.8	7.9
7.75	4	6.9	7.9
8	4	6.8	7.4
8.25	4	6.7	7.3
8.5	4	6.7	7.5
8.75	4	6.9	7.9
9	4	6.7	8.6
9.25	4	6.6	8.0
9.5	4	6.8	7.7
9.75	4	6.8	8.1
10	4	6.6	8.4
10.25	4	6.9	8.3
10.5	4	6.4	8.1
10.75	4	6.7	8.2
11	2	6.8	5.8
11.25	3	6.8	6.8
11.5	3	6.8	6.7
11.75	4	6.5	8.0
12	4	6.7	7.6

PH-2: pH using electrode probe
 PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon Ap CFs in lens at 0.25-0.3m

Project: NQAS **Site:** 206 **Observation:** 1

Location: GDA 94 ZONE 55 362395mE 8130951mN Lat: -16.90095 Long: 145.70801

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain **Element:** valley-flat

Classifications:

ASC: Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .2	Brown (7.5YR43) moist; clay loam; massive structure; common 1-2mm roots; dry when sampled; sharp to
A12	.2 to .4	Brown (7.5YR44) moist; clay loam; massive structure; dry when sampled; abrupt to
A2	.4 to .85	Brown (10YR53) moist; clay loam; massive structure; few 1-2mm roots; dry when sampled; clear to
2C1	.85 to 1.2	Dark yellowish brown (10YR44) moist; clayey fine sand; massive structure; dry when sampled; gradual to
3B2	1.2 to 3.3	Yellowish brown (10YR54) moist; few 2-10% medium 5-15mm faint brown mottles; clay loam; massive structure; few 1-2mm roots; moist when sampled; gradual to
4C1	3.3 to 4.2	Light olive brown (2.5Y54) moist; coarse sand; single grain structure; wet when sampled; gradual to
4C2	4.2 to 6.6	Greyish brown (2.5Y52) moist; coarse sand; single grain structure; wet when sampled; clear to
4C3	6.6 to 6.85	Light brownish grey (2.5Y62) moist; coarse sand; few 2-10% rounded quartz small pebbles 2-6 mm; few 2-10% subrounded metamorphic rock (unidentified) medium pebbles 6-20 mm; few 2- 10% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled; clear to
5D1	6.85 to 7.2	Yellowish brown (10YR54) moist; coarse sand; common 10-20% rounded quartz small pebbles 2-6 mm; common 10-20% rounded metamorphic rock (unidentified) small pebbles 2-6 mm; very few <2% subrounded metamorphic rock (unidentified) large pebbles 20-60 mm; very few <2% subrounded quartz large pebbles 20-60 mm; single grain structure; wet when sampled; clear to
5D2	7.2 to 9.6	Dark yellowish brown (10YR36) moist; coarse sand; few 2-10% subrounded metamorphic rock (unidentified) cobbles 60-200 mm; common 10-20% subrounded metamorphic rock (unidentified) large pebbles 20-60 mm; many 20-50% subrounded metamorphic rock (unidentified) medium pebbles 6-20 mm; few 2-10% subrounded quartz small pebbles 2-6 mm; few 2-10% subrounded metamorphic rock (unidentified) small pebbles 2-6 mm; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	4	6.4	3.1	5	2	6.5	4.6
.3	3	5.2	4.7	5.25		6.0	
.6	4	5.5	3.4	5.5	1	6.3	4.6
.8	2	5.9	3.2	5.75	1	6.3	4.6
1	2	5.0	3.8	6	1	6.4	5.1
1.25	4	5.4	4.0	6.25	1	6.4	3.1
1.5	3	5.6	4.0	6.5	1	6.3	5.2
1.75	4	5.7	4.0	6.75	4	6.9	6.9
2	3	5.6	3.9	7	4	7.1	7.4
2.25	3	5.9	4.3	7.25	4	6.9	7.7
2.75	4	6.1	4.5	7.5	4	6.8	7.8
3	4	5.9	5.0	7.75	4	6.9	7.8
3.25	2	6.3	3.9	8	4	7.1	8.0
3.5	2	6.5	3.9	8.25	4	6.9	7.7
3.75	2	6.4	4.4	8.5	4	6.8	8.0
4	2	6.4	4.8	8.75	4	7.0	7.9
4.25	1	6.5	4.9	9	4	6.9	8.1
4.5	2	6.5	4.4	9.25	4	6.9	8.4
4.75	2	6.4	4.9	9.5	4	7.2	7.9

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 207 **Observation:** 1

Location: GDA 94 ZONE 55 361748mE 8132233mN Lat: -16.88932 Long: 145.70201

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain **Element:** valley-flat

Depth to Water: 3.5

Classifications:

ASC: REGOLITHIC, Brown-Orthic, Tenosol

Profile Morphology:

Horizon	Depth (m)	Description
A11p	0 to .15	Dark yellowish brown (10YR44) moist; clay loam; subangular blocky strong 2-5mm structure; common 1-2mm roots; dry when sampled; clear to
A12	.15 to .5	Dark yellowish brown (10YR46) moist; clay loam; angular blocky weak structure; common 1-2mm roots; dry when sampled; gradual to
A13	.5 to 1.2	Dark yellowish brown (10YR46) moist; clay loam; angular blocky weak structure; dry when sampled; gradual to
B21	1.2 to 2.2	Yellowish brown (10YR54) moist; common 10-20% coarse 15-30mm faint grey mottles; clayey fine sand; angular blocky weak structure; dry when sampled; clear to
C1	2.2 to 3	Yellowish brown (10YR56) moist; sand; single grain structure; dry when sampled; clear to
2C2	3 to 3.2	Brown (7.5YR43) moist; coarse sand; very few <2% rounded metamorphic rock (unidentified) medium pebbles 6-20 mm; many 20-50% rounded metamorphic rock (unidentified) small pebbles 2-6 mm; dry when sampled; clear to
2C3	3.2 to 4.9	Grey (2.5Y51) moist; coarse sand; many 20-50% rounded metamorphic rock (unidentified) small pebbles 2-6 mm; few 2-10% rounded quartz small pebbles 2-6 mm; very few <2% rounded quartz medium pebbles 6-20 mm; many 20-50% subrounded quartz small pebbles 2-6 mm; very few <2% subrounded metamorphic rock (unidentified) medium pebbles 6-20 mm; single grain structure; wet when sampled; clear to
2C4	4.9 to 7.1	Olive grey (5Y52) moist; coarse sand; common 10-20% rounded quartz medium pebbles 6-20 mm; common 10-20% subrounded metamorphic rock (unidentified) small pebbles 2-6 mm; abundant 50-90% rounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled; sharp to
3C5gh	7.1 to 8.3	Dark grey (N40) moist; fibric clay loam; massive structure; wet when sampled; sharp to
3C6g	8.3 to 8.4	Dark grey (N40) moist; clayey fine sand; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	4	5.7	3.1	4.25	1	6.9	5.2
.3	4	6.0	4.1	4.5	1	6.9	5.6
.6	4	6.5	5.8	4.75	1	7.0	5.7
.8	4	6.8	6.0	5		6.9	5.6
1	4	6.8	5.4	5.25		6.9	5.9
1.25	4	6.7	5.5	5.5		7.2	6.0
1.5	4	6.3	4.6	5.75		7.0	5.8
1.75	4	6.6	4.4	6		7.1	4.8
2	1	6.6	4.9	6.25		6.6	5.8
2.25	1	6.7	4.4	6.5		6.7	5.5
2.5	2	6.6	4.7	6.75		6.8	5.6
2.75	1	6.8	5.1	7		6.5	5.6
3	1	6.5	4.9	7.25	4	6.3	2.1
3.1	4	7.0	6.8	7.5	4	6.6	2.2
3.25	3	6.9	7.2	7.75	4	6.8	1.8
3.5		6.7	5.4	8	4	6.7	1.8
3.75		6.6	5.3	8.25	4	6.8	1.9
4		6.9	5.6	8.4	4	6.6	2.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 208 **Observation:** 1

Location: GDA 94 ZONE 55 362671mE 8131360mN Lat: -16.89727 Long: 145.71062

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain **Element:** fill-top

Depth to Water: 3.4

Surface Condition: Firm

Disturbances: Highly disturbed e.g. mining, urban

Classifications:

ASC: BROWN, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .1	Dark greyish brown (2.5Y43) moist; clay loam; weak structure; many 1-2mm roots; dry when sampled; clear to
A12	.1 to .3	Dark yellowish brown (10YR46) moist; clay loam; weak structure; dry when sampled; clear to
A13	.3 to .9	Strong brown (7.5YR46) moist; fine sandy clay loam; platy weak 2-5mm structure; dry when sampled; gradual to
B21	.9 to 1.6	Yellowish brown (10YR56) moist; few 2-10% medium 5-15mm faint pale mottles; heavy sandy loam; massive structure; dry when sampled; clear to
B22	1.6 to 2.1	Yellowish brown (10YR56) moist; few 2-10% medium 5-15mm faint pale mottles, few 2-10% medium 5-15mm faint red mottles; sandy loam; massive structure; dry when sampled; clear to
2C1	2.1 to 3.6	Brown (7.5YR44) moist; coarse sandy loam; few 2-10% subrounded metamorphic rock (unidentified) large pebbles 20-60 mm; many 20-50% subrounded gravel small pebbles 2-6 mm; few 2-10% subrounded gravel medium pebbles 6-20 mm; single grain structure; moist when sampled; clear to
3D1	3.6 to 6	Yellowish brown (10YR56) moist; common 10-20% coarse 15-30mm distinct grey mottles, very few <2% medium 5-15mm distinct dark mottles; light medium clay; massive structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	3	5.7	2.7	3.25	4	5.9	6.6
.3	4	5.1	5.2	3.5	1	5.7	5.1
.6	4	5.7	5.6	3.75	2	5.6	4.3
.8	2	5.7	4.5	4	4	5.6	4.9
1	1	5.4	4.0	4.25	4	5.6	5.0
1.25		5.3	3.9	4.5		5.4	4.1
1.5		5.3	4.0	4.75		5.5	4.1
1.75		5.3	4.0	5		5.5	5.1
2	3	5.3	4.0	5.25	3	5.8	4.8
2.25	3	5.5	5.0	5.5	4	5.8	6.1
2.5	2	5.5	4.8	5.75	4	5.9	5.7
2.75	4	6.0	6.2	6	4	5.9	6.6
3	4	5.8	6.2				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 209 **Observation:** 1

Location: GDA 94 ZONE 55 362284mE 8131788mN Lat: -16.89338 Long: 145.70702

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain

Element: terrace flat

Classifications:

ASC: REGOLITHIC, Brown-Orthic, Tenosol

Confidence:

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .2	Brown (7.5YR43) moist; fine sandy loam; granular strong 2-5mm structure; common 1-2mm roots; dry when sampled; clear to
A12	.2 to .4	Brown (10YR43) moist; fine sandy loam; angular blocky weak structure; common 1-2mm roots; moderately moist when sampled; clear to
A13	.4 to 1.55	Dark yellowish brown (10YR44) moist; fine sandy loam; angular blocky weak structure; common 1-2mm roots; moist when sampled; diffuse to
B21	1.55 to 3.25	Dark yellowish brown (10YR46) moist; few 2-10% medium 5-15mm faint pale mottles; heavy fine sandy loam; massive structure; wet when sampled; abrupt to
B22	3.25 to 3.9	Dark yellowish brown (10YR46) moist; few 2-10% medium 5-15mm prominent brown mottles, common 10-20% coarse 15-30mm distinct orange mottles, common 10-20% coarse 15-30mm prominent grey mottles; heavy sandy loam; massive structure; few 2-10% very coarse 20-60mm manganiferous soft segregations; wet when sampled; clear to
C1	3.9 to 4.4	Olive grey (5Y42) moist; sandy loam; few 2-10% rounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled; abrupt to
2C2	4.4 to 4.6	Dark greenish grey (10Y41) moist; clay loam; massive structure; wet when sampled; sharp to
3C3	4.6 to 5.2	Greenish grey (10Y51) moist; clayey sand; few 2-10% rounded tabular other large pebbles 20-60 mm; single grain structure; wet when sampled; abrupt to
4C4	5.2 to 5.9	Greenish grey (5GY51) moist; coarse sand; few 2-10% rounded quartz small pebbles 2-6 mm; few 2-10% rounded quartz medium pebbles 6-20 mm; common 10-20% rounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled; diffuse to
4C5	5.9 to 6.1	Olive grey (5Y42) moist; coarse sand; few 2-10% rounded quartz small pebbles 2-6 mm; few 2-10% rounded quartz medium pebbles 6-20 mm; common 10-20% rounded quartz small pebbles 2-6 mm; single grain structure; uncemented continuous massive thin ironpan; wet when sampled; sharp to
5C6	6.1 to 6.5	Olive grey (5Y42) moist; clay loam; very few <2% subrounded quartz large pebbles 20-60 mm; massive structure; wet when sampled; clear to
5C7	6.5 to 7.05	Olive brown (2.5Y44) moist; clay loam, fine sandy; massive structure; wet when sampled; clear to
6C8	7.05 to 7.5	Dark greyish brown (2.5Y43) moist; coarse sandy loam; few 2-10% rounded metamorphic rock (unidentified) medium pebbles 6-20 mm; many 20-50% rounded gravel small pebbles 2-6 mm; single grain structure; wet when sampled; clear to
7D1	7.5 to 8.4	Light grey (N70) moist; many 20-50% very coarse >30mm distinct orange mottles; heavy clay loam; massive structure; few 2-10% medium 2-6mm ferruginous concretions; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	4	6.0	3.2
.3	4	6.0	3.7
.6	4	6.1	4.6
.8	4	5.7	4.7
1	1	5.9	3.9
1.25	1	5.9	3.9
1.5	4	5.6	4.8
1.75	4	5.7	4.2
2	4	5.8	5.0
2.25	3	5.8	4.6
2.5	4	5.8	4.8
2.75	1	6.1	4.4
3	1	6.4	5.2
3.25	1	6.3	3.8
3.5	1	5.9	4.0

Project: NQAS **Site:** 209 **Observation:** 1

Depth	H2O2-	PH-2	PH-3
3.75	4	6.0	6.4
4		6.0	3.9
4.25		6.1	3.7
4.5	1	5.9	3.6
4.75		6.2	2.8
5	1	6.2	2.6
5.25		6.2	3.0
5.5		6.3	3.4
5.75	1	6.4	5.2
6	1	6.5	4.9
6.25	4	6.1	2.8
6.5	4	6.1	3.0
6.75	1	6.1	3.0
7	1	6.1	3.5
7.25	1	6.1	4.1
7.5	1	6.1	2.7
7.75	1	6.1	3.4
8		6.2	3.9
8.25		6.2	4.3
8.4		6.2	4.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 210 **Observation:** 1

Location: GDA 94 ZONE 55 362952mE 8135703mN Lat: -16.85803 Long: 145.71353

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain

Element: terrace plain

Classifications:

ASC: REGOLITHIC, Brown-Orthic, Tenosol

Profile Morphology:

Horizon	Depth (m)	Description
A2	0 to .3	Dark yellowish brown (10YR44) moist; loamy sand; single grain structure; dry when sampled; gradual to
B2	.3 to .65	Brown (10YR43) moist; clay loam; subangular blocky weak 5-10mm structure; dry when sampled; sharp to
2A2	.65 to 1	Light olive brown (2.5Y54) moist; loamy sand; single grain structure; dry when sampled; sharp to
2B2	1 to 1.4	Dark greyish brown (10YR42) moist; clay loam; massive structure; moderately moist when sampled; clear to
3C1	1.4 to 1.7	Brownish yellow (10YR66) moist; coarse sand; few 2-10% subrounded quartz medium pebbles 6- 20 mm; few 2-10% subrounded gravel medium pebbles 6-20 mm; moderately moist when sampled; clear to
3C2	1.7 to 2.75	Yellow (2.5Y76) moist; coarse sand; common 10-20% subrounded quartz medium pebbles 6-20 mm; common 10-20% subrounded gravel medium pebbles 6-20 mm; many 20-50% subrounded quartz small pebbles 2-6 mm; many 20-50% subrounded gravel small pebbles 2-6 mm; single grain structure; moist when sampled; gradual to
3C3	2.75 to 4.9	Olive yellow (2.5Y66) moist; sand; very few <2% rounded metamorphic rock (unidentified) large pebbles 20-60 mm; single grain structure; wet when sampled; gradual to
4C4	4.9 to 6	Light brownish grey (2.5Y63) moist; coarse sand; common 10-20% subrounded quartz medium pebbles 6-20 mm; common 10-20% subrounded metamorphic rock (unidentified) medium pebbles 6-20 mm; many 20-50% subrounded quartz small pebbles 2-6 mm; many 20-50% subrounded metamorphic rock (unidentified) small pebbles 2-6 mm; very few <2% rounded metamorphic rock (unidentified) large pebbles 20-60 mm; wet when sampled; clear to
4C5	6 to 7	Olive grey (5Y52) moist; coarse sand; very few <2% subrounded metamorphic rock (unidentified) large pebbles 20-60 mm; single grain structure; wet when sampled; diffuse to
4C6	7 to 12	Greenish grey (10Y51) moist; coarse sand; abundant 50-90% subrounded quartz small pebbles 2-6 mm; common 10-20% subrounded quartz medium pebbles 6-20 mm; very few <2% subrounded metamorphic rock (unidentified) large pebbles 20-60 mm; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	4	6.4	3.5
.3	2	5.9	2.6
.6	4	5.5	3.4
.8	2	6.0	3.3
1	4	6.3	5.1
1.25		6.2	3.1
1.5	1	6.6	5.1
1.75		6.8	5.2
2	1	6.9	5.4
2.25		6.9	5.3
2.5		6.9	4.7
2.75		6.9	5.4
3		6.9	5.0
3.25		6.7	4.4
3.5	1	6.8	5.0
3.75	1	6.9	5.7
4	1	6.9	5.7
4.25	1	7.0	5.8
4.5		7.3	6.3

Project: NQAS Site: 210 Observation: 1

Depth	H2O2-	PH-2	PH-3
4.75	4	7.3	7.4
5	4	7.0	1.4
5.25		7.0	2.2
5.5		7.0	3.6
5.75		7.1	4.3
6		7.1	4.2
6.25		7.0	4.2
6.5		7.0	5.0
6.75		7.3	5.2
7		7.2	4.3
7.25		6.8	2.1
7.5	4	6.8	2.2
7.75	4	6.9	2.0
8	4	6.9	1.9
8.25	4	6.8	1.6
8.5	4	7.1	2.0
8.75	4	7.0	2.0
9	4	7.0	1.6
9.25	4	6.9	1.7
9.5	4	7.0	1.9
9.75	4	6.6	2.1
10	4	7.0	1.9
10.25	4	7.4	2.1
10.5	4	7.6	2.1
10.75	4	7.0	1.6
11	4	7.2	1.5
11.2	4	7.4	1.4
11.25	4	6.9	1.4
11.5	4	7.3	1.9
11.75	4	7.2	1.6
12	4	7.5	1.5

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon 4C4 Timber frags at 5.0-5.1m

Project: NQAS **Site:** 211 **Observation:** 1

Location: GDA 94 ZONE 55 362074mE 8133159mN Lat: -16.88097 Long: 145.70513

Described By: Lauren OBrien (OBRL)

Landscape:
Landform Pattern: alluvial plain **Element:** plain

Classifications:
ASC: REGOLITHIC, Brown-Orthic, Tenosol

Profile Morphology:

Horizon	Depth (m)	Description
Ap	0 to .1	Brown (10YR43) moist; heavy clay loam, sandy; subangular blocky weak 2-5mm structure; common 1-2mm roots; moderately moist when sampled; diffuse to
A1	.1 to .4	Brown (10YR43) moist; heavy clay loam, sandy; subangular blocky weak structure; common 1- 2mm roots; moderately moist when sampled; diffuse to
B21	.4 to 1.5	Yellowish brown (10YR56) moist; few 2-10% medium 5-15mm faint brown mottles; clay loam; angular blocky weak structure; few 2-10% medium 2-6mm manganiferous nodules; few 1-2mm roots; moderately moist when sampled; gradual to
B22	1.5 to 2.7	Brownish yellow (10YR66) moist; few 2-10% coarse 15-30mm faint pale mottles; clay loam; angular blocky weak structure; few 2-10% medium 2-6mm manganiferous nodules; moderately moist when sampled; clear to
B23	2.7 to 3.5	Strong brown (7.5YR56) moist; common 10-20% coarse 15-30mm faint red mottles, many 20- 50% coarse 15-30mm distinct pale mottles; heavy clay loam; massive structure; common 10- 20% coarse 6-20mm manganiferous nodules; moderately moist when sampled; clear to
B24	3.5 to 4.1	Brownish yellow (10YR66) moist; few 2-10% coarse 15-30mm faint pale mottles; heavy clay loam; massive structure; common 10-20% coarse 6-20mm manganiferous nodules; moderately moist when sampled; clear to
B25	4.1 to 4.5	Yellowish red (5YR46) moist; few 2-10% medium 5-15mm distinct grey mottles; clay loam; massive structure; common 10-20% coarse 6-20mm manganiferous nodules; moderately moist when sampled; abrupt to
B26	4.5 to 4.9	Light grey (2.5Y71) moist; common 10-20% coarse 15-30mm prominent brown mottles; heavy clay loam, sandy; massive structure; moderately moist when sampled; clear to
B27	4.9 to 5.7	Brown (7.5YR54) moist; few 2-10% medium 5-15mm distinct grey mottles; clay loam, sandy; massive structure; common 10-20% coarse 6-20mm manganiferous nodules; moderately moist when sampled; diffuse to
2B21	5.7 to 7.3	Dark yellowish brown (10YR46) moist; common 10-20% coarse 15-30mm prominent gley mottles; clay loam, sandy; massive structure; moist when sampled; diffuse to
2B22	7.3 to 7.9	Yellowish brown (10YR56) moist; common 10-20% coarse 15-30mm prominent grey mottles; fine sandy clay loam; massive structure; moist when sampled; clear to
2B23	7.9 to 9	Yellowish brown (10YR54) moist; common 10-20% coarse 15-30mm faint pale mottles, few 2- 10% medium 5-15mm faint brown mottles; fine sandy clay loam; massive structure; moist when sampled; diffuse to
3C1	9 to 10.6	Light olive brown (2.5Y54) moist; clayey coarse sand; few 2-10% subrounded metamorphic rock (unidentified) medium pebbles 6-20 mm; few 2-10% subrounded quartz medium pebbles 6-20mm; many 20-50% subrounded metamorphic rock (unidentified) small pebbles 2-6 mm; many 20-50% subrounded quartz small pebbles 2-6 mm; very few <2% subrounded metamorphic rock (unidentified) large pebbles 20-60 mm; very few <2% subrounded quartz large pebbles 20-60 mm; single grain structure; wet when sampled; diffuse to
3C2	10.6 to 10.8	Yellowish brown (10YR56) moist; sandy clay loam; single grain structure; wet when sampled; clear to
3C3	10.8 to 11.2	Light olive brown (2.5Y54) moist; clayey coarse sand; single grain structure; wet when sampled; clear to
4C4	11.2 to 11.7	Yellowish brown (10YR55) moist; fine sandy clay loam; massive structure; wet when sampled; sharp to
5C5	11.7 to 12	Olive yellow (2.5Y66) moist; clay loam, sandy; single grain structure; wet when sampled; clear to
5C6	12 to 12.4	Olive yellow (2.5Y66) moist; clayey sand; few 2-10% subrounded quartz small pebbles 2-6 mm; few 2-10% subrounded metamorphic rock (unidentified) small pebbles 2-6 mm; single grain structure; wet when sampled; diffuse to
5C7	12.4 to 13.2	Light olive brown (2.5Y54) moist; clayey coarse sand; many 20-50% subrounded metamorphic rock (unidentified) small pebbles 2-6 mm; many 20-50% subrounded quartz small pebbles 2-6 mm; common 10-20% subrounded metamorphic rock (unidentified) medium pebbles 6-20 mm; few 2-10% subrounded metamorphic rock (unidentified) large pebbles 20-60 mm; single grain structure; wet when sampled

Project: NQAS

Site: 211

Observation: 1

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	4	5.9	3.1	6.75	1	6.6	4.4
.3	4	5.6	4.4	7	1	6.7	4.5
.6	4	6.1	6.1	7.25	1	6.3	4.5
.8	4	6.2	6.4	7.5	4	6.2	5.5
1	4	6.2	5.9	7.75	4	6.2	7.2
1.25	4	6.2	6.3	8	1	6.4	4.8
1.5	4	6.1	6.0	8.25	1	6.4	4.7
1.75	2	6.0	6.0	8.5	1	6.5	4.5
2	3	5.9	5.5	8.75	1	6.3	4.5
2.25	4	5.9	5.9	9	1	5.7	5.0
2.5	4	5.9	6.1	9.25	4	5.8	7.3
2.75	4	5.8	5.8	9.5	4	6.3	7.5
3	4	5.9	4.8	9.75	4	6.5	7.6
3.25	4	6.0	5.3	10	4	6.1	7.3
3.5	4	5.7	5.4	10.25	4	6.0	7.2
3.75	4	5.8	5.2	10.5	4	6.1	6.3
4	4	5.6	4.7	10.75	2	5.6	5.8
4.25	4	5.7	4.5	11	1	6.1	5.8
4.5		5.9	4.1	11.25	4	6.3	5.6
4.75	1	6.0	4.2	11.5	1	5.4	4.5
5	1	6.1	4.1	11.75	2	6.4	6.7
5.25	4	6.2	5.6	12	1	6.2	5.5
5.5	4	6.3	6.0	12.25		6.8	5.8
5.75	4	6.5	6.5	12.5		6.8	5.4
6	1	6.7	4.4	12.75		6.8	5.3
6.25	1	6.8	4.2	13		6.6	5.5
6.5	1	6.7	4.3	13.2		6.7	5.1

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon 5C7 clay lens at 13.1-13.2m. Basement below - sandstone.

Project: NQAS **Site:** 212 **Observation:** 1

Location: GDA 94 ZONE 55 361379mE 8133126mN Lat: -16.88123 Long: 145.69861

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain **Element:** valley-flat

Classifications:

ASC: REGOLITHIC, Brown-Orthic, Tenosol

Profile Morphology:

Horizon	Depth (m)	Description
Ap	0 to .1	Dark yellowish brown (10YR46) moist; clay loam; subangular blocky weak 2-5mm structure; moderately moist when sampled; clear to
B21	.1 to 1.6	Dark yellowish brown (10YR46) moist; clay loam; massive structure; many 20-50% medium 2- 6mm manganiferous nodules; few 2-10% fine <2mm manganiferous root linings; moderately moist when sampled; diffuse to
B22	1.6 to 2.4	Yellowish brown (10YR56) moist; few 2-10% medium 5-15mm faint pale mottles; clay loam; massive structure; few 2-10% medium 2-6mm manganiferous nodules; moderately moist when sampled; clear to
2B21	2.4 to 2.8	Yellowish brown (10YR54) moist; common 10-20% medium 5-15mm faint pale mottles; coarse sandy loam; many 20-50% subangular gravel small pebbles 2-6 mm; few 2-10% subangular gravel medium pebbles 6-20 mm; massive structure; few 2-10% fine <2mm manganiferous nodules; moist when sampled; sharp to
3B21	2.8 to 3.15	Brown (10YR43) moist; few 2-10% medium 5-15mm prominent brown mottles; clay loam; massive structure; very many >50% coarse 6-20mm manganiferous soft segregations; few 2- 10% fine <2mm manganiferous nodules; moderately moist when sampled; sharp to
3B22	3.15 to 3.5	Yellowish brown (10YR56) moist; many 20-50% coarse 15-30mm faint gley mottles; clay loam; massive structure; few 2-10% medium 2-6mm manganiferous nodules; moist when sampled; clear to
3B23	3.5 to 4.1	Yellowish brown (10YR56) moist; many 20-50% coarse 15-30mm faint grey mottles; light clay; massive structure; moist when sampled; diffuse to
4B21	4.1 to 4.7	Yellowish brown (10YR56) moist; common 10-20% medium 5-15mm faint grey mottles; clay loam, fine sandy; massive structure; moist when sampled; diffuse to
5C1	4.7 to 6	Dark grey (2.5Y41) moist; fine sandy light clay; massive structure; few 2-10% medium 2-6mm organic (humified) root linings; weakly cemented continuous massive organic pan; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	4	5.7	4.3	3.25	4	5.9	5.5
.3	4	5.9	6.2	3.5	4	5.8	7.4
.6	4	6.0	6.5	3.75		6.0	4.5
.8	4	6.0	6.6	4	4	5.9	5.9
1	4	5.7	4.4	4.25		6.1	4.7
1.25	4	5.9	3.2	4.5		6.3	4.7
1.5	4	6.0	4.6	4.75		6.5	3.8
1.75	4	5.6	6.0	5	4	6.6	1.3
2	4	5.4	5.7	5.25	4	6.6	2.8
2.25	4	5.7	6.7	5.5	1	6.7	1.0
2.5	4	6.6	4.0	5.75	4	6.9	1.6
2.75	4	5.9	6.1	6	4	7.1	1.8
3	4	5.8	7.4				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 213 **Observation:** 1

Location: GDA 94 ZONE 55 360403mE 8133882mN Lat: -16.87434 Long: 145.68949

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain

Element: terrace flat

Classifications:

ASC: REGOLITHIC, Brown-Orthic, Tenosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .25	Dark yellowish brown (10YR34) moist; clay loam, fine sandy; weak structure; common 1-2mm roots; dry when sampled; sharp to
A12	.25 to .5	Brown (10YR43) moist; sand; single grain structure; dry when sampled; abrupt to
A13	.5 to .75	Dark yellowish brown (10YR44) moist; clay loam, fine sandy; few 2-10% angular other medium pebbles 6-20 mm; single grain structure; dry when sampled; sharp to
A14	.75 to 1	Dark reddish brown (5YR34) moist; light sandy clay loam; few 2-10% angular other medium pebbles 6-20 mm; massive structure; few 2-10% medium 2-6mm manganiferous nodules; moderately moist when sampled; abrupt to
2A1	1 to 2	Dark yellowish brown (10YR34) moist; clay loam; few 2-10% angular other small pebbles 2-6 mm; very few <2% rounded gravel large pebbles 20-60 mm; very few <2% rounded gravel cobbles 60-200 mm; massive structure; moderately moist when sampled; sharp to
2B21	2 to 2.35	Dark yellowish brown (10YR46) moist; common 10-20% coarse 15-30mm distinct pale mottles, few 2-10% medium 5-15mm faint brown mottles; sandy loam; massive structure; moist when sampled; sharp to
2B22	2.35 to 3	Dark yellowish brown (10YR46) moist; loamy sand; single grain structure; wet when sampled; sharp to
3B21	3 to 3.25	Yellowish brown (10YR56) moist; common 10-20% coarse 15-30mm prominent grey mottles; clay loam, fine sandy; massive structure; wet when sampled; sharp to
3B22	3.25 to 4.1	Dark grey (10YR41) moist; few 2-10% medium 5-15mm prominent brown mottles; clayey sand; massive structure; wet when sampled; diffuse to
4C1	4.1 to 4.85	Dark greenish grey (10Y41) moist; very few <2% coarse 15-30mm faint brown mottles; sand; single grain structure; wet when sampled; sharp to
5D1	4.85 to 5.5	Greyish brown (2.5Y53) moist; coarse sand; single grain structure; wet when sampled; clear to
5D2	5.5 to 6	Brownish yellow (10YR68) moist; coarse sand; common 10-20% subrounded quartz small pebbles 2-6 mm; very few <2% subrounded gravel medium pebbles 6-20 mm; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	4	5.3	2.7	3		6.6	7.1
.3	4	5.9	2.9	3.25		6.8	4.6
.5	4	6.3	3.2	3.5		6.8	4.1
.6	4	5.8	3.5	3.75		6.3	4.0
.8	4	5.1	5.8	4		6.4	4.8
1	4	6.4	5.0	4.25	4	6.5	3.1
1.25	4	6.3	2.9	4.5	4	6.1	2.8
1.5	4	6.8	6.1	4.75	4	5.8	3.4
1.75	4	6.8	4.8	5	1	6.2	2.1
2	2	7.2	4.8	5.25	4	6.5	6.9
2.25	4	7.0	7.0	5.5	4	6.5	6.7
2.5	1	7.1	7.2	5.75		6.8	5.4
2.75	4	6.8	5.4	6		6.7	4.7

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon	A13/A14	CF's are manufactured glass
Horizon	2A1	OT CF's are manufactured glass, at 3.1m.
Horizon	4C1	Clay lens at 4.55m
Horizon	5D1	clay lenses at 5.4m, 10YR68

Project: NQAS **Site:** 214 **Observation:** 1

Location: GDA 94 ZONE 55 361075mE 8133916mN Lat: -16.87407 Long: 145.6958

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain **Element:** valley-flat

Depth to Water: 6.4

Disturbances: Cultivation - Rainfed, Highly disturbed e.g. mining, urban

Classifications:

ASC: REGOLITHIC, Brown-Orthic, Tenosol

Profile Morphology:

Horizon	Depth (m)	Description
Ap	0 to .25	Dark greyish brown (10YR42) moist; loamy sand; subangular blocky weak 2-5mm structure; common 1-2mm roots; moderately moist when sampled; clear to
A2	.25 to .85	Brown (10YR43) moist; loamy fine sand; single grain structure; moderately moist when sampled; clear to
B21	.85 to 1.6	Dark greyish brown (10YR42) moist; few 2-10% medium 5-15mm faint grey mottles; clay loam, fine sandy; massive structure; very few <2% fine <2mm manganiferous nodules; very few <2% medium 2-6mm manganiferous nodules; moderately moist when sampled; diffuse to
B22	1.6 to 2.5	Dark yellowish brown (10YR44) moist; few 2-10% coarse 15-30mm prominent brown mottles; heavy sandy clay loam; massive structure; common 10-20% medium 2-6mm manganiferous nodules; moderately moist when sampled; clear to
B23	2.5 to 2.95	Yellowish brown (10YR54) moist; few 2-10% medium 5-15mm faint grey mottles, few 2-10% medium 5-15mm faint brown mottles; sandy clay loam; massive structure; few 2-10% medium 2- 6mm manganiferous soft segregations; moderately moist when sampled; clear to
2B2	2.95 to 4.05	Dark yellowish brown (10YR44) moist; few 2-10% coarse 15-30mm faint grey mottles; loamy sand; single grain structure; moist when sampled; sharp to
3B2	4.05 to 4.75	Light grey (5Y72) moist; common 10-20% coarse 15-30mm prominent brown mottles; heavy clay loam; massive structure; moist when sampled; abrupt to
4B2	4.75 to 5.35	Light olive grey (5Y62) moist; common 10-20% medium 5-15mm prominent brown mottles; fine sandy loam; massive structure; moist when sampled; clear to
5B2	5.35 to 5.75	Light olive grey (5Y62) moist; few 2-10% coarse 15-30mm faint brown mottles; clay loam, fine sandy; massive structure; moist when sampled; gradual to
6C1	5.75 to 6.2	Light olive grey (5Y62) moist; few 2-10% fine <5mm distinct orange mottles; sand; single grain structure; moist when sampled; clear to
6C2	6.2 to 7.3	Grey (2.5Y51) moist; few 2-10% fine <5mm faint brown mottles; fine sandy clay loam; massive structure; wet when sampled; gradual to
7C3	7.3 to 8.2	Greenish grey (10Y51) moist; sand; wet when sampled; gradual to
8C4	8.2 to 9	Very dark grey (N30) moist; fine sandy clay loam; massive structure; wet when sampled; clear to
9C5	9 to 9.2	Dark greenish grey (10Y41) moist; sand; single grain structure; wet when sampled; abrupt to
10C6	9.2 to 9.6	Very dark grey (5Y31) moist; fine sandy clay loam; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	5.0	2.4
.3	1	4.9	2.8
.6	2	5.7	3.5
.8	2	5.6	3.2
1	2	5.6	3.1
1.25	4	5.6	4.3
1.5	4	5.7	5.4
1.75	4	6.7	6.8
2	1	6.2	4.8
2.25	1	6.1	4.5
2.5	4	6.2	6.7
2.75		5.9	4.7
3	4	6.1	6.4

Project: NQAS Site: 214 Observation: 1

Depth	H2O2-	PH-2	PH-3
3.25	2	6.2	4.8
3.5	1	6.1	5.3
3.75	1	6.2	5.5
4	1	6.4	4.9
4.25	4	6.4	6.8
4.5		6.4	4.7
4.75		6.1	4.6
5		6.4	4.8
5.25		6.0	4.9
5.5		6.2	4.5
5.75		6.3	5.0
6		6.7	5.0
6.25		6.3	4.8
6.5		6.3	4.7
6.75		6.0	4.8
7		5.7	4.0
7.25		6.0	3.6
7.5	4	6.1	1.6
7.75	4	6.4	1.8
8	4	6.5	1.7
8.25	4	6.4	1.2
8.5	4	5.8	1.0
8.75	4	6.5	1.0
9	4	6.7	0.9
9.2	4	6.5	1.1
9.5	4	6.8	0.7

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon	2B2	olive-coloured lens at 3.5m
Horizon	4B2	fine sand lens at 5.0m.
Horizon	6C1	orange lens at 6.1m.
Horizon	8C4	Lots of fine organics, mostly roots
Horizon	10C6	Lots of fine organics, mostly roots

Project: NQAS **Site:** 215 **Observation:** 1

Location: GDA 94 ZONE 55 358243mE 8148817mN Lat: -16.73924 Long: 145.67016

Described By: David Morrison (MORD)

Landscape:

Landform Pattern: beach ridge plain **Element:** supratidal flat

Surface Condition: Soft

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .1	Dark greyish brown (2.5Y42) moist; sandy clay loam; very few <2% subangular quartz small pebbles 2-6 mm; massive structure; moderately moist when sampled; gradual to
B21	.1 to .75	Very dark greyish brown (2.5Y32) moist; silty clay loam; very few <2% subangular quartz small pebbles 2-6 mm; massive structure; very few <2% medium 2-6mm organic (humified) fragments; wet when sampled; clear to
B22	.75 to 1.15	Dark greyish brown (2.5Y42) moist; clayey sand; massive structure; wet when sampled; abrupt to
2C1	1.15 to 1.8	Very dark grey (2.5Y31) moist; silty loam; massive structure; many 20-50% coarse 6-20mm organic (humified) fragments; wet when sampled; abrupt to
2C2	1.8 to 2	Dark greyish brown (2.5Y42) moist; sand; single grain structure; wet when sampled; abrupt to
2C3	2 to 2.4	Black (2.5Y2.5/1) moist; silty loam; massive structure; very few <2% medium 2-6mm organic (humified) fragments; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	6.4	1.9
.3		6.4	2.4
.6		6.2	2.6
.8		6.1	2.8
1		6.1	2.8
1.25	1	6.3	0.9
1.5	4	6.1	0.9
1.75	4	5.7	0.9
2	4	5.7	1.0
2.25	4	5.4	0.9
2.4	4	5.9	0.8

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Observation Notes:

Vegetation Rhizophora macronata, Brniera sexangla (T6M, T6S). Melaleuca spp, Ficus spp, Strangler fig (T7S, T7I, T7L)

Project: NQAS **Site:** 216 **Observation:** 1

Location: GDA 94 ZONE 55 358162mE 8148464mN Lat: -16.74242 Long: 145.66938

Described By: David Morrison (MORD)

Landscape:

Landform Pattern: beach ridge plain

Element: swale

Runoff: Slow

Permeability: Highly permeable

Drainage: Well drained

Depth to Water: 1.2

Classifications:

ASC: REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
C1	0 to .7	Very dark greyish brown (2.5Y32) moist; silty clay loam; subangular blocky weak 5-10mm structure; moist when sampled; clear to
2A1	.7 to 1.4	Greyish brown (2.5Y52) moist; few 2-10% medium 5-15mm distinct orange mottles; loamy sand; subangular blocky weak 2-5mm structure; moderately moist when sampled; gradual to
2A2	1.4 to 1.85	Grey (5Y61) moist; few 2-10% medium 5-15mm distinct orange mottles; clayey sand; single grain structure; wet when sampled; diffuse to
2B21	1.85 to 2.65	Yellowish red (5YR58) moist; many 20-50% coarse 15-30mm prominent red mottles, many 20- 50% coarse 15-30mm distinct yellow mottles; sandy loam; single grain structure; wet when sampled; gradual to
2B22	2.65 to 2.9	Olive yellow (2.5Y66) moist; common 10-20% medium 5-15mm distinct yellow mottles; sandy loam; single grain structure; wet when sampled; abrupt to
3C1	2.9 to 3	Yellowish brown (10YR54) moist; many 20-50% coarse 15-30mm distinct brown mottles; clayey sand; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		5.8	5.6
.3		6.1	5.3
.6		5.5	5.2
.8		7.4	7.1
1		7.3	6.1
1.25		7.2	5.7
1.5		7.0	5.7
1.75		7.4	5.6
2		7.0	5.8
2.25		7.3	6.3
2.5		7.3	6.2
2.75		6.9	4.8
3	1	6.9	4.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 217 **Observation:** 1

Location: GDA 94 ZONE 55 364314mE 8138792mN Lat: -16.8302 Long: 145.7265

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain **Element:** beach ridge

Depth to Water: 2.5 **Surface Condition:** Loose

Disturbances: Complete clearing - pasture - cultivation at some stage

Classifications:

ASC: Tenosol

Profile Morphology:

Horizon	Depth (m)	Description
A11p	0 to .35	Brown (10YR43) moist; sandy clay loam; platy weak 5-10mm structure; common 1-2mm roots; dry when sampled; gradual to
A12	.35 to .5	Very dark greyish brown (10YR32) moist; clayey sand; single grain structure; common 1-2mm roots; dry when sampled; sharp to
A2	.5 to .9	Yellowish brown (10YR56) moist; coarse sand; many 20-50% subrounded quartz small pebbles 2-6 mm; single grain structure; dry when sampled; gradual to
2A1	.9 to 1.5	Dark yellowish brown (10YR46) moist; coarse sand; common 10-20% subrounded quartz small pebbles 2-6 mm; single grain structure; moderately moist when sampled; gradual to
2B21	1.5 to 1.9	Light brownish grey (2.5Y62) moist; few 2-10% medium 5-15mm prominent orange mottles; clayey sand; single grain structure; moist when sampled; abrupt to
2B22	1.9 to 2.2	Light grey (2.5Y72) moist; common 10-20% coarse 15-30mm prominent orange mottles; fine sandy loam; massive structure; few 2-10% medium 2-6mm ferromanganiferous concretions; moist when sampled; abrupt to
2C1	2.2 to 2.3	Grey (10YR51) moist; fine sandy clay loam; massive structure; moist when sampled; abrupt to
2C2	2.3 to 2.5	Dark reddish grey (2.5YR41) moist; clay loam, sandy; massive structure; wet when sampled; abrupt to
3C3	2.5 to 3.45	Light reddish grey (2.5YR71) moist; clayey coarse sand; many 20-50% subrounded quartz medium pebbles 6-20 mm; common 10-20% subrounded quartz small pebbles 2-6 mm; single grain structure; very few <2% coarse 6-20mm earthy soft segregations; wet when sampled; clear to
4C4	3.45 to 4.2	Yellow (10YR76) moist; clayey coarse sand; few 2-10% subrounded quartz medium pebbles 6-20 mm; very few <2% subrounded quartz large pebbles 20-60 mm; very few <2% subrounded quartz cobbles 60-200 mm; common 10-20% subrounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled; gradual to
5C5	4.2 to 4.8	Light yellowish brown (2.5Y64) moist; coarse sand; common 10-20% subrounded quartz medium pebbles 6-20 mm; very few <2% subrounded platy metamorphic rock (unidentified) small pebbles 2-6 mm; single grain structure; very few <2% very coarse 20-60mm earthy soft segregations; wet when sampled; clear to
6C6	4.8 to 5.9	Grey (N60) moist; coarse sand; many 20-50% subrounded quartz small pebbles 2-6 mm; few 2- 10% subrounded quartz medium pebbles 6-20 mm; very few <2% subrounded platy metamorphic rock (unidentified) small pebbles 2-6 mm; single grain structure; wet when sampled; gradual to
7C7	5.9 to 7.2	Grey (N50) moist; coarse sand; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	2	3.8	1.4	3.5	2	3.8	2.7
.3	2	4.1	2.1	3.75	1	4.3	2.4
.6	1	5.2	4.1	4	1	4.5	3
.8		5.4	3.9	4.25	1	4.4	3.3
1	2	5.3	4.1	4.5	1	4.5	3.5
1.25	2	4.8	3.4	4.75	1	4.7	4.8
1.5	2	4.8	4.0	5	1	5.3	4.9
1.75	1	4.8	4.4	5.25	1	5.6	4.9
2	1	4.4	3.8	5.5	4	5.5	4.9
2.25	2	3.5	0.9	5.75	4	5.5	0.7
2.5	3	3.5	1.0	6	4	5.7	0.7
2.75	2	3.7	2.0	6.5	4	5.6	0.3
3	2	3.7	1.6	7	4	6.0	.3
3.25	1	3.7	2.5				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 218 **Observation:** 1

Location: GDA 94 ZONE 55 364630mE 8138724mN Lat: -16.83083 Long: 145.72946

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain

Element: tidal flat

Classifications:

ASC: SULFURIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .3	Brown (10YR43) moist; many 20-50% medium 5-15mm faint orange mottles; clay loam, sandy; subangular blocky weak 5-10mm structure
B21i	.3 to .5	Greyish brown (10YR52) moist; common 10-20% medium 5-15mm faint orange mottles, few 2- 10% medium 5-15mm faint dark mottles; sandy light clay; massive structure
B22ia	.5 to .8	Dark grey (5Y41) moist; very few <2% fine <5mm distinct yellow jarosite (from pyrite) mottles; fibric sandy clay loam; massive structure
C1	.8 to 1.4	Very dark grey (N30) moist; fibric sandy clay loam; massive structure
2C2	1.4 to 2.8	Dark greenish grey (10Y41) moist; clayey coarse sand; many 20-50% subrounded quartz small pebbles 2-6 mm; few 2-10% subrounded quartz medium pebbles 6-20 mm; very few <2% subangular platy quartz small pebbles 2-6 mm; single grain structure; common 10-20% very coarse 20-60mm earthy soft segregations
2C3	2.8 to 3	Dark greenish grey (10Y41) moist; loamy sand; few 2-10% subrounded quartz small pebbles 2-6 mm; single grain structure
2C4	3 to 3.6	Dark greenish grey (10Y41) moist; coarse sand; many 20-50% subrounded quartz small pebbles 2-6 mm; few 2-10% subrounded quartz medium pebbles 6-20 mm; single grain structure
2C5	3.6 to 4.8	Grey (5Y61) moist; coarse sand; abundant 50-90% subrounded quartz small pebbles 2-6 mm; few 2-10% subrounded quartz medium pebbles 6-20 mm; very few <2% subrounded platy metamorphic rock (unidentified) small pebbles 2-6 mm; single grain structure

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	4.1	2.1
.3	1	3.3	2.0
.4	1	2.7	1.2
.6	4	2.4	0.0
.8	4	5.1	0.1
1	4	5.6	0.1
1.25	4	5.8	0.1
1.5	4	6.0	0.0
1.75	4	5.9	0.1
2	4	6.0	0.2
2.25	4	6.0	0.3
2.5	4	6.0	0.3
2.75	4	6.1	0.3
3	4	5.7	0.2
3.25	4	5.7	0.2
3.5	4	6.1	0.0
3.75	4	6.0	0.2
4	4	6.2	0.4
4.25	4	6.2	0.4
4.5	4	6.0	0.3
4.75	4	6.1	0.1

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 219 **Observation:** 1

Location: GDA 94 ZONE 55 363717mE 8138592mN Lat: -16.83197 Long: 145.72088

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Depth to Water: 1.5

Classifications:

ASC: GREY, Dermosol

Profile Morphology:

Horizon	Depth (m)	Description
A11p	0 to .4	Very dark grey (10YR31) moist; few 2-10% fine <5mm distinct red mottles; heavy clay loam; subangular blocky moderate 2-5mm structure; dry when sampled; sharp to
A12p	.4 to .55	Very dark grey (10YR31) moist; few 2-10% fine <5mm distinct red mottles; light clay; massive structure; moderately moist when sampled; sharp to
B2	.55 to 1.1	Grey (5Y51) moist; many 20-50% coarse 15-30mm distinct red mottles, common 10-20% coarse 15-30mm distinct orange mottles; light clay; angular blocky weak 5-10mm structure; moderately moist when sampled; clear to
C1	1.1 to 1.5	Dark greyish brown (2.5Y42) moist; sandy light clay; massive structure; moist when sampled; gradual to
2C1	1.5 to 3.4	Very dark grey (5Y31) moist; fibric clay loam; massive structure; very few <2% coarse 6-20mm other soft segregations; wet when sampled; gradual to
2C2	3.4 to 4	Dark grey (5Y41) moist; many 20-50% very coarse >30mm prominent dark mottles; sandy loam; massive structure; wet when sampled; gradual to
3C3	4 to 4.7	Grey (5Y51) moist; very few <2% medium 5-15mm distinct dark mottles; loamy sand; few 2-10% subrounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled
3C4	4.7 to 6	Olive grey (5Y52) moist; very few <2% medium 5-15mm distinct dark mottles; loamy sand; very few <2% subrounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	1	5.3	2.6	3	4	6.6	1.1
.3	1	5.2	2.8	3.25	4	6.6	1.5
.5		4.6	2.6	3.5	4	6.4	1.3
.6		4.6	3.0	3.75	4	5.7	1.3
.8		4.2	2.9	4	4	6.1	1.4
1		4.3	3.6	4.25	4	6.4	1.5
1.25		4.5	2.3	4.5	4	6.7	1.6
1.5		4.2	2.4	4.75	4	6.3	1.7
1.75	4	4.7	1.3	5	4	6.3	1.8
2	4	5.6	1.2	5.25	4	6.4	1.8
2.25	4	6.3	1.4	5.5	4	6.3	1.5
2.5	4	5.9	1.3	5.75	4	6.3	1.6
2.75	4	6.5	1.3	6	3	6.2	1.7

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon A12p compacted

Project: NQAS **Site:** 220 **Observation:** 1

Location: GDA 94 ZONE 55 364416mE 8139138mN Lat: -16.82708 Long: 145.72748

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Classifications:

ASC: SULFIDIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .4	Dark grey (10YR41) moist; few 2-10% medium 5-15mm faint orange mottles; sandy loam; subangular blocky weak 5-10mm structure; dry when sampled; clear to
B2	.4 to 1.05	Grey (2.5Y51) moist; many 20-50% coarse 15-30mm distinct orange mottles, few 2-10% medium 5-15mm faint brown mottles; light clay; angular blocky weak 5-10mm structure; moderately moist when sampled; gradual to
B3	1.05 to 1.5	Very dark grey (N30) moist; common 10-20% very coarse >30mm faint dark mottles; light clay; massive structure; wet when sampled; clear to
C1	1.5 to 2.8	Dark grey (N40) moist; fibric light clay; massive structure; wet when sampled; sharp to
2C2	2.8 to 3.75	Greenish grey (10Y51) moist; coarse sand; many 20-50% subrounded quartz small pebbles 2-6 mm; few 2-10% subrounded quartz medium pebbles 6-20 mm; single grain structure; few 2-10% coarse 6-20mm earthy soft segregations; wet when sampled; abrupt to
2C3	3.75 to 4.55	Dark greenish grey (10Y41) moist; fine sand; single grain structure; wet when sampled; sharp to
3C4	4.55 to 5.35	Dark grey (N40) moist; fine sandy light clay; single grain structure; wet when sampled
4C5	5.35 to 6	Grey (N50) moist; sand; few 2-10% subrounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	4	4.7	3.1	3.25	4	7.2	1.7
.3	3	5.1	3.2	3.5	4	7.2	1.8
.6	1	6.9	4.5	3.75	4	6.8	1.7
.8	1	6.9	5.0	4	4	6.7	1.6
1	1	6.9	4.5	4.25	4	6.7	2.2
1.25	4	7.4	1.9	4.5	4	7.0	1.4
1.5	4	7.2	1.8	4.75	4	7.3	1.8
1.75	4	7.1	1.8	5	4	8.2	1.8
2	4	7.1	2.0	5.25	4	8.7	2.4
2.25	4	6.9	1.7	5.5	4	8.2	1.8
2.5	4	6.6	1.6	5.75	4	8.4	1.8
2.75	4	6.9	1.7	6	3	8.3	1.8
3	4	6.9	1.6				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon	B3	sand lens at 1.5
Horizon	2C3	Clay lens at 3.8m, mica lens at 4.3m

Project: NQAS **Site:** 221 **Observation:** 1

Location: GDA 94 ZONE 55 364610mE 8139575mN Lat: -16.82314 Long: 145.72932

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: beach ridge plain **Element:** beach ridge

Depth to Water: 2.2

Surface Condition: Loose

Disturbances: Complete clearing - pasture - cultivation at some stage

Classifications:

ASC: STRATIC, Rudosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .55	Black (10YR21) moist; loamy sand; single grain structure; common 1-2mm roots; dry when sampled; abrupt to
B21	.55 to .8	Olive (5Y43) moist; sand; single grain structure; dry when sampled; clear to
B22	.8 to 1.05	Light olive brown (2.5Y54) moist; few 2-10% very coarse >30mm faint brown mottles; sand; single grain structure; moderately moist when sampled; clear to
2C1	1.05 to 1.45	Pale yellow (2.5Y84) moist; coarse sand; single grain structure; moist when sampled; gradual to
2C2	1.45 to 2.2	Pale yellow (2.5Y73) moist; coarse sand; few 2-10% subrounded quartz large pebbles 20-60 mm; very few <2% subrounded platy metamorphic rock (unidentified) large pebbles 20-60 mm; common 10-20% subrounded quartz small pebbles 2-6 mm; single grain structure; moist when sampled; gradual to
3C3	2.2 to 3.25	Light grey (5Y72) moist; sand; few 2-10% subrounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled
4C4	3.25 to 3.45	Light grey (5Y72) moist; coarse sand; very few <2% subrounded quartz medium pebbles 6-20 mm; abundant 50-90% subrounded quartz small pebbles 2-6 mm; very few <2% subrounded platy metamorphic rock (unidentified) small pebbles 2-6 mm; single grain structure; wet when sampled
5C5	3.45 to 3.6	Dark greenish grey (10Y31) moist; sandy light clay; massive structure; wet when sampled
6C6	3.6 to 6	Light grey (5Y72) moist; coarse sand; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1		5.9	5.3	3.35		6.9	5.8
.3		6.2	5.3	3.5	4	6.6	1.7
.6		6.2	5.6	3.75		6.9	5.8
.8		6.3	5.9	4		6.9	5.7
1		6.4	5.6	4.25		6.9	5.7
1.25		7.1	6.0	4.5		6.7	4.9
1.5		7.0	6.1	4.75		6.6	5.9
1.75		7.0	6.1	5		6.6	4.8
2		7.0	6.1	5.25		6.5	6.0
2.25		6.8	5.3	5.5		6.4	5.8
2.5		6.3	5.9	5.75		6.2	2.0
2.75		6.1	5.9	6		6.6	1.8
3		6.2	5.4				
3.25		6.1	5.7				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 222 **Observation:** 1

Location: GDA 94 ZONE 55 364048mE 8139318mN Lat: -16.82543 Long: 145.72403

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain

Element: prior stream

Depth to Water: .9

Classifications:

ASC: SULFURIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .25	Dark greyish brown (10YR42) moist; few 2-10% fine <5mm faint brown mottles; sandy clay loam; subangular blocky weak 2-5mm structure; very few <2% fine <2mm ferruginous root linings; moderately moist when sampled; sharp to
B2	.25 to .6	Greyish brown (10YR52) moist; common 10-20% medium 5-15mm distinct orange mottles; clay loam, sandy; massive structure; very few <2% medium 2-6mm ferruginous root linings; moist when sampled; sharp to
B3	.6 to .9	Dark greyish brown (2.5Y42) moist; fibric clay loam, sandy; massive structure; moist when sampled; sharp to
C1	.9 to 1.1	Dark greenish grey (10Y31) moist; fibric sandy light clay; wet when sampled; sharp to
2C2	1.1 to 1.45	Dark grey (5Y41) moist; clayey sand; massive structure; wet when sampled; gradual to
2C3	1.45 to 2.15	Dark grey (5Y41) moist; sand; few 2-10% subrounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled; gradual to
3C4	2.15 to 3.1	Grey (5Y51) moist; coarse sand; common 10-20% subrounded quartz medium pebbles 6-20 mm; few 2-10% subrounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled; clear to
4C5	3.1 to 3.45	Dark grey (5Y41) moist; sandy clay loam; massive structure; wet when sampled; clear to
5C6	3.45 to 4.4	Dark grey (5Y41) moist; loamy sand; single grain structure; common 10-20% coarse 6-20mm earthy soft segregations; wet when sampled; clear to
6C7	4.4 to 4.8	Grey (5Y61) moist; sand; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	5.6	3.1
.3		6.0	4.4
.6		5.6	4.2
.8	1	5.6	1.2
1	4	6.7	1.4
1.25	4	6.9	1.6
1.5	4	6.9	1.8
1.75	4	7.2	2.0
2	4	6.9	1.8
2.25	4	6.9	1.8
2.5	4	7.3	1.8
2.75	4	7.4	1.9
3	4	7.3	1.8
3.25	4	6.6	2.6
3.5	4	6.8	1.6
3.75	4	6.8	1.7
4	4	6.7	1.5
4.25	4	7.0	2.0
4.5	4	7.4	1.5
4.75	4	7.3	1.6

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon	B3	sand lenses
Horizon	C1	sand lenses

Project: NQAS **Site:** 223 **Observation:** 1

Location: GDA 94 ZONE 55 363917mE 8140298mN Lat: -16.81656 Long: 145.72286

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Classifications:

ASC: REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A2p	0 to .35	Very dark greyish brown (2.5Y32) moist; light clay loam, sandy; subangular blocky weak 5-10mm structure; many >5mm roots; moderately moist when sampled; sharp to
B2	.35 to .9	Grey (2.5Y51) moist; common 10-20% coarse 15-30mm faint orange mottles, very few <2% medium 5-15mm distinct dark mottles; heavy clay loam, sandy; subangular blocky weak 10- 20mm structure; moist when sampled; gradual to
C1	.9 to 1.6	Grey (5Y51) moist; loamy coarse sand; few 2-10% subrounded quartz small pebbles 2-6 mm; single grain structure; moist when sampled; clear to
2C2	1.6 to 2.1	Dark greenish grey (10Y31) moist; loamy sand; few 2-10% subrounded quartz small pebbles 2-6 mm; single grain structure; few 2-10% coarse 6-20mm earthy soft segregations; weakly cemented continuous massive organic pan; wet when sampled
3C3	2.1 to 2.85	Dark greenish grey (10Y41) moist; coarse sand; common 10-20% subrounded quartz small pebbles 2-6 mm; very few <2% subrounded quartz large pebbles 20-60 mm; single grain structure; wet when sampled; sharp to
4C4	2.85 to 4.05	Dark greenish grey (10Y41) moist; fine sandy loam; very few <2% angular platy shell small pebbles 2-6 mm; wet when sampled; abrupt to
5C5	4.05 to 5.5	Dark greenish grey (10Y31) moist; sapric light clay; very few <2% angular platy shell small pebbles 2-6 mm; massive structure; wet when sampled
6C6	5.5 to 6	Dark grey (5Y41) moist; fine sandy loam; very few <2% angular platy shell small pebbles 2-6 mm; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	2	5.2	2.3	3.25	1	7.4	2.8
.3	1	6.9	5.0	3.5	1	7.6	1.9
.6		7.7	5.7	3.75	1	7.6	3.4
.8		7.2	5.3	4	4	8.0	6.6
1		6.9	5.2	4.25	4	8.3	6.6
1.25		7.0	5.8	4.5	4	8.4	6.6
1.5		7.5	1.7	4.75	4	8.7	6.7
1.75	4	7.5	1.2	5	4	8.8	5.9
2	4	7.5	1.5	5.25	4	8.6	5.6
2.25	4	7.5	1.6	5.5	4	8.5	1.8
2.5	4	7.4	1.2	5.75	4	8.3	6.5
2.75	4	7.5	1.6	6	4	8.4	6.4
3	4	7.0	1.8				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon	C1	clay lens @ 1.1m
Horizon	4C4	shells within 3.9-4.1m
Horizon	5C5	shell lens at 4.8m

Project: NQAS **Site:** 224 **Observation:** 1

Location: GDA 94 ZONE 55 363508mE 8140703mN Lat: -16.81288 Long: 145.71905

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain

Element: fill-top

Depth to Water: 2.1

Classifications:

ASC: STRATIC, Rudosol

Profile Morphology:

Horizon	Depth (m)	Description
M1	0 to .25	Very dark greyish brown (2.5Y32) moist; fine sand; single grain structure; moderately moist when sampled; sharp to
A21	.25 to .55	Greyish brown (2.5Y53) moist; fine sand; single grain structure; dry when sampled; diffuse to
A22e	.55 to .9	Light grey (2.5Y72) moist; sand; single grain structure; few 2-10% medium 2-6mm organic (humified) soft segregations; moderately moist when sampled; diffuse to
B21	.9 to 2.1	Light yellowish brown (2.5Y64) moist; sand; single grain structure; moist when sampled; diffuse to
B22	2.1 to 2.7	Light olive grey (5Y62) moist; sand; single grain structure; wet when sampled; diffuse to
B3	2.7 to 3.3	Light grey (2.5Y72) moist; sand; single grain structure; wet when sampled; abrupt to
C1	3.3 to 3.6	White (N80) moist; coarse sand; few 2-10% subrounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled; clear to
C2	3.6 to 4.6	Light grey (5Y72) moist; sand; single grain structure; wet when sampled; clear to
C3	4.6 to 5.05	Grey (2.5Y51) moist; sand; single grain structure; wet when sampled; clear to
2C4	5.05 to 7.2	Dark greenish grey (10Y41) moist; loamy fine sand; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	1	5.6	4.5	3.75		6.0	5.4
.3		5.6	5.1	4		5.9	5.3
.6		5.7	5.7	4.25		5.9	4.8
.8		6.3	5.6	4.5		6.0	5.7
1		6.0	5.7	4.75		6.4	5.1
1.25		5.8	5.8	5		6.6	3.4
1.5		5.9	5.7	5.25	4	6.7	1.6
1.75		6.1	5.7	5.5	4	6.5	2.1
2		6.4	5.9	5.75	4	6.8	2.6
2.25		6.0	5.9	6	4	6.7	2.1
2.5		6.0	5.2	6.25	4	6.8	2.6
2.75		5.8	5.7	6.5	4	6.9	1.8
3		6.4	6.0	6.75	4	6.9	1.7
3.25		6.1	5.9	7	1	6.6	1.7
3.5		6.3	5.7	7.2	1	6.4	2.0

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 225 **Observation:** 1

Location: GDA 94 ZONE 55 363686mE 8137241mN Lat: -16.84418 Long: 145.72051

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain

Element: backplain

Classifications:

ASC: KANDOSOLIC, EXTRATIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .35	Dark brown (10YR33) moist; common 10-20% fine <5mm faint brown mottles; clay loam, sandy; subangular blocky weak 2-5mm structure; moderately moist when sampled; clear to
B21	.35 to .6	Dark greyish brown (10YR42) moist; many 20-50% medium 5-15mm distinct orange mottles, few 2-10% very coarse >30mm faint brown mottles; loamy fine sand; single grain structure; moderately moist when sampled; clear to
B22	.6 to 1	Dark greyish brown (2.5Y43) moist; common 10-20% medium 5-15mm distinct orange mottles, common 10-20% medium 5-15mm distinct brown mottles; loamy fine sand; massive structure; moderately moist when sampled; diffuse to
B23	1 to 1.45	Grey (5Y51) moist; common 10-20% medium 5-15mm distinct orange mottles; light clay; massive structure; moist when sampled; diffuse to
B24	1.45 to 2.05	Greenish grey (10Y51) moist; few 2-10% medium 5-15mm distinct orange mottles; light medium clay; massive structure; wet when sampled; clear to
B3	2.05 to 2.55	Greenish grey (10Y51) moist; loam; massive structure; wet when sampled; clear to
2C1	2.55 to 5.25	Very dark grey (10YR31) moist; hemic peat; massive structure; wet when sampled; diffuse to
2C2	5.25 to 6	Very dark grey (2.5Y31) moist; sapric light clay; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	1	4.2	2.4	3.25	4	7.1	1.2
.3	1	4.0	3.0	3.5	4	7.3	1.2
.6	1	4.0	2.5	3.75	4	7.3	0.8
.8	2	4.6	3.3	4	4	7.2	0.8
1	2	4.9	3.7	4.25	4	7.2	1.0
1.25	2	5.4	3.2	4.5	4	7.2	0.8
1.5	2	5.9	3.7	4.75	4	7.3	0.8
1.75	2	5.7	3.7	5	4	7.2	0.8
2	2	5.9	4.2	5.25	4	7.1	1.7
2.25	2	5.9	4.4	5.5	4	7.1	0.9
2.5	2	6.3	2.4	5.75	4	7.2	0.9
2.75	4	6.7	1.2	6	4	7.1	1.6
3	4	7.0	1.2				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon B22 clay lens 0.8m

Project: NQAS **Site:** 226 **Observation:** 1

Location: GDA 94 ZONE 55 366153mE 8133556mN Lat: -16.87762 Long: 145.74344

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: tidal flat **Element:** intertidal flat

Disturbances: Highly disturbed e.g. mining, urban

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .2	Very dark grey (5Y31) moist; fibric sandy clay loam; wet when sampled; gradual to
B21	.2 to .5	Dark greenish grey (10Y41) moist; few 2-10% medium 5-15mm distinct orange mottles; light clay; massive structure; very few <2% medium 2-6mm earthy fragments; wet when sampled; gradual to
B22	.5 to .9	Dark grey (5Y41) moist; very few <2% fine <5mm faint orange mottles; light medium clay; massive structure; wet when sampled; gradual to
B23ia	.9 to 1.1	Very dark grey (5Y31) moist; few 2-10% medium 5-15mm distinct yellow jarosite (from pyrite) mottles; light medium clay; massive structure; wet when sampled; sharp to
2C1	1.1 to 1.45	Dark greenish grey (10Y31) moist; loam; few 2-10% subrounded quartz small pebbles 2-6 mm; very few <2% subrounded quartz medium pebbles 6-20 mm; single grain structure; wet when sampled; clear to
3C2	1.45 to 2	Dark grey (N40) moist; sand; single grain structure; wet when sampled; clear to
4C3	2 to 2.4	Dark grey (N40) moist; clayey coarse sand; massive structure; wet when sampled; clear to
5C4	2.4 to 2.7	Dark grey (N40) moist; few 2-10% very coarse >30mm faint orange mottles; coarse sand; few 2- 10% subrounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled; clear to
6C5	2.7 to 2.95	Dark grey (N40) moist; sand; single grain structure; wet when sampled; clear to
7C6	2.95 to 3.2	Very dark grey (N30) moist; clayey sand; many 20-50% angular platy charcoal large pebbles 20- 60 mm; massive structure; wet when sampled; clear to
8D1	3.2 to 3.75	Olive grey (5Y42) moist; common 10-20% very coarse >30mm faint brown mottles; heavy clay loam, sandy; massive structure; wet when sampled; clear to
8D2	3.75 to 4.3	Light olive brown (2.5Y54) moist; common 10-20% medium 5-15mm faint brown mottles, common 10-20% coarse 15-30mm distinct pale mottles; clay loam, sandy; massive structure; uncemented continuous massive organic pan; wet when sampled
8D3	4.3 to 4.45	Olive (5Y53) moist; gravel; very abundant >90% subangular other large pebbles 20-60 mm; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	2	6.1	2.4	2.5	3	8.4	1.5
.3	2	6.0	4.3	2.75	2	8.0	6.2
.6	2	5.4	3.3	3	4	7.5	1.6
.8	2	4.5	2.7	3.25	2	7.6	5.6
1	2	5.3	2.4	3.5	2	7.4	3.1
1.25	4	7.0	2.6	3.75	1	7.1	6.1
1.5	4	7.8	2.0	4	1	7.1	6.3
1.75	4	7.3	1.8	4.25	2	7.3	6.3
2	4	7.5	1.8				
2.25	4	7.8	2.0				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Observation Notes:

Location Park between airport and railway. Hit rock stopped Geoprobe.

Project: NQAS **Site:** 227 **Observation:** 1

Location: GDA 94 ZONE 55 365416mE 8134221mN Lat: -16.87157 Long: 145.73656

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain **Element:** supratidal flat

Depth to Water: .01

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .2	Dark greyish brown (2.5Y42) moist; common 10-20% fine <5mm faint orange mottles; sandy clay loam; massive structure; wet when sampled; clear to
B2	.2 to .55	Grey (2.5Y51) moist; sandy light clay; common 10-20% subrounded quartz small pebbles 2-6 mm; massive structure; wet when sampled; clear to
B3	.55 to 1.1	Dark greenish grey (10Y41) moist; sandy light medium clay; massive structure; common 10-20% very coarse 20-60mm earthy soft segregations; wet when sampled; sharp to
2C1	1.1 to 1.75	Very dark grey (N30) moist; clayey coarse sand; common 10-20% subrounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled; clear to
3C2	1.75 to 2	Dark greenish grey (10Y31) moist; sandy light clay; massive structure; wet when sampled; clear to
4C3	2 to 4.3	Grey (N50) moist; coarse sand; common 10-20% subrounded quartz small pebbles 2-6 mm; very few <2% subrounded quartz medium pebbles 6-20 mm; single grain structure; common 10-20% very coarse 20-60mm earthy soft segregations; wet when sampled; sharp to
5B4	4.3 to 4.55	Bluish grey (10B61) moist; very few <2% fine <5mm faint brown mottles; fine sandy light clay; common 10-20% medium 2-6mm ferruginous soft segregations; wet when sampled; clear to
6D2	4.55 to 5.45	Yellowish brown (10YR56) moist; few 2-10% medium 5-15mm distinct red mottles, common 10- 20% very coarse >30mm prominent gley mottles; fine sandy light medium clay; massive structure; moist when sampled; gradual to
7D3	5.45 to 5.9	Light yellowish brown (10YR64) moist; few 2-10% medium 5-15mm distinct red mottles, common 10-20% very coarse >30mm prominent gley mottles; coarse sandy medium clay; massive structure; moist when sampled; abrupt to
8D4	5.9 to 6	White (N80) moist; loamy fine sand; massive structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	2	6.9	4.7	3.25	4	7.1	2.1
.3	4	7.1	6.6	3.5	4	6.3	1.9
.6	2	7.1	5.5	3.75	4	6.5	1.8
.8	3	7.0	1.7	4	4	6.8	1.6
1	4	6.9	1.8	4.25	4	6.9	1.4
1.25	4	7.3	1.6	4.5	4	6.5	2.9
1.5	4	7.4	1.4	4.75	4	6.6	6.0
1.75	4	7.5	1.7	5	4	6.1	6.1
2	4	7.4	1.3	5.25	1	6.4	5.8
2.25	4	7.2	1.8	5.5	1	6.6	5.6
2.5	4	6.8	2.0	5.75		6.6	6.0
2.75	4	6.9	2.0	6		6.5	5.9
3	4	6.9	1.9				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Observation Notes:

Vegetation Mangroves, Salt couch

Horizon Notes:

Horizon B3 segregations at 1.3 and 1.45m

Project: NQAS **Site:** 228 **Observation:** 1

Location: GDA 94 ZONE 55 361142mE 8137182mN Lat: -16.84456 Long: 145.69663

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Disturbances: Complete clearing - pasture - cultivation at some stage

Classifications:

ASC: KANDOSOLIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .1	Dark yellowish brown (10YR44) moist; clay loam; subangular blocky weak <2mm structure; common 1-2mm roots; dry when sampled; clear to
B21	.1 to .9	Dark grey (10YR41) moist; many 20-50% fine <5mm faint orange mottles, few 2-10% fine <5mm faint dark mottles, few 2-10% fine <5mm faint pale mottles; heavy clay loam; massive structure; common 1-2mm roots; moderately moist when sampled; clear to
B22	.9 to 1.35	Dark grey (2.5Y41) moist; light medium clay; massive structure; few 1-2mm roots; moist when sampled
B23	1.35 to 1.7	Dark grey (5Y41) moist; common 10-20% coarse 15-30mm prominent gley mottles; medium clay; massive structure; very few <2% very coarse 20-60mm earthy concretions; few 1-2mm roots; moist when sampled; diffuse to
C1	1.7 to 2.05	Bluish grey (10B61) moist; fine sandy light medium clay; massive structure; few 1-2mm roots; wet when sampled; gradual to
2C2	2.05 to 2.4	Grey (5Y51) moist; clayey coarse sand; common 10-20% subrounded quartz small pebbles 2-6 mm; massive structure; wet when sampled; abrupt to
3C3	2.4 to 2.75	Very dark grey (N30) moist; coarse sandy clay loam; few 2-10% subrounded quartz small pebbles 2-6 mm; massive structure; wet when sampled; sharp to
4C4	2.75 to 4.2	Dark greenish grey (10Y31) moist; silty clay loam; massive structure; wet when sampled
5C5	4.2 to 6	Very dark grey (2.5Y31) moist; fibric light clay; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	3	4.9	2.5	3.25	4	7.1	1.8
.3	3	4.7	2.8	3.5	4	7.1	1.5
.6	3	5.1	3.0	3.75	4	7.1	1.8
.8	3	6.1	3.7	4	4	7.0	2.4
1	3	5.9	3.7	4.25	4	7.1	1.4
1.25		6.2	4.0	4.5	4	7.3	1.5
1.5		6.1	4.1	4.75	4	7.2	1.3
1.75	2	6.8	4.8	5	4	7.2	1.3
2	2	6.9	3.8	5.25	4	7.6	1.0
2.25	2	7.0	2.0	5.5	4	7.5	1.0
2.5	4	7.2	1.5	5.75	4	7.9	0.9
2.75	4	6.9	1.4	6	4	7.4	0.9
3	4	7.0	1.5				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 229 **Observation:** 1

Location: GDA 94 ZONE 55 361174mE 8137907mN Lat: -16.83801 Long: 145.69698

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Classifications:

ASC: KANDOSOLIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A11p	0 to .1	Brown (10YR43) moist; clay loam; subangular blocky weak 2-5mm structure; common 10-20% fine <2mm manganiferous nodules; moderately moist when sampled; clear to
A12	.1 to .65	Brown (10YR43) moist; clay loam; angular blocky weak structure; moderately moist when sampled; gradual to
B21	.65 to 1.5	Light brownish grey (2.5Y63) moist; common 10-20% fine <5mm faint orange mottles, few 2-10% fine <5mm faint pale mottles; heavy clay loam; massive structure; common 10-20% medium 2- 6mm manganiferous nodules; moist when sampled; gradual to
B22	1.5 to 3.1	Light grey (5Y72) moist; heavy clay loam; massive structure; moist when sampled
2B23	3.1 to 3.6	Dark bluish black (10B31) moist; few 2-10% medium 5-15mm distinct orange mottles, common 10-20% coarse 15-30mm prominent red mottles; light clay; massive structure; moist when sampled
2B3	3.6 to 4	Olive grey (5Y52) moist; common 10-20% medium 5-15mm faint brown mottles; coarse sandy light clay; few 2-10% subrounded quartz small pebbles 2-6 mm; massive structure; wet when sampled
2C1	4 to 4.35	Dark grey (5Y41) moist; fine sandy clay loam; massive structure; wet when sampled
2C2	4.35 to 5.75	Very dark grey (N30) moist; fine sandy light clay; massive structure; wet when sampled
3C3	5.75 to 6	Dark greenish grey (10Y31) moist; clayey coarse sand; single grain structure; wet when sampled; clear to
3C4	6 to 6.25	Clayey Sand; single grain structure; wet when sampled; clear to
4C5	6.25 to 7.2	Coarse Sand; single grain structure; few 2-10% very coarse 20-60mm earthy soft segregations; wet when sampled; clear to
5C6	7.2 to 8	Clay Loam, Sandy; massive structure; wet when sampled; sharp to
6C7	8 to 8.4	Clay Loam; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	3	5.0	2.9	4.5	4	5.9	1.4
.3	3	5.5	3.2	4.75	4	6.4	1.3
.6	3	6.1	4.6	5	4	6.5	1.3
.8	3	6.0	4.3	5.25	4	7.0	1.5
1	3	6.0	5.0	5.5	4	6.6	1.7
1.25		5.8	3.8	5.75	4	6.9	1.3
1.5		5.6	3.3	6	4	7.4	1.3
1.75		5.4	3.1	6.25	4	6.7	1.4
2		4.6	3.0	6.5	4	6.9	1.4
2.25		4.5	3.0	6.75	4	6.6	1.5
2.5		4.7	3.3	7	4	7.3	1.6
2.75	4	4.6	3.5	7.25	4	7.1	1.3
3.25	3	5.0	3.2	7.5	4	6.6	2.2
3.5	2	5.1	2.9	7.75	4	6.7	1.3
3.75	2	4.9	2.5	8	4	6.7	1.2
4	4	5.5	3.3	8.25	4	6.6	1.1
4.25	3	5.6	2.0				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 230 **Observation:** 1

Location: GDA 94 ZONE 55 366701mE 8132389mN Lat: -16.8882 Long: 145.74852

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: tidal flat

Element: fill-top

Classifications:

ASC: SPOLIC, Anthroposol

ASC: SULFIDIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
M1	0 to .1	Dark greyish brown (10YR42) moist; sandy loam; common 10-20% subangular gravel large pebbles 20-60 mm; subangular blocky weak 2-5mm structure; moist when sampled; clear to
M2	.1 to .65	Strong brown (7.5YR58) moist; sandy clay loam; common 10-20% subangular quartz large pebbles 20-60 mm; common 10-20% subangular quartz small pebbles 2-6 mm; single grain structure; dry when sampled
M3	.65 to 1.45	Brown (7.5YR44) moist; clay loam; many 20-50% angular other large pebbles 20-60 mm; dry when sampled
2B2	1.45 to 1.9	Very dark grey (5Y31) moist; many 20-50% very coarse >30mm distinct dark mottles; fibric fine sandy clay loam; massive structure; moist when sampled
2C1	1.9 to 2.5	Dark greenish grey (10GY41) moist; many 20-50% fine <5mm distinct dark mottles; fibric light clay; massive structure; wet when sampled
3C2	2.5 to 2.75	Dark bluish black (10B31) moist; clay loam; wet when sampled
4C3	2.75 to 3.1	Dark greenish grey (10Y41) moist; fibric clay loam; massive structure; wet when sampled
5C4	3.1 to 3.6	Dark greenish grey (10Y31) moist; fibric fine sandy clay loam; massive structure; wet when sampled
6C5	3.6 to 4.05	Light olive grey (5Y62) moist; sand; very few <2% subrounded metamorphic rock (unidentified) cobbles 60-200 mm; few 2-10% subrounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled
7C6	4.05 to 4.8	Greenish grey (10Y51) moist; fibric fine sandy loam; massive structure; uncemented continuous massive organic pan; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		6.6	4.6
.3	1	6.1	4.9
.6	4	6.5	6.2
.8	4	6.0	4.8
1.25	2	5.9	5.1
1.5	2	3.9	1.6
1.75	4	6.3	2.1
2	4	7.5	2.7
2.25	4	7.3	2.3
2.5	4	7.1	3.0
2.75	4	7.3	2.7
3	4	6.8	2.0
3.25	4	6.7	1.6
3.5	4	6.7	1.4
3.75	2	7.5	1.8
4	2	7.6	2.1
4.25	4	7.8	1.6
4.5	4	7.5	1.5
4.75	4	7.1	1.1

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon M2 KS lens @ 0.2m

Project: NQAS **Site:** 231 **Observation:** 1

Location: GDA 94 ZONE 55 362158mE 8139884mN Lat: -16.8202 Long: 145.70633

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain

Element: drainage depression

Classifications:

ASC: SESQUIC, SEMIAQUIC, Podsol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .25	Black (7.5YR2.5/1) moist; loamy sand; single grain structure; common 1-2mm roots; wet when sampled; diffuse to
A2e	.25 to 2	White (2.5Y81) moist; sand; single grain structure; few 2-10% fine <2mm organic (humified) root linings; few 1-2mm roots; wet when sampled; clear to
B21	2 to 2.3	White (5Y81) moist; coarse sand; single grain structure; wet when sampled; sharp to
B22s	2.3 to 2.6	Yellow (10YR78) moist; coarse sand; single grain structure; wet when sampled
2C1	2.6 to 3.7	Pale yellow (2.5Y74) moist; sand; single grain structure; few 2-10% fine <2mm organic (humified) concretions; wet when sampled
2C2	3.7 to 4	Light grey (5Y72) moist; loamy sand; single grain structure; common 10-20% fine <2mm organic (humified) concretions; wet when sampled
2C3	4 to 4.3	Light grey (5Y71) moist; fine sand; wet when sampled
2C4	4.3 to 5.25	Light grey (5Y72) moist; clayey fine sand; single grain structure; wet when sampled
3D1	5.25 to 5.55	Brownish yellow (10YR66) moist; many 20-50% coarse 15-30mm distinct gley mottles; clayey coarse sand; massive structure; moist when sampled; sharp to
4D2	5.55 to 6.25	Yellowish brown (10YR56) moist; many 20-50% coarse 15-30mm distinct gley mottles; light clay; few 2-10% subrounded quartz small pebbles 2-6 mm; massive structure; moist when sampled
4D3	6.25 to 7.55	Yellowish brown (10YR56) moist; few 2-10% medium 5-15mm distinct gley mottles; light clay; massive structure; few 2-10% medium 2-6mm manganiferous nodules; moist when sampled
4D4	7.55 to 8.4	Yellowish brown (10YR56) moist; very few <2% medium 5-15mm distinct gley mottles; medium clay; massive structure; moist when sampled

Field Tests:

Depth	PH-2	PH-3	Depth	PH-2	PH-3
.1	5.7	4.2	4.5	6.1	8.1
.3	5.9	5.9	4.75	6.3	6.4
.6	6.2	5.8	5	6.0	6.2
.8	6.0	6.0	5.25	6.7	6.1
1	5.9	5.7	5.5	6.4	8.0
1.25	6.0	4.6	5.75	5.9	7.7
1.5	5.7	5.4	6	6.7	5.8
1.75	5.5	5.3	6.25	6.4	3.4
2	5.6	5.2	6.5	6.5	5.5
2.25	5.7	5.5	6.75	6.6	7.0
2.5	5.5	5.8	7	6.6	5.5
2.75	5.7	5.7	7.25	6.6	5.5
3	5.7	6.8	7.5	6.4	6.6
3.25	5.7	5.8	7.75	6.5	5.4
3.5	6.0	6.6	8	6.6	6.8
3.75	6.1	8.7	8.25	6.7	6.9
4	5.8	6.8	8.4	6.6	6.7
4.25	6.1	7.1			

PH-2: pH using electrode probe
PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon 4D2 CFs lens at 5.7m

Project: NQAS **Site:** 232 **Observation:** 1

Location: GDA 94 ZONE 55 362191mE 8139876mN Lat: -16.82028 Long: 145.70664

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain

Element: swamp

Disturbances: Limited clearing

Classifications:

ASC: OXYAQUIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .3	Black (10YR21) moist; fibric sandy loam; massive structure; common 1-2mm roots; wet when sampled; diffuse to
C1	.3 to 1	Light brownish grey (2.5Y62) moist; sand; single grain structure; wet when sampled; clear to
C2	1 to 1.9	White (N80) moist; sand; single grain structure; wet when sampled; diffuse to
C3	1.9 to 3.05	White (5Y81) moist; sand; single grain structure; wet when sampled; clear to
C4	3.05 to 4.05	Light grey (N70) moist; clayey fine sand; single grain structure; wet when sampled
C5	4.05 to 4.3	Light greenish grey (10Y81) moist; clayey coarse sand; single grain structure; wet when sampled
2D1	4.3 to 4.6	Light greenish grey (10Y71) moist; few 2-10% medium 5-15mm distinct orange mottles; fine sandy light clay; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	5.8	3.7
.3	1	6.1	3.9
.6		6.2	5.7
.8		6.2	6.0
1		6.1	6.1
1.25		6.3	6.2
1.5		6.2	5.7
1.75		6.3	6.0
2		6.1	5.7
2.25		6.1	6.1
2.5		6.2	6.0
2.75		6.0	6.0
3		6.3	5.8
3.25		6.5	5.8
3.5		6.3	5.9
3.75		6.1	5.9
4	1	6.6	5.9
4.25	2	6.3	5.9
4.5	2	6.7	5.6
4.6	2	6.7	5.7

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Observation Notes:

Location Swamp ~100m E of 231. Sampling in 200mm of water. Around 2m lower than 231.

Project: NQAS **Site:** 233 **Observation:** 1

Location: GDA 94 ZONE 55 360826mE 8144261mN Lat: -16.78057 Long: 145.69411

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain

Element: fill-top

Classifications:

ASC: SPOLIC, Anthropol

Profile Morphology:

Horizon	Depth (m)	Description
M1	0 to .15	Yellowish brown (10YR54) moist; clay loam; subangular blocky weak 2-5mm structure; common 1-2mm roots; moderately moist when sampled; clear to
M2	.15 to 1.3	Yellowish brown (10YR55) moist; clay loam, sandy; subangular blocky weak 2-5mm structure; moderately moist when sampled; clear to
A1	1.3 to 1.5	Very dark grey (10YR31) moist; common 10-20% fine <5mm faint brown mottles; sandy clay loam; massive structure; moderately moist when sampled; clear to
B21	1.5 to 1.75	Light brownish grey (2.5Y62) moist; common 10-20% medium 5-15mm faint brown mottles; clayey sand; massive structure; moderately moist when sampled; clear to
B22	1.75 to 2.05	Grey (N60) moist; very few <2% fine <5mm faint orange mottles; clay loam, sandy; massive structure; moist when sampled; clear to
B23	2.05 to 2.4	Brownish yellow (10YR68) moist; few 2-10% coarse 15-30mm faint gley mottles; heavy sandy clay loam; massive structure; moist when sampled; sharp to
2C1	2.4 to 2.6	Very dark grey (N30) moist; clayey sand; single grain structure; moist when sampled; sharp to
3D1	2.6 to 3.3	Dark red (10R36) moist; many 20-50% very coarse >30mm distinct pale mottles, common 10- 20% very coarse >30mm distinct orange mottles; coarse sandy heavy clay; massive structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	5.6	5.2
.3		6.0	4.6
.6		5.8	4.3
.8		5.8	4.3
1		5.1	4.1
1.25		4.8	5.1
1.5		5.1	4.1
1.75		5.6	4.9
2		6.3	5.3
2.25		6.5	5.8
2.5		6.3	5.2
2.75		6.5	5.6
3		6.5	5.4
3.25		6.6	5.6

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon M2 Colour mixed - alternating thin layers of pale yellow and grey fill material.

Project: NQAS **Site:** 234 **Observation:** 1

Location: GDA 94 ZONE 55 360794mE 8144306mN Lat: -16.78016 Long: 145.69381

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: tidal flat

Element: intertidal flat

Surface Condition: Soft

Disturbances: No effective disturbance

Classifications:

ASC: INTERTIDAL, Hydrosol

Vegetation:

Tallest Stratum: Low open forest (3.01-6m)

Species: Rhizophora species

Profile Morphology:

Horizon	Depth (m)	Description
C1	0 to .2	Dark greyish brown (2.5Y42) moist; fibric clayey sand; massive structure; wet when sampled; clear to
C2	.2 to 1	Very dark grey (10YR31) moist; fibric sandy clay loam; massive structure; wet when sampled; clear to
C3	1 to 1.4	Dark greenish grey (10Y31) moist; fibric sandy clay loam; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	6.8	3.4
.3	4	6.8	1.1
.6	4	6.7	0.9
.8	4	6.8	1.0
1	4	6.9	0.9
1.25	4	6.7	0.9
1.4	4	6.8	0.9

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Site Notes:

Observation Notes:

Location Mangroves adjacent to 233. Gouge sample.

Project: NQAS**Site:** 235**Observation:** 1

Location: GDA 94

ZONE

55

360629mE

8144066mN

Lat: -16.78232

Long: 145.69224

Described By: Lauren OBrien (OBRL)

Landscape:**Landform Pattern:** tidal flat**Element:** intertidal flat**Runoff:** Moderately rapid**Permeability:** Slowly permeable**Drainage:** Poorly drained**Surface Condition:** Soft**Disturbances:** No effective disturbance**Classifications:****ASC:** INTERTIDAL, Hydrosol**Profile Morphology:**

Horizon	Depth (m)	Description
A1	0 to .2	Brown (10YR43) moist; clay loam, fine sandy; massive structure; common 1-2mm roots; moist when sampled; clear to
B2	.2 to .4	Dark greyish brown (10YR42) moist; few 2-10% medium 5-15mm distinct orange mottles; clay loam, fine sandy; massive structure; common 1-2mm roots; moist when sampled; clear to
B3	.4 to .85	Dark greyish brown (2.5Y42) moist; fibric sandy clay loam; massive structure; abundant <1mm roots; wet when sampled; clear to
C1	.85 to 1.8	Very dark grey (2.5Y31) moist; fibric clay loam; massive structure; abundant <1mm roots; wet when sampled; sharp to
2C2	1.8 to 2.25	Grey (5Y51) moist; light clay; massive structure; many 2-5mm roots; wet when sampled; gradual to
2C3	2.25 to 3.1	Greenish grey (10Y51) moist; light clay; massive structure; many 2-5mm roots; wet when sampled; sharp to
3B21	3.1 to 3.8	Greenish grey (10Y51) moist; few 2-10% coarse 15-30mm faint orange mottles; light medium clay; massive structure; wet when sampled; sharp to
4B22	3.8 to 4.3	Pale yellow (5Y73) moist; few 2-10% coarse 15-30mm faint orange mottles; loamy fine sand; single grain structure; wet when sampled; gradual to
5C1	4.3 to 4.6	Light olive grey (5Y62) moist; loamy fine sand; single grain structure; wet when sampled; gradual to
5C2	4.6 to 4.8	Light grey (5Y72) moist; few 2-10% fine <5mm faint orange mottles; clayey fine sand; single grain structure; wet when sampled; clear to
5C3	4.8 to 5.4	Light bluish grey (5PB71) moist; very few <2% fine <5mm faint orange mottles; clayey fine sand; single grain structure; wet when sampled; sharp to
6C4	5.4 to 5.8	Light greenish grey (10Y81) moist; sand; single grain structure; wet when sampled; sharp to
7C5	5.8 to 6	Light grey (5Y72) moist; clayey coarse sand; very few <2% subrounded quartz cobbles 60-200 mm; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1		4.6	3.3	3.25	4	7.4	3.5
.3		5.6	4.0	3.5	2	7.2	6.2
.6		6.9	4.2	3.75	2	6.9	2.5
.8	1	6.9	1.4	4		6.8	4.3
1	2	6.9	1.3	4.25		6.2	6.1
1.25	3	6.9	1.3	4.5		6.4	5.9
1.5	4	6.7	1.4	4.75		6.4	6.0
1.75	4	6.8	1.4	5		6.4	5.9
2	4	6.8	1.7	5.25		6.3	.8
2.25	2	7.0	1.8	5.5		6.2	6.4
2.5	2	7.8	2.9	5.75		6.4	6.2
2.75	4	7.9	2.3	6		6.2	5.8
3	3	7.9	5.2				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 236 **Observation:** 1

Location: GDA 94 ZONE 55 360547mE 8144011mN Lat: -16.78281 Long: 145.69147

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain

Element: drainage depression

Classifications:

ASC: REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .1	Dark greyish brown (2.5Y43) moist; clay loam; massive structure; moderately moist when sampled; clear to
B21	.1 to .6	Light grey (5Y71) moist; common 10-20% coarse 15-30mm distinct orange mottles; clay loam, fine sandy; very few <2% rounded quartz cobbles 60-200 mm; massive structure; few 2-10% fine <2mm ferruginous root linings; common >5mm roots; moist when sampled; gradual to
B22	.6 to 1.15	Light grey (N70) moist; very few <2% fine <5mm faint orange mottles; fine sandy clay loam; massive structure; moist when sampled; diffuse to
B23	1.15 to 2.25	Light grey (N70) moist; very few <2% fine <5mm distinct orange mottles; clay loam, fine sandy; massive structure; wet when sampled; clear to
2C1	2.25 to 3.95	White (N80) moist; sand; single grain structure; wet when sampled
2C2	3.95 to 4.45	White (5Y81) moist; sand; single grain structure; wet when sampled
2C3	4.45 to 4.7	White (5Y81) moist; clayey sand; single grain structure; wet when sampled
3D1	4.7 to 4.9	Light grey (5Y72) moist; few 2-10% medium 5-15mm distinct orange mottles, few 2-10% medium 5-15mm distinct red mottles; sandy clay loam; massive structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	2	5.7	3.7
.3	1	5.4	4.5
.6		4.8	4.1
.8	1	4.7	4.3
1	1	4.5	4.0
1.25	1	4.8	4.6
1.5	1	6.1	4.6
1.75	1	6.5	4.7
2	1	6.7	4.4
2.25		6.5	6.0
2.5		6.1	6.2
2.75		6.0	6.0
3		5.8	6.0
3.25		6.0	5.8
3.5		6.1	5.5
3.75		5.8	6.1
4		6.1	5.8
4.25		6.0	6.1
4.5		5.8	5.9
4.75		6.2	6.0

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Observation Notes:

Location Near 235. Holl.

Project: NQAS **Site:** 237 **Observation:** 1

Location: GDA 94 ZONE 55 358994mE 8145589mN Lat: -16.76846 Long: 145.677

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: beach ridge plain **Element:** beach ridge

Classifications:

ASC: SPOLIC, Anthropol

Profile Morphology:

Horizon	Depth (m)	Description
M1	0 to .2	Brown (7.5YR44) moist; sandy clay loam; very few <2% subrounded gravel medium pebbles 6-20 mm; single grain structure; dry when sampled; clear to
M2	.2 to .75	Light olive brown (2.5Y54) moist; sandy clay loam; common 10-20% subrounded gravel small pebbles 2-6 mm; few 2-10% subrounded gravel medium pebbles 6-20 mm; single grain structure; dry when sampled; sharp to
M3	.75 to 1.05	Dark greyish brown (2.5Y43) moist; sand; few 2-10% subrounded quartz small pebbles 2-6 mm; single grain structure; dry when sampled; abrupt to
M4	1.05 to 1.15	Very dark grey (2.5Y31) moist; sand; few 2-10% subrounded quartz small pebbles 2-6 mm; single grain structure; dry when sampled; abrupt to
A1	1.15 to 1.35	Dark greyish brown (2.5Y42) moist; sand; few 2-10% subrounded quartz small pebbles 2-6 mm; single grain structure; moderately moist when sampled; clear to
C1	1.35 to 1.8	Yellowish brown (10YR54) moist; sand; few 2-10% subrounded quartz small pebbles 2-6 mm; single grain structure; moderately moist when sampled; clear to
C2	1.8 to 2.3	Light brownish grey (2.5Y63) moist; sand; few 2-10% subrounded quartz small pebbles 2-6 mm; moist when sampled; clear to
C3	2.3 to 2.6	Light grey (2.5Y71) moist; sand; common 10-20% subrounded quartz small pebbles 2-6 mm; single grain structure; moist when sampled; clear to
2C4	2.6 to 3.4	Light brownish grey (2.5Y62) moist; coarse sand; single grain structure; wet when sampled; abrupt to
3C4	3.4 to 3.9	Dark grey (5Y41) moist; sand; single grain structure; uncemented continuous massive organic pan; wet when sampled
3C5	3.9 to 4.4	Olive yellow (2.5Y66) moist; sand; single grain structure; wet when sampled
3C6	4.4 to 5.15	Light olive grey (5Y62) moist; fine sand; single grain structure; wet when sampled
3C7	5.15 to 5.8	Grey (5Y61) moist; fine sand; single grain structure; wet when sampled; clear to
4C8	5.8 to 6.2	Dark greenish grey (10Y41) moist; fine sand; single grain structure; common 10-20% coarse 6- 20mm earthy soft segregations; wet when sampled; clear to
5C9	6.2 to 6.9	Dark greenish grey (5GY41) moist; fine sandy clay loam; massive structure; wet when sampled; gradual to
6D	6.9 to 7.2	Greenish grey (5G51) moist; few 2-10% medium 5-15mm distinct orange mottles; fine sandy heavy clay; common 10-20% angular platy shell small pebbles 2-6 mm; very few <2% angular platy shell medium pebbles 6-20 mm; massive structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	4	6.4	4.5	3.75	4	6.4	1.9
.3	2	5.9	3.9	4		6.1	5.8
.6		5.8	4.4	4.25		6.3	6.3
.8	1	6.1	4.2	4.5		6.6	6.0
1	1	6.2	4.9	4.75		6.0	5.9
1.15	1	5.5	3.3	5		6.7	4.7
1.25		6.2	5.2	5.25	1	6.8	2.2
1.5		5.2	5.4	5.5	2	6.8	1.8
1.75		6.2	5.7	5.75	4	7.3	1.5
2		6.5	5.9	6	4	8.6	2.3
2.25		6.7	6.1	6.25		8.9	5.9
2.5		6.4	5.7	6.5	1	9.2	6.0
2.75		6.5	5.8	6.75	2	8.9	5.8
3		6.6	6.0	7	4	9.3	8.5
3.25		6.6	6.1	7.2	4	9.1	8.5
3.5	4	6.4	2.0				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 238 **Observation:** 1

Location: GDA 94 ZONE 55 359395mE 8144923mN Lat: -16.7745 Long: 145.68072

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: beach ridge plain **Element:** swale

Classifications:

ASC: SPOLIC, Anthropol

ASC: Podosol

Vegetation:

Species: Melaleuca species

Profile Morphology:

Horizon	Depth (m)	Description
M1	0 to .3	Dark greyish brown (2.5Y42) moist; heavy fine sandy clay loam; subangular blocky weak 2-5mm structure; dry when sampled; clear to
M2	.3 to 1	Dark greyish brown (2.5Y43) moist; sandy clay loam; many 20-50% subrounded gravel small pebbles 2-6 mm; common 10-20% subrounded gravel medium pebbles 6-20 mm; single grain structure; dry when sampled; clear to
M3	1 to 1.3	Greyish brown (2.5Y52) moist; very few <2% fine <5mm faint brown mottles; clay loam, fine sandy; platy weak <2mm structure; dry when sampled; clear to
B21	1.3 to 1.55	Pale olive (5Y63) moist; sand; single grain structure; moist when sampled; clear to
B22	1.55 to 1.8	Olive yellow (2.5Y66) moist; sand; few 2-10% subrounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled; sharp to
B23s	1.8 to 2.35	Pale yellow (2.5Y74) moist; sand; few 2-10% subrounded quartz small pebbles 2-6 mm; single grain structure; few 2-10% coarse 6-20mm ferromanganiferous laminae; wet when sampled; sharp to
B24	2.35 to 2.65	Light yellowish brown (2.5Y64) moist; fine sand; single grain structure; wet when sampled; gradual to
B25	2.65 to 3.4	Olive grey (5Y52) moist; fine sand; single grain structure; wet when sampled; diffuse to
2C1	3.4 to 4.1	Dark greenish grey (10Y41) moist; fine sandy clay loam; massive structure; wet when sampled; clear to
2C2	4.1 to 4.95	Dark grey (N40) moist; clayey fine sand; massive structure; weakly cemented continuous massive organic pan; wet when sampled; clear to
3D1	4.95 to 5.5	Greenish grey (10GY51) moist; few 2-10% medium 5-15mm faint orange mottles, very few <2% fine <5mm distinct red mottles; light medium clay; massive structure; moist when sampled; clear to
3D2	5.5 to 5.75	Light olive brown (2.5Y56) moist; very few <2% coarse 15-30mm distinct grey mottles; sandy clay loam; massive structure; wet when sampled; clear to
3D3	5.75 to 6	White (N80) moist; clay loam, sandy; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	2	4.8	3.9	3.25	2	7.5	3.0
.3	2	5.8	3.9	3.5	4	7.6	2.2
.6	2	6.0	4.2	3.75	3	7.7	5.6
.8	1	5.6	4.1	4	4	7.7	1.7
1	1	5.0	3.9	4.25	4	7.4	1.4
1.25		6.4	5.9	4.5	4	7.4	1.8
1.5		6.6	6.1	4.75	4	7.5	1.4
1.75		6.9	6.3	5	4	7.5	3.7
2		7.1	6.3	5.25	4	7.3	2.2
2.25		7.0	6.2	5.5	4	6.6	4.5
2.5		7.0	5.4	5.75	2	6.4	5.1
2.75		6.9	6.2	6	2	6.3	5.0
3		6.9	6.1				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon 3D1 gley sand lenses through, same as overlying

Project: NQAS **Site:** 239 **Observation:** 1

Location: GDA 94 ZONE 55 361737mE 8136846mN Lat: -16.84763 Long: 145.7022

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain

Element: drainage depression

Classifications:

ASC: BROWN, Dermosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .4	Dark greyish brown (10YR42) moist; clay loam; subangular blocky moderate 10-20mm structure; common 2-5mm roots; dry when sampled; clear to
B2	.4 to 1	Light olive brown (2.5Y54) moist; common 10-20% fine <5mm faint orange mottles, common 10- 20% medium 5-15mm distinct orange mottles; sandy clay loam; subangular blocky moderate 5- 10mm structure; common 10-20% fine <2mm earthy root linings; few 2-10% medium 2-6mm manganiferous nodules; moderately moist when sampled; clear to
2B2	1 to 1.4	Yellowish brown (10YR54) moist; very few <2% coarse 15-30mm prominent brown mottles, few 2-10% prominent dark mottles; fine sandy loam; single grain structure; moist when sampled; gradual to
3B21	1.4 to 2.1	Greenish grey (10Y61) moist; few 2-10% medium 5-15mm distinct orange mottles; heavy clay loam, fine sandy; massive structure; moist when sampled; clear to
3B22	2.1 to 2.4	Grey (5Y51) moist; few 2-10% medium 5-15mm distinct orange mottles; clay loam, fine sandy; massive structure; moist when sampled; clear to
3B3	2.4 to 2.6	Greenish grey (10Y51) moist; very few <2% fine <5mm faint orange mottles; fine sandy light clay; massive structure; wet when sampled; sharp to
4C1	2.6 to 3.15	Pale olive (5Y64) moist; few 2-10% very coarse >30mm faint orange mottles; coarse sand; common 10-20% subrounded platy metamorphic rock (unidentified) medium pebbles 6-20 mm; few 2-10% rounded quartz medium pebbles 6-20 mm; common 10-20% subrounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled; gradual to
4C2	3.15 to 3.75	Light greenish grey (10Y81) moist; coarse sand; common 10-20% subrounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled
4C3	3.75 to 5.3	Grey (N50) moist; clayey coarse sand; common 10-20% subrounded quartz medium pebbles 6- 20 mm; many 20-50% subrounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled
4C4	5.3 to 5.5	Grey (N50) moist; sand; single grain structure; wet when sampled
5C5	5.5 to 6	Very dark greyish brown (2.5Y32) moist; sapric light clay; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	4	5.9	3.1	3.25		6.1	6.1
.3	4	6.2	3.6	3.5		6.1	5.9
.6	4	5.8	4.6	3.75		6.1	5.0
.8	2	5.9	4.8	4	4	6.2	1.9
1	2	5.6	4.6	4.25	4	6.5	1.9
1.25	1	6.0	5.0	4.5	4	6.5	1.8
1.5		6.5	4.6	4.75	4	6.6	1.9
1.75		6.4	4.3	5	4	6.6	1.2
2	1	5.8	3.8	5.25	4	5.7	1.6
2.25		6.1	3.5	5.5	4	7.7	1.9
2.5	2	6.2	2.9	5.75	4	7.2	3.2
2.75		6.4	5.7	6	4	7.1	1.3
3		6.4	5.9				

PH-2: pH using electrode probe
PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon 5C5 Hemic horizon. sand lens at 5.65m

Project: NQAS **Site:** 240 **Observation:** 1

Location: GDA 94 ZONE 55 362486mE 8138729mN Lat: -16.83066 Long: 145.70934

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Classifications:

ASC: YELLOW, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .2	Very dark greyish brown (10YR32) moist; clay loam; subangular blocky weak 2-5mm structure; dry when sampled; clear to
A12	.2 to .5	Very dark greyish brown (10YR32) moist; clay loam; subangular blocky weak 10-20mm structure; dry when sampled; clear to
A2	.5 to .9	Light olive brown (2.5Y54) moist; common 10-20% fine <5mm faint dark mottles; fine sandy clay loam; massive structure; moderately moist when sampled; gradual to
B21	.9 to 1.7	Light yellowish brown (2.5Y64) moist; fine sandy loam; massive structure; moist when sampled; diffuse to
B22	1.7 to 2.6	Light brownish grey (2.5Y62) moist; very few <2% medium 5-15mm faint red mottles, many 20- 50% coarse 15-30mm distinct orange mottles; heavy fine sandy loam; massive structure; moist when sampled; sharp to
C1	2.6 to 3	Dark grey (5Y41) moist; sandy clay loam; single grain structure; wet when sampled; clear to
2C2	3 to 3.9	Greenish grey (10Y51) moist; sand; single grain structure; wet when sampled; clear to
2C3	3.9 to 4.3	Dark greenish grey (10Y31) moist; sand; many 20-50% subrounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled; clear to
3C4	4.3 to 4.9	Dark greenish grey (10Y31) moist; clay loam, sandy; single grain structure; wet when sampled; sharp to
4C5	4.9 to 5.15	Very dark grey (10YR31) moist; hemic peat; massive structure; wet when sampled; sharp to
5C6	5.15 to 6	Dark grey (5Y41) moist; clayey coarse sand; very few <2% angular platy shell small pebbles 2-6 mm; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	2	5.0	2.7	3.25	4	4.9	1.3
.3	3	5.3	2.7	3.5	4	5.1	1.6
.6	1	5.3	3.7	3.75	4	5.1	1.4
.8	1	5.4	3.7	4	4	5.1	1.4
1		5.4	4.4	4.25	4	5.2	1.2
1.25		5.1	3.7	4.5	4	6.8	1.5
1.5		4.8	3.9	4.75	4	7.1	1.4
1.75		5.1	3.8	5	4	7.5	1.1
2		5.1	3.8	5.25	4	7.6	1.5
2.25		4.7	2.3	5.5	4	7.7	1.5
2.5		4.8	3.7	5.75	4	7.4	1.4
2.75	4	4.9	1.6	6	4	7.5	2.0
3	4	4.8	1.4				
				PH-2: pH using electrode probe			
				PH-3: pH of hydrogen peroxide extract			

Horizon Notes:

Horizon	B22	gleyed clay lens at 2.3m
Horizon	2C2	clay lens at 3.8m
Horizon	5C6	cfs only at 5.9-6.0m

Project: NQAS **Site:** 251 **Observation:** 1

Location: GDA 94 ZONE 55 367522mE 8131566mN Lat: -16.89569 Long: 145.75617

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: tidal flat

Element: supratidal flat

Classifications:

ASC: SULFIDIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
B2	0 to .45	Olive grey (5Y52) moist; few 2-10% fine <5mm faint brown mottles; light clay; massive structure; few 2-10% coarse 6-20mm manganiferous soft segregations; wet when sampled; clear to
C1	.45 to 1.4	Dark greenish grey (10Y31) moist; fibric light clay; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1		7.6	6.8
.3		6.9	5.6
.6	4	6.9	1.4
.8	4	7.1	1.3
1	4	7.3	1.4
1.25	4	7.1	1.3

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Observation Notes:

Location Salt flats ~150m north of Site 250. Gouge auger sample, Veg = samphire

Horizon Notes:

Horizon C1 organics

Project: NQAS **Site:** 252 **Observation:** 1

Location: GDA 94 ZONE 55 367306mE 8123251mN Lat: -16.97082 Long: 145.75365

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: tidal flat

Element: terrace flat

Classifications:

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Vegetation:

Tallest Stratum: Low open forest (3.01-6m)

Species: *Bruguiera exaristata* (rib-fruited mangrove)

Profile Morphology:

Horizon	Depth (m)	Description
P1	0 to .05	Brown (7.5YR44) moist; fibric light clay; massive structure; many 1-2mm roots; moist when sampled; clear to
B21	.05 to .5	Brown (7.5YR43) moist; many 20-50% very coarse >30mm prominent dark mottles; fibric light clay; massive structure; common >5mm roots; wet when sampled; clear to
B22	.5 to .9	Brown (7.5YR43) moist; few 2-10% medium 5-15mm prominent dark mottles; sandy loam; massive structure; wet when sampled; clear to
B23	.9 to 1.2	Dark grey (2.5Y41) moist; common 10-20% fine <5mm distinct orange mottles; fine sandy light clay; massive structure; wet when sampled; clear to
2C1	1.2 to 1.5	Very dark greyish brown (2.5Y32) moist; clayey sand; common 10-20% subrounded quartz small pebbles 2-6 mm; common 10-20% subrounded metamorphic rock (unidentified) small pebbles 2-6 mm; very few <2% angular platy shell medium pebbles 6-20 mm; massive structure; wet when sampled; gradual to
2C2	1.5 to 1.85	Very dark grey (2.5Y31) moist; clayey coarse sand; common 10-20% subrounded quartz medium pebbles 6-20 mm; common 10-20% angular metamorphic rock (unidentified) medium pebbles 6-20 mm; common 10-20% angular platy shell medium pebbles 6-20 mm; common 10-20% subrounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled; gradual to
3C3	1.85 to 2.25	Dark greyish brown (2.5Y42) moist; clayey coarse sand; common 10-20% subrounded quartz large pebbles 20-60 mm; common 10-20% subangular metamorphic rock (unidentified) large pebbles 20-60 mm; few 2-10% subrounded quartz large pebbles 20-60 mm; single grain structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.01	1	5.9	2.6
.1	4	6.8	2.0
.3	4	7.1	2.2
.6	4	6.5	2.3
.8	1	6.6	1.9
1	1	6.9	3.1
1.25		6.6	1.8
1.5		6.5	2.7
1.75	4	6.4	1.6
2	1	6.3	2.4
2.25	1	6.2	2.6

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Observation Notes:

Location White Rock Fitness Park, sand auger sample from adjacent creekline.

Vegetation Species ID fairly confident, but flower was red.

Project: NQAS **Site:** 253 **Observation:** 1

Location: GDA 94 ZONE 55 361717mE 8133415mN Lat: -16.87864 Long: 145.7018

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain

Element: plain

Classifications:

ASC: BROWN, Dermosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .25	Light olive brown (2.5Y54) moist; clay loam; granular weak 2-5mm structure; dry when sampled; diffuse to
B21	.25 to 1.45	Yellowish brown (10YR56) moist; common 10-20% medium 5-15mm faint dark mottles; clay loam; subangular blocky weak 5-10mm structure; dry when sampled; clear to
B22	1.45 to 2.4	Light olive brown (2.5Y54) moist; few 2-10% medium 5-15mm faint orange mottles, few 2-10% coarse 15-30mm faint pale mottles; clay loam; massive structure; few 2-10% medium 2-6mm manganiferous nodules; dry when sampled; gradual to
B23	2.4 to 3	Dark yellowish brown (10YR46) moist; many 20-50% coarse 15-30mm prominent dark mottles, common 10-20% medium 5-15mm prominent orange mottles; fine sandy clay loam; massive structure; dry when sampled; gradual to
B24	3 to 3.8	Dark yellowish brown (10YR46) moist; common 10-20% coarse 15-30mm prominent gley mottles, few 2-10% medium 5-15mm distinct orange mottles; sandy loam; massive structure; moderately moist when sampled; clear to
B25	3.8 to 5.4	Light olive brown (2.5Y54) moist; common 10-20% very coarse >30mm prominent gley mottles, common 10-20% coarse 15-30mm prominent orange mottles, common 10-20% coarse 15-30mm prominent dark mottles; loamy sand; massive structure; few 2-10% medium 2-6mm manganiferous soft segregations; wet when sampled; clear to
C1	5.4 to 5.9	Greenish grey (10Y61) moist; loamy fine sand; massive structure; wet when sampled; sharp to
2B2	5.9 to 6.2	Olive grey (5Y52) moist; few 2-10% medium 5-15mm faint orange mottles; clay loam, fine sandy; massive structure; wet when sampled; diffuse to
2C1	6.2 to 6.7	Dark grey (N40) moist; light clay loam, fine sandy; massive structure; wet when sampled; gradual to
2C2	6.7 to 7.05	Dark greenish grey (10Y41) moist; heavy clay loam, fine sandy; massive structure; wet when sampled; clear to
2C3	7.05 to 7.2	Dark greenish grey (10Y41) moist; fine sandy clay loam; massive structure; wet when sampled; clear to
3C4	7.2 to 7.6	Dark greenish grey (10Y41) moist; fibric clay loam, fine sandy; massive structure; wet when sampled; clear to
3C5	7.6 to 8.35	Greenish black (10Y2.5/1) moist; fibric light clay; massive structure; wet when sampled; abrupt to
4C6	8.35 to 8.7	Dark greenish grey (10Y41) moist; fine sandy clay loam; massive structure; wet when sampled; abrupt to
5C1	8.7 to 9.6	Black (2.5Y2.5/1) moist; fibric light clay; massive structure; moist when sampled
D	13.24 to 14.16	Bluish grey (5B51) moist; many 20-50% very coarse >30mm prominent brown mottles; silty light clay; massive structure; moist when sampled

Project: NQAS

Site: 253

Observation: 1

Field Tests:

Depth	H2O2-	PH-2	PH-3	5.5		6.1	5.4
.1	4	5.6	3.9	5.75		6.1	4.7
.3	4	5.7	5.0	6		5.9	5.2
.6	4	6.0	6.4	6.25		6.6	3.0
.8	4	5.9	6.5	6.5	4	7.0	3.6
1	4	6.1	6.1	6.75	4	7.2	3.6
1.25	4	6.1	6.6	7	4	7.1	3.4
1.5	4	6.2	7.1	7.2	4	6.5	2.1
1.75	4	6.1	7.1	7.5	4	6.3	2.1
2	4	6.1	6.9	7.75	4	6.5	1.9
2.25	4	6.0	7.1	8	4	6.4	1.3
2.5	4	6.0	6.6	8.25	4	7.0	1.0
2.75	4	6.1	7.1	8.5	4	6.7	1.7
3	4	6.1	7.0	8.75	4	6.8	1.3
3.25	4	6.2	7.2	9	4	6.7	1.3
3.5	4	6.1	7.2	9.25	4	7.0	0.9
3.75	4	6.2	6.7	9.5	4	7.6	1.1
4	1	5.9	5.2	13.25	4	8.2	7.1
4.25	1	6.1	5.3	13.5	4	8.3	7.0
4.5	1	5.9	5.5	13.75	4	8.3	6.9
4.75	4	6.0	6.4	14	4	8.6	7.4
5	1	6.0	5.6				
5.25		6.2	5.7				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Observation Notes:

Location Lower Freshwater Road, LHS heading WNW. Cane.

Horizon Notes:

Horizon B25 clay lens at 5.2m
Horizon 3C4 FS lens at 7.5m
Horizon 3C5 gley sand lenses throughout

Project: NQAS **Site:** 254 **Observation:** 1

Location: GDA 94 ZONE 55 363697mE 8136633mN Lat: -16.84967 Long: 145.72058

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain **Element:** plain

Classifications:

ASC: CHERNIC, Tenosol

Profile Morphology:

Horizon	Depth (m)	Description
A11p	0 to .1	Very dark greyish brown (10YR32) moist; clay loam; subangular blocky weak 2-5mm structure; dry when sampled; clear to
A12	.1 to .4	Very dark greyish brown (10YR32) moist; clay loam; platy weak 5-10mm structure; dry when sampled; diffuse to
B21	.4 to .65	Dark greyish brown (10YR42) moist; very few <2% fine <5mm faint orange mottles; clay loam; massive structure; moderately moist when sampled; clear to
B22	.65 to 1.05	Light olive brown (2.5Y54) moist; few 2-10% fine <5mm distinct dark mottles, few 2-10% fine <5mm distinct orange mottles; fine sandy clay loam; massive structure; very few <2% fine <2mm manganiferous soft segregations; moderately moist when sampled; clear to
B23	1.05 to 2.05	Dark greyish brown (2.5Y43) moist; few 2-10% fine <5mm prominent orange mottles, many 20- 50% coarse 15-30mm prominent pale mottles; fine sandy loam; massive structure; few 2-10% medium 2-6mm manganiferous soft segregations; moist when sampled; clear to
2B24	2.05 to 2.55	Greyish brown (2.5Y52) moist; many 20-50% coarse 15-30mm prominent gley mottles, few 2- 10% medium 5-15mm distinct orange mottles; clay loam, fine sandy; massive structure; wet when sampled; abrupt to
2B25	2.55 to 3.05	Grey (5Y61) moist; few 2-10% coarse 15-30mm distinct orange mottles; clayey fine sand; massive structure; wet when sampled; clear to
2C1	3.05 to 3.4	Grey (5Y51) moist; common 10-20% coarse 15-30mm distinct orange mottles, very few <2% fine <5mm prominent red mottles; fine sandy clay loam; massive structure; wet when sampled; clear to
2C2	3.4 to 3.8	Dark grey (5Y41) moist; clay loam, fine sandy; massive structure; wet when sampled; clear to
2C3	3.8 to 4.1	Very dark grey (5Y31) moist; fine sandy clay loam; massive structure; wet when sampled; abrupt to
3C4	4.1 to 4.5	Black (5Y2.5/2) moist; fibric clay loam; massive structure; wet when sampled; clear to
3C5	4.5 to 5.4	Very dark grey (5Y31) moist; fibric clay loam; massive structure; wet when sampled; gradual to
3C6	5.4 to 6	Dark greenish grey (10Y31) moist; fibric light clay; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	3.25		7.0	5.6
.1	3	5.1	2.6	3.5		7.1	5.6
.3	3	5.7	3.1	3.75		7.5	2.9
.6	3	6.1	4.4	4	4	7.4	1.5
.8		6.2	4.5	4.25	4	7.2	1.1
1		6.4	4.8	4.5	4	7.6	1.1
1.25		6.2	5.0	4.75	4	7.6	1.1
1.5		6.3	5.5	5	4	7.5	1.2
1.75	3	6.6	5.4	5.25	4	7.3	1.1
2		7.1	5.2	5.5	4	7.3	1.1
2.25		7.0	5.4	5.75	4	7.4	1.2
2.5		7.3	5.7	6	4	7.4	1.0
2.75		7.0	6.0				
3		7.1	6.1				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Observation Notes:

Location Cane. NE of Captain Cook Hwy between Thomatis Ck and Holloway Beach Road.

Project: NQAS **Site:** 255 **Observation:** 1

Location: GDA 94 ZONE 55 366969mE 8126596mN Lat: -16.94057 Long: 145.75069

Described By: Lauren OBrien (OBRL)

Landscape:
Landform Pattern: chenier plain **Element:** fill-top

Classifications:
ASC: SPOLIC, Anthroposol
ASC: SULFIDIC, INTERTIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
M1	0 to .25	Light olive brown (2.5Y54) moist; sandy clay loam; very few <2% subrounded gravel medium pebbles 6-20 mm; common 10-20% subrounded gravel small pebbles 2-6 mm; single grain structure; dry when sampled; clear to
M2	.25 to .8	Dark greyish brown (2.5Y43) moist; few 2-10% very coarse >30mm prominent dark mottles; sandy clay loam; very few <2% subrounded gravel medium pebbles 6-20 mm; common 10-20% subrounded gravel small pebbles 2-6 mm; subangular blocky weak 2-5mm structure; moderately moist when sampled; clear to
2B21a	.8 to 1.2	Dark grey (2.5Y41) moist; few 2-10% medium 5-15mm faint dark mottles, common 10-20% fine <5mm distinct yellow jarosite (from pyrite) mottles; medium clay; very few <2% angular platy shell medium pebbles 6-20 mm; massive structure; moist when sampled; clear to
3A11	1.2 to 1.45	Black (2.5Y2.5/1) moist; sandy loam; massive structure; moist when sampled; clear to
3A12	1.45 to 1.75	Very dark greyish brown (2.5Y32) moist; clayey coarse sand; massive structure; moist when sampled; diffuse to
4B21	1.75 to 2.2	Grey (5Y51) moist; many 20-50% fine <5mm distinct orange mottles; medium clay; massive structure; wet when sampled; diffuse to
5B3	2.2 to 2.55	Dark greyish brown (2.5Y42) moist; coarse sand; single grain structure; wet when sampled; gradual to
5C1	2.55 to 3	Grey (5Y61) moist; coarse sand; few 2-10% angular platy shell medium pebbles 6-20 mm; single grain structure; wet when sampled; sharp to
6C2	3 to 3.75	Dark greenish grey (10Y41) moist; light clay; common 10-20% angular platy shell medium pebbles 6-20 mm; massive structure; wet when sampled; clear to
6C3	3.75 to 4.2	Very dark grey (2.5Y31) moist; fibric light clay; massive structure; wet when sampled; clear to
6C4	4.2 to 5.45	Very dark grey (5Y31) moist; light clay; massive structure; wet when sampled; diffuse to
7D1	5.45 to 6	Dark grey (N40) moist; common 10-20% very coarse >30mm distinct orange mottles; medium clay; massive structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	4	7.9	8.0	3.25	4	7.9	6.8
.3	4	7.7	7.1	3.5	4	8.6	6.6
.6	4	7.6	6.6	3.75	4	7.9	1.4
.8	2	7.2	4.1	4	4	7.9	1.2
1	4	7.1	7.0	4.25	4	7.8	1.6
1.25	1	6.7	2.9	4.5	4	8.1	1.4
1.5		7.1	4.9	4.75	4	8.0	1.4
1.75		6.8	5.1	5	4	8.1	1.5
2		5.4	4.1	5.25	4	7.9	1.6
2.25		6.9	5.2	5.5	4	7.9	3.6
2.5		7.0	5.7	5.75	4	7.7	6.1
2.75		7.0	5.0	6	4	7.7	7.1
3	4	7.4	6.4				

PH-2: pH using electrode probe
PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon 5C1 shell CFs in lens 2.95-3m, clay lens at 2.9m

Project: NQAS **Site:** 256 **Observation:** 1

Location: GDA 94 ZONE 55 367187mE 8130923mN Lat: -16.90148 Long: 145.75299

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: chenier plain

Element: fill-top

Classifications:

ASC: SPOLIC, Anthroposol

ASC: SULFIDIC, INTERTIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
M1	0 to .65	Dark greyish brown (2.5Y43) moist; common 10-20% medium 5-15mm prominent orange mottles; clay loam, sandy; subangular blocky weak 5-10mm structure; moderately moist when sampled; clear to
M2	.65 to 1.15	Very dark greyish brown (2.5Y32) moist; very few <2% fine <5mm distinct yellow jarosite (from pyrite) mottles, few 2-10% medium 5-15mm distinct orange mottles; clay loam, sandy; massive structure; moderately moist when sampled; clear to
2B3	1.15 to 1.35	Dark greenish grey (10Y31) moist; clayey coarse sand; massive structure; wet when sampled; sharp to
3C1	1.35 to 1.5	Very dark grey (N30) moist; light clay; massive structure; wet when sampled; sharp to
4C2	1.5 to 1.75	Grey (5Y51) moist; coarse sand; single grain structure; wet when sampled; sharp to
5C3	1.75 to 3.45	Very dark grey (N30) moist; fine sandy clay loam; common 10-20% angular platy shell medium pebbles 6-20 mm; common 10-20% subrounded quartz small pebbles 2-6 mm; common 10-20% angular platy shell small pebbles 2-6 mm; massive structure; wet when sampled; clear to
6C4	3.45 to 4.5	Very dark grey (5Y31) moist; fibric light clay; massive structure; wet when sampled; clear to
6C5	4.5 to 4.8	Very dark grey (5Y31) moist; fibric peat; massive structure; wet when sampled; clear to
6C6	4.8 to 5.15	Very dark grey (5Y31) moist; fibric light clay; massive structure; wet when sampled; clear to
6C7	5.15 to 5.4	Very dark grey (5Y31) moist; sandy clay loam; massive structure; wet when sampled; clear to
7D1	5.4 to 5.85	Bluish grey (5PB61) moist; light clay; sandy; massive structure; moist when sampled; clear to
7D2	5.85 to 6	Bluish grey (5PB61) moist; few 2-10% medium 5-15mm distinct orange mottles; light clay; sandy; massive structure; moist when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	3.25	4	7.5	4.6
.1	1	4.8	3.6	3.5	4	7.4	1.1
.3		5.5	4.4	3.75	4	6.6	1.4
.6	1	4.9	2.9	4	4	7.3	1.3
.8	1	4.2	2.3	4.25	4	7.3	1.1
1	1	4.1	2.2	4.5	4	7.4	1.2
1.25	2	4.8	2.2	4.75	3	7.4	0.8
1.5	3	6.6	2.6	5	4	7.5	1.2
1.75	2	6.2	1.7	5.25	4	7.6	1.9
2	4	6.6	1.9	5.5	4	7.5	1.3
2.25	4	6.9	6.4	5.75	4	7.5	1.7
2.5	4	8.0	6.7	6	4	7.5	5.9
2.75	4	8.0	6.4				
3	4	7.9	6.9				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon 5C3 sand and clay lenses throughout - highly variable texture

Project: NQAS **Site:** 257 **Observation:** 1

Location: GDA 94 ZONE 55 366337mE 8130288mN Lat: -16.90717 Long: 145.74497

Described By: Lauren OBrien (OBRL)

Landscape:
Landform Pattern: chenier plain **Element:** beach ridge

Classifications:
ASC: ARENIC, BLEACHED-ORTHIC, Tenosol
ASC: SULFIDIC, EXTRATIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A11	0 to .15	Black (10YR21) moist; loamy sand; single grain structure; common 2-5mm roots; dry when sampled; clear to
A12	.15 to .65	Very dark grey (10YR31) moist; loamy sand; single grain structure; common 1-2mm roots; dry when sampled; diffuse to
A21	.65 to .95	Dark greyish brown (2.5Y43) moist; sand; few 2-10% subrounded quartz small pebbles 2-6 mm; single grain structure; dry when sampled; diffuse to
A22	.95 to 1.45	Greyish brown (2.5Y53) moist; sand; few 2-10% subrounded quartz small pebbles 2-6 mm; single grain structure; moderately moist when sampled; clear to
A23e	1.45 to 1.65	Light grey (5Y72) moist; very few <2% medium 5-15mm faint orange mottles; sand; few 2-10% subrounded quartz small pebbles 2-6 mm; single grain structure; moderately moist when sampled; clear to
2B21	1.65 to 2	Greenish grey (10Y51) moist; common 10-20% coarse 15-30mm prominent orange mottles; light clay; very few <2% angular platy shell small pebbles 2-6 mm; massive structure; common 1-2mm roots; moist when sampled; gradual to
2B22	2 to 2.35	Very dark grey (N30) moist; common 10-20% coarse 15-30mm prominent brown mottles; light clay; massive structure; moist when sampled; clear to
2B23	2.35 to 2.6	Dark grey (5Y41) moist; few 2-10% very coarse >30mm faint brown mottles; sandy clay loam; massive structure; wet when sampled; clear to
3B24	2.6 to 2.8	Dark greenish grey (10Y41) moist; fine sandy loam; few 2-10% angular platy shell small pebbles 2-6 mm; few 2-10% angular platy shell medium pebbles 6-20 mm; very few <2% rounded quartz large pebbles 20-60 mm; massive structure; wet when sampled; sharp to
4C1	2.8 to 3.6	Black (2.5Y2.5/1) moist; fibric peat; massive structure; wet when sampled; clear to
4C2	3.6 to 3.8	Dark grey (5Y41) moist; fine sandy clay loam; few 2-10% angular platy shell medium pebbles 6- 20 mm; few 2-10% angular platy shell small pebbles 2-6 mm; massive structure; wet when sampled; clear to
5B21	3.8 to 4.05	Greenish grey (10Y61) moist; light clay; massive structure; many 20-50% medium 2-6mm ferromanganiferous nodules; many 20-50% medium 2-6mm ferromanganiferous soft segregations; wet when sampled; clear to
6D1	4.05 to 4.35	Dark yellowish brown (10YR46) moist; very few <2% fine <5mm prominent gley mottles, few 2- 10% medium 5-15mm faint dark mottles, very few <2% fine <5mm faint red mottles; medium clay; massive structure; wet when sampled; gradual to
6D2	4.35 to 4.8	Yellowish red (5YR46) moist; very few <2% fine <5mm faint orange mottles, few 2-10% medium 5-15mm prominent gley mottles; medium clay; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	1	4.3	3.4	2.75	3	6.2	5.9
.3	1	5.0	4.8	3	4	6.3	1.3
.6		5.0	5.4	3.25	4	6.5	0.8
.8		5.4	5.9	3.5	4	6.5	1.6
1		5.6	6.1	3.75	4	6.8	1.8
1.25		5.8	5.8	4	4	6.9	3.1
1.5		5.4	6.0	4.25	1	7.0	6.5
1.75		4.2	3.4	4.5	3	7.1	6.4
2		4.3	2.6	4.7	1	7.2	6.7
2.25	4	6.1	2.5			PH-2: pH using electrode probe	
2.5	3	6.3	6.1			PH-3: pH of hydrogen peroxide extract	

Horizon Notes:

Horizon 2B22 KS lens at 2.2m, no mottle after that.
Horizon 4C2 clay lens at 3.7-3.8m (N40)

Project: NQAS **Site:** 258 **Observation:** 1

Location: GDA 94 ZONE 55 362005mE 8138691mN Lat: -16.83097 Long: 145.70482

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain **Element:** creek terrace

Classifications:

ASC: KANDOSOLIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .1	Dark brown (10YR33) moist; fine sandy clay loam; platy weak 5-10mm structure; moderately moist when sampled; abrupt to
A21	.1 to .4	Dark yellowish brown (10YR46) moist; fine sandy clay loam; massive structure; moderately moist when sampled; gradual to
A22	.4 to .9	Light olive brown (2.5Y56) moist; fine sandy loam; massive structure; moderately moist when sampled; clear to
B21	.9 to 1.5	Light grey (2.5Y72) moist; common 10-20% medium 5-15mm prominent red mottles, few 2-10% medium 5-15mm faint orange mottles; fine sandy clay loam; massive structure; moist when sampled; abrupt to
B22	1.5 to 2.6	Light olive grey (5Y62) moist; many 20-50% very coarse >30mm prominent red mottles, few 2- 10% medium 5-15mm distinct orange mottles; light fine sandy clay loam; massive structure; moist when sampled; gradual to
C1	2.6 to 3	Grey (5Y51) moist; light clay; very few <2% rounded quartz small pebbles 2-6 mm; massive structure; wet when sampled; clear to
2C2	3 to 3.6	Very dark grey (10YR31) moist; fibric peat; massive structure; wet when sampled; clear to
2C3	3.6 to 6.5	Very dark grey (10YR31) moist; fibric light clay; massive structure; wet when sampled; clear to
2C4	6.5 to 7	Very dark grey (10YR31) moist; fibric peat; massive structure; wet when sampled; gradual to
3C5	7 to 7.2	Very dark grey (2.5Y31) moist; clayey coarse sand; common 10-20% subrounded quartz medium pebbles 6-20 mm; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	1	4.5	4.3	4	4	6.5	1.2
.3		5.0	4.5	4.25	4	6.7	1.2
.6		5.2	4.1	4.5	4	7.0	1.1
.8		5.1	4.7	4.75	4	7.2	1.1
1		5.1	3.4	5	4	7.3	1.3
1.25		4.7	3.0	5.25	4	7.1	1.3
1.5		4.6	4.6	5.5	4	7.3	1.1
1.75		4.4	3.8	5.75	4	7.2	1.1
2		4.2	4.0	6	4	7.3	1.3
2.25		4.2	3.8	6.25	4	7.1	1.0
2.5		4.1	2.9	6.5	4	7.0	1.3
2.75		4.4	3.4	6.75	4	7.3	1.0
3	2	4.6	0.8	7	4	7.3	1.8
3.25	4	5.7	1.0	7.2	4	7.4	1.1
3.5	4	6.4	1.0				
3.75	4	6.7	0.9				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon	B21	sandy lens at 1.5m
Horizon	C1	v thin KS lenses at 3.0m

Project: NQAS **Site:** 259 **Observation:** 1

Location: GDA 94 ZONE 55 361573mE 8138816mN Lat: -16.82982 Long: 145.70078

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain **Element:** creek terrace

Classifications:

ASC: SULFIDIC, REDOXIC, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .1	Dark brown (10YR33) moist; clay loam; subangular blocky weak 2-5mm structure; moist when sampled; clear to
B21	.1 to .5	Brown (10YR43) moist; common 10-20% coarse 15-30mm faint brown mottles; clay loam; very few <2% rounded quartz small pebbles 2-6 mm; massive structure; common 10-20% fine <2mm manganiferous soft segregations; common 10-20% medium 2-6mm manganiferous soft segregations; moist when sampled; gradual to
2B22	.5 to .8	Very dark grey (2.5Y31) moist; few 2-10% fine <5mm faint brown mottles; light clay; massive structure; wet when sampled; gradual to
2B3	.8 to 1.15	Dark greyish brown (2.5Y42) moist; very few <2% fine <5mm faint brown mottles; clay loam, sandy; few 2-10% subrounded quartz small pebbles 2-6 mm; massive structure; wet when sampled; clear to
3C1	1.15 to 1.6	Dark grey (5Y41) moist; sand; single grain structure; wet when sampled; gradual to
3C2	1.6 to 2.2	Dark grey (5Y41) moist; coarse sand; few 2-10% subrounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled; clear to
4C3	2.2 to 3.25	Dark greenish grey (10Y31) moist; sandy light clay; common 10-20% subrounded quartz small pebbles 2-6 mm; massive structure; wet when sampled; gradual to
4C4	3.25 to 4.2	Grey (5Y51) moist; sand; common 10-20% subrounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled; diffuse to
4C5	4.2 to 4.9	Grey (5Y51) moist; coarse sand; few 2-10% subrounded quartz medium pebbles 6-20 mm; common 10-20% subrounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled; clear to
4C6	4.9 to 5.9	Greenish grey (10Y61) moist; coarse sand; many 20-50% subrounded quartz small pebbles 2-6 mm; single grain structure; wet when sampled; clear to
5D1	5.9 to 7.2	Light olive brown (2.5Y54) moist; common 10-20% medium 5-15mm prominent grey mottles; clay loam, fine sandy; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	2	4.7	3.3	4	4	6.3	1.9
.3	4	5.0	3.4	4.25	4	6.3	1.2
.6	2	5.3	2.4	4.5	4	6.3	1.8
.8	3	5.6	2.9	4.75	4	6.3	2.0
1	4	5.6	3.1	5	4	6.4	2.0
1.25	4	6.0	1.2	5.25	2	6.4	1.7
1.5	4	6.2	1.6	5.5	2	6.3	1.6
1.75	4	6.1	1.3	5.75	2	6.2	1.7
2	4	5.9	1.4	6	2	7.0	3.9
2.25	4	5.8	1.3	6.25	3	6.9	5.8
2.5	4	5.8	1.6	6.5	3	6.9	6.2
2.75	4	6.3	1.5	6.75	1	6.9	5.7
3	4	5.6	1.5	7	1	7.0	6.0
3.25	4	5.4	1.7	7.2		6.9	6.1
3.5	4	5.6	1.8				
3.75	4	6.1	1.6				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Horizon Notes:

Horizon 4C3 variable texture - alternating thin bands LC/SLC/CS

Project: NQAS **Site:** 260 **Observation:** 1

Location: GDA 94 ZONE 55 363686mE 8139410mN Lat: -16.82458 Long: 145.72064

Described By: David Morrison (MORD)

Landscape:
Landform Pattern: alluvial plain **Element:** drainage depression

Classifications:
ASC: SULFIDIC, EXTRATIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A1p	0 to .1	Dark greyish brown (10YR42) moist; few 2-10% medium 5-15mm distinct red mottles, few 2-10% fine <5mm faint orange mottles; sandy loam; subangular blocky moderate 5-10mm structure; very few <2% fine <2mm organic (humified) root linings; abrupt to
A2p	.1 to .3	Light grey (2.5Y71) moist; common 10-20% medium 5-15mm distinct orange mottles, few 2-10% fine <5mm faint red mottles; sandy light medium clay; angular blocky weak 5-10mm structure; very few <2% fine <2mm organic (humified) root linings; abrupt to
B2	.3 to .75	Grey (2.5Y61) moist; many 20-50% very coarse >30mm distinct orange mottles, common 10- 20% coarse 15-30mm distinct grey mottles; sandy medium clay; massive structure; very few <2% fine <2mm organic (humified) root linings; clear to
2B3	.75 to 1.2	Dark grey (2.5Y41) moist; few 2-10% medium 5-15mm faint dark mottles; loamy sand; single grain structure; abrupt to
2C1	1.2 to 3	Light greenish grey (5GY71) moist; few 2-10% very coarse >30mm distinct dark mottles; clayey sand; very few <2% subangular quartz small pebbles 2-6 mm; single grain structure; very few <2% medium 2-6mm organic (humified) root linings; diffuse to
2C2	3 to 3.9	Light greenish grey (10GY81) moist; clayey sand; very few <2% subangular quartz small pebbles 2-6 mm; single grain structure; gradual to
2C3	3.9 to 4.3	Light greenish grey (5GY81) moist; clay loam, sandy; very few <2% angular metamorphic rock (unidentified) large pebbles 20-60 mm; few 2-10% subangular quartz small pebbles 2-6 mm; clear to
3C4	4.3 to 4.7	Light greenish grey (10GY81) moist; clay loam, coarse sandy; few 2-10% subangular metamorphic rock (unidentified) medium pebbles 6-20 mm; few 2-10% subangular quartz medium pebbles 6-20 mm; many 20-50% angular quartz small pebbles 2-6 mm; clear to
4C5	4.7 to 5.7	Bluish grey (5B61) moist; clayey sand; very few <2% subangular quartz medium pebbles 6-20 mm; single grain structure; abrupt to
5D	5.7 to 6	Pale olive (5Y64) moist; few 2-10% very coarse >30mm faint gley mottles; clay loam, fine sandy; massive structure; few 2-10% coarse 6-20mm ferromanganiferous soft segregations

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	1	5.4	3.7	3.25		6.3	4.9
.3		5.9	5.2	3.5		6.3	5.2
.6		6.1	5.3	3.75		6.2	5.0
.8		6.0	2.2	4		6.7	4.8
1	2	6.6	1.0	4.25	4	6.6	1.7
1.25	4	6.7	1.3	4.5	2	6.8	4.0
1.5	4	6.6	1.3	4.75	4	6.7	1.3
1.75	4	6.3	1.4	5	4	6.6	1.5
2	4	6.5	1.4	5.25	4	6.4	1.3
2.25	1	6.2	1.2	5.5	4	6.5	1.2
2.5	1	6.1	1.1	5.75		6.9	5.4
2.75	1	5.9	1.4	6		6.7	5.4
3	1	6.4	1.5				

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 261 **Observation:** 1

Location: GDA 94 ZONE 55 361640mE 8138297mN Lat: -16.83451 Long: 145.70137

Described By: Lauren OBrien (OBRL)

Landscape:
Landform Pattern: alluvial plain **Element:** plain

Classifications:
ASC: DYSTROPHIC, RED, Kandosol

Profile Morphology:

Horizon	Depth (m)	Description
A1	0 to .15	Dark brown (10YR33) moist; sandy clay loam; subangular blocky weak 2-5mm structure; dry when sampled; gradual to
B21	.15 to .75	Dark yellowish brown (10YR44) moist; clay loam, sandy; granular weak 5-10mm structure; dry when sampled; gradual to
B3	.75 to 1.4	Dark yellowish brown (10YR46) moist; loamy sand; granular weak <2mm structure; dry when sampled; clear to
2C1	1.4 to 1.7	Yellowish brown (10YR56) moist; coarse sand; many 20-50% subrounded quartz small pebbles 2-6 mm; many 20-50% subrounded metamorphic rock (unidentified) small pebbles 2-6 mm; few 2-10% subrounded quartz medium pebbles 6-20 mm; few 2-10% subrounded metamorphic rock (unidentified) medium pebbles 6-20 mm; single grain structure; dry when sampled; clear to
2C2	1.7 to 3.1	Olive yellow (2.5Y66) moist; sand; common 10-20% subrounded quartz small pebbles 2-6 mm; common 10-20% subrounded metamorphic rock (unidentified) small pebbles 2-6 mm; very few <2% subrounded quartz medium pebbles 6-20 mm; very few <2% subrounded metamorphic rock (unidentified) medium pebbles 6-20 mm; single grain structure; moderately moist when sampled; sharp to
2C3	3.1 to 3.4	Brown (10YR43) moist; sand; common 10-20% subrounded quartz small pebbles 2-6 mm; common 10-20% subrounded metamorphic rock (unidentified) small pebbles 2-6 mm; very few <2% subrounded quartz medium pebbles 6-20 mm; very few <2% subrounded metamorphic rock (unidentified) medium pebbles 6-20 mm; single grain structure; wet when sampled; sharp to
3C4	3.4 to 3.6	Yellowish brown (10YR58) moist; sand; common 10-20% subrounded quartz small pebbles 2-6 mm; common 10-20% subrounded metamorphic rock (unidentified) small pebbles 2-6 mm; single grain structure; wet when sampled; sharp to
3C5	3.6 to 4.15	Light yellowish brown (2.5Y64) moist; sand; single grain structure; wet when sampled; clear to
4C6	4.15 to 5.95	Light yellowish brown (2.5Y64) moist; coarse sand; many 20-50% subrounded quartz small pebbles 2-6 mm; many 20-50% subrounded metamorphic rock (unidentified) small pebbles 2-6 mm; few 2-10% subrounded quartz medium pebbles 6-20 mm; few 2-10% subrounded metamorphic rock (unidentified) medium pebbles 6-20 mm; single grain structure; wet when sampled; sharp to
4C7	5.95 to 6.2	Dark greenish grey (10Y41) moist; coarse sand; single grain structure; common 10-20% coarse 6-20mm argillaceous soft segregations; wet when sampled; sharp to
5C8	6.2 to 6.5	Grey (N60) moist; loamy fine sand; very few <2% subrounded quartz medium pebbles 6-20 mm; massive structure; wet when sampled; gradual to
6D	6.5 to 7.2	Light olive brown (2.5Y56) moist; very few <2% coarse 15-30mm prominent gley mottles; sandy clay loam; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3	Depth	H2O2-	PH-2	PH-3
.1	2	5.6	3.8	3.75		5.8	6.2
.3		5.4	4.5	4		5.9	6.3
.6	1	5.3	4.3	4.25		6.2	6.3
.8	1	5.3	4.9	4.5		6.2	6.4
1	1	5.6	5.0	4.75		6.3	5.6
1.25	1	5.4	4.6	5		6.4	5.9
1.5	1	5.6	6.0	5.25		6.3	6.2
1.75	1	5.7	5.7	5.5		6.5	6.2
2	1	5.6	6.1	5.75		6.2	5.6
2.25	1	5.6	6.1	6	1	6.3	2.1
2.5		5.6	6.1	6.25		6.8	5.2
2.75		5.7	6.0	6.5		6.9	5.6
3		6.0	6.1	6.75		6.4	6.0
3.25	4	5.8	8.9	7		6.5	5.9
3.5		5.8	6.4	7.2		6.5	6.0

PH-2: pH using electrode probe
 PH-3: pH of hydrogen peroxide extract

Project: NQAS **Site:** 262 **Observation:** 1

Location: GDA 94 ZONE 55 363250mE 8138887mN Lat: -16.82928 Long: 145.71652

Described By: Lauren OBrien (OBRL)

Landscape:

Landform Pattern: alluvial plain

Element: supratidal flat

Classifications:

ASC: SULFURIC, EXTRATIDAL, Hydrosol

Profile Morphology:

Horizon	Depth (m)	Description
A11ia	0 to .1	Dark olive grey (5Y32) moist; common 10-20% very coarse >30mm faint orange mottles, very few <2% fine <5mm prominent yellow jarosite (from pyrite) mottles; light clay; massive structure; moist when sampled; clear to
A21ia	.1 to .45	Very dark greyish brown (2.5Y32) moist; common 10-20% medium 5-15mm prominent yellow jarosite (from pyrite) mottles; light clay; very few <2% rounded quartz small pebbles 2-6 mm; massive structure; wet when sampled; clear to
C1u	.45 to 1.1	Very dark grey (2.5Y31) moist; common 10-20% coarse 15-30mm faint pale mottles; fibric light clay; massive structure; wet when sampled; clear to
C2	1.1 to 2.9	Black (2.5Y2.5/1) moist; fibric peat; massive structure; wet when sampled; clear to
2C3	2.9 to 3.3	Very dark greyish brown (2.5Y32) moist; fibric sandy light clay; massive structure; wet when sampled; clear to
3C4	3.3 to 3.6	Grey (5Y51) moist; clayey sand; common 10-20% subrounded quartz small pebbles 2-6 mm; massive structure; wet when sampled; clear to
3C5	3.6 to 4.2	Grey (N60) moist; clayey coarse sand; common 10-20% subrounded quartz small pebbles 2-6 mm; few 2-10% subrounded quartz medium pebbles 6-20 mm; massive structure; wet when sampled; clear to
3C6	4.2 to 4.8	Bluish grey (5B61) moist; heavy clayey coarse sand; many 20-50% subrounded quartz small pebbles 2-6 mm; massive structure; wet when sampled

Field Tests:

Depth	H2O2-	PH-2	PH-3
.1	1	3.3	2.0
.3	1	3.9	1.6
.6	1	4.0	1.5
.8	4	4.1	1.0
1	4	5.5	1.0
1.25	4	6.0	1.1
1.5	4	6.6	1.3
1.75	4	6.5	1.3
2	4	6.8	1.3
2.25	4	6.4	1.2
2.5	4	6.8	1.1
2.75	4	6.7	1.0
3	4	6.8	1.2
3.25	4	6.6	1.2
3.5	4	6.8	1.2
3.75	4	6.5	1.4
4	4	6.8	1.2
4.25	2	6.9	1.3
4.5	4	7.2	1.7
4.75	2	7.4	1.7

PH-2: pH using electrode probe

PH-3: pH of hydrogen peroxide extract