



15 Site compatibility certificates and conditions for seniors housing

- 15.1 Is the land subject to a current site compatibility certificate (seniors housing), of which Council is aware, issued under *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004*?

No.

- 15.2 Has Council granted a development consent after 11 October 2007 in respect of the land, setting out any terms of a kind referred to in clause 18(2) of the *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004*?

No.

16 Site compatibility certificates for infrastructure

Is the land subject to a valid site compatibility certificate (infrastructure), of which Council is aware?

No.

17 Site compatibility certificates and conditions for affordable rental housing

- 17.1 Is the land subject to a current site compatibility certificate (affordable rental housing), of which Council is aware?

No.

- 17.2 Is the land subject to a statement setting out any terms of a kind referred to in clause 17(1) or 38(1) of *State Environmental Planning Policy (Affordable Rental Housing) 2009* that has been imposed as a condition of consent to a development application?

No.

18 Paper subdivision information

- 18.1 Is the land subject to a development plan adopted by a relevant authority that applies to the land or that is proposed to be subject to a consent ballot?

No.

- 18.2 Is the land subject to a subdivision order?

No.

Note: Words and expressions used in this section have the same meaning as they have in Part 16C of the *Environmental Planning and Assessment Regulation 2000*.

19 Site verification certificates for biophysical strategic agricultural lands

Is the land subject to a current site verification certificate (biophysical strategic agricultural land), of which Council is aware?

No.



Note: A site verification certificate sets out the relevant State Government department Secretary's opinion as to whether the land concerned is or is not biophysical strategic agricultural land or critical industry cluster land - see Division 3 of Part 4AA of *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*.

20 Loose-fill asbestos insulation

Does the land contain any residential premises that is listed on the Loose-Fill Asbestos Insulation Register (within the meaning of Division 1A of Part 8 of the *Home Building Act 1989*)?

No.

Additional Matters

Certain prescribed matters under Section 59(2) of the *Contaminated Land Management Act 1997 (CLMA 1997)*.

a) Is the land significantly contaminated land within the meaning of the CLMA 1997?

No.

b) Is the land subject to a management order within the meaning of the CLMA 1997?

No.

c) Is the land subject to an approved voluntary management proposal within the meaning of the CLMA 1997?

No.

d) Is the land subject to an ongoing maintenance order within the meaning of the CLMA 1997?

No.

e) Is the land subject to a site audit statement within the meaning of the CLMA 1997?

No.

Enquiries

For any enquiries please contact Customer Service on (02) 4560 4444.

A stylized, handwritten signature in black ink, appearing to be a cursive 'S' followed by a wavy line.

Authorised Officer

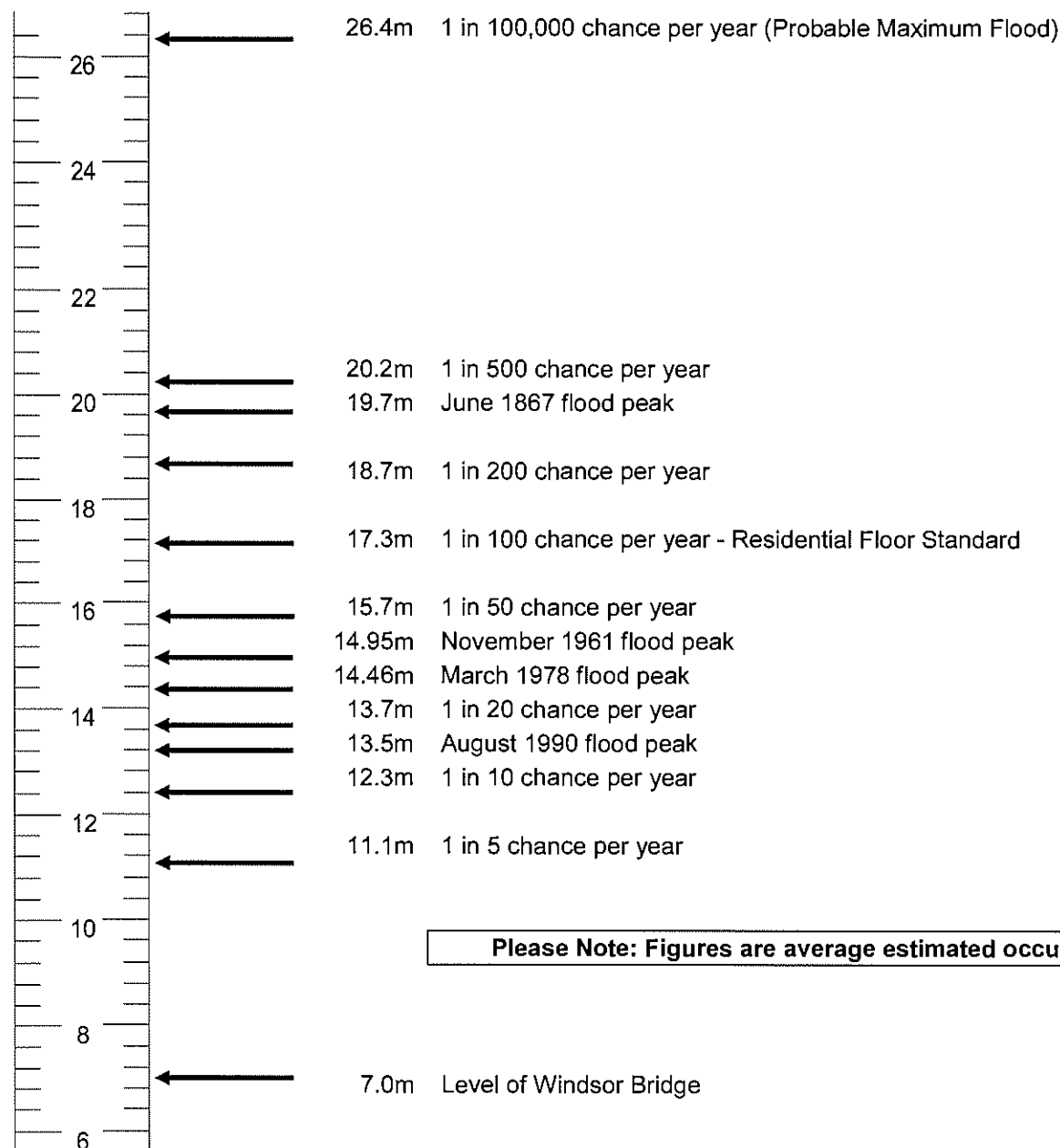


Flood Awareness - City of Hawkesbury

Windsor

Please note that there is a risk of flooding above Council's residential floor height control. The table below indicates levels to Australian Height Datum (above sea level) for estimated flooding probabilities and historical flood peaks.

Flood chance of occurrence per year and historical floods



Flood heights obtained from *Engineering Studies to Modify Flood Behaviour*, September 1997, prepared by Webb, McKeown & Associates Pty Ltd for the Hawkesbury-Nepean Floodplain Management Strategy Steering Committee. Flood heights reproduced in Table: 2.3 Design Flood Levels of the Hawkesbury Floodplain Risk Management Study and Plan, December 2012, prepared by Bewsher Consulting Pty Ltd for Hawkesbury City Council.

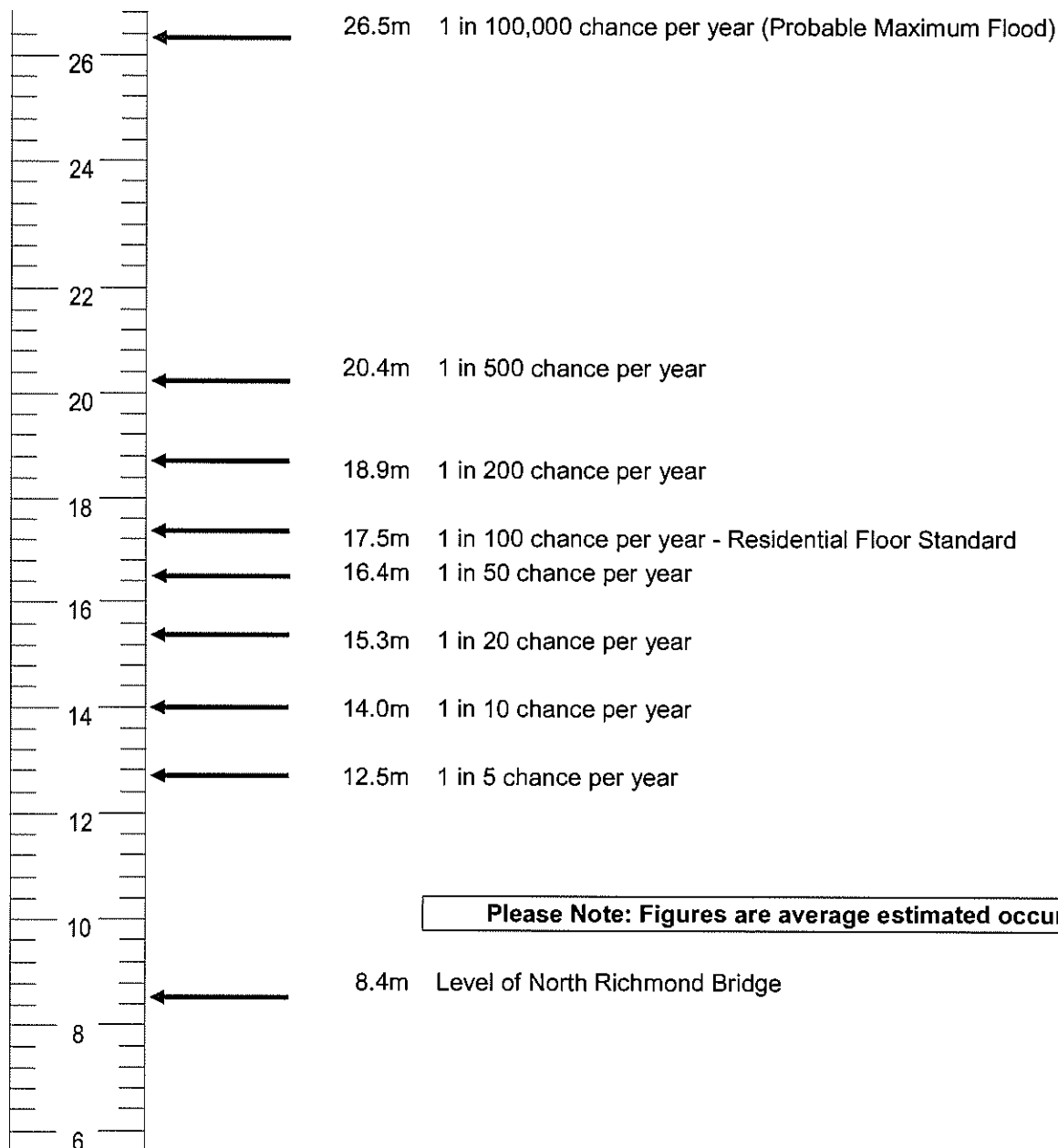


Flood Awareness - City of Hawkesbury

North Richmond

Please note that there is a risk of flooding above Council's residential floor height control. The table below indicates levels to Australian Height Datum (above sea level) for estimated flooding probabilities and historical flood peaks.

Flood chance of occurrence per year and historical floods



Please Note: Figures are average estimated occurrences

Flood heights obtained from *Engineering Studies to Modify Flood Behaviour*, September 1997, prepared by Webb, McKeown & Associates Pty Ltd for the Hawkesbury-Nepean Floodplain Management Strategy Steering Committee. Flood heights reproduced in Table: 2.3 Design Flood Levels of the Hawkesbury Floodplain Risk Management Study and Plan, December 2012, prepared by Bewsher Consulting Pty Ltd for Hawkesbury City Council.

Appendix D

Field Work Results

BOREHOLE LOG

CLIENT: NSW Department of Education
PROJECT: Hurlstone Agricultural High School (Hawkesbury)
LOCATION: Londonderry Road, Richmond

SURFACE LEVEL: 23.4 AHD
EASTING: 290646
NORTHING: 6278336
DIP/AZIMUTH: 90°/-

BORE No: 1
PROJECT No: 85644.00
DATE: 21/10/2016
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
					0.0		0.0-1.5m: Bulk sample			
	0.3	TOPSOIL - dark grey-brown silty fine grained sand topsoil with rootlets, dry to humid		A	0.1					
		SILTY SAND - medium dense, dark grey-brown silty fine grained sand, humid		A	0.5					
	1	- with some clay, grey-brown fine to medium grained, moist below 0.9m depth		A	1.0		2,4,7 N = 11 Rec = 350mm			
		- becoming slightly clayey below 1.2m depth		S	1.35					
				A	1.5					
	2									
					2.5		8,1216 refusal Rec = 0.4m			
				S	2.9					
	3.4	CLAYEY SAND - medium dense, grey clayey fine to medium grained sand, moist to wet		D	3.5					
	4.0	SILTY CLAY - very stiff, grey and orange-brown mottled, silty, high plasticity clay with a trace of fine grained sand, moist		S	4.0		4,8,10 N = 18 Rec = 350mm pp = 400			
					4.35					
				S	5.5		6,11,13 N = 24 Rec = 450mm pp = 200-250			
		- becoming grey and slightly sandy below 5.7m depth. Sand fraction fine grained			5.95					
	7.0	SANDY SILTY CLAY - very stiff, grey sandy silty medium plastic clay. Sand fraction fine grained		S	7.0		8,12,16 N = 28 Rec = 350mm pp = 350			
	7.45	Bore discontinued at 7.45m - limit of investigation			7.35 7.45					
	8									
	9									

RIG: DT250

DRILLER: GM

LOGGED: DCH

CASING: Uncased

TYPE OF BORING: Solid flight auger to 7.0m

WATER OBSERVATIONS: Free groundwater observed at 2.5m

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	>	Water seep	S	Standard penetration test
E	Environmental sample	≡	Water level	V	Shear vane (kPa)

BOREHOLE LOG

CLIENT: NSW Department of Education
PROJECT: Hurlstone Agricultural High School (Hawkesbury)
LOCATION: Londonderry Road, Richmond

SURFACE LEVEL: 23.2 AHD
EASTING: 290641
NORTHING: 6278178
DIP/AZIMUTH: 90°/-

BORE No: 2
PROJECT No: 85644.00
DATE: 21/10/2016
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
23	0.2	TOPSOIL - dark grey-brown silty fine grained sand topsoil with rootlets, dry to humid		A	0.0					
					0.1					
		SILTY SAND - medium dense, grey-brown silty fine grained sand, humid		A	0.5					
1		- with some clay, grey-brown and orange-brown mottled, with fine to medium grained sand, moist below 0.9m depth		A	1.0		3,13,24 N = 37 Rec = 450mm		1	
		- becoming dense below 1.0m depth		S						
		- becoming fine grained, slightly clayey below 1.1m depth		A	1.45					
					1.5					
2									2	
		- with some clay, becoming orange-brown below 2.6m depth		S	2.5		10,18,21 N = 39 Rec = 330			
					2.83					
3									3	
4	4.0	SILTY CLAY -stiff, grey with orange-brown mottled, silty high plasticity clay with a trace of fine grained sand, moist		S	4.0		3,5,7 N = 12 Rec = 360 pp = 150-200		4	
					4.36					
5									5	
		- becoming very stiff and grey below 5.5m depth		S	5.5		5,10,11 N = 21 Rec = 340mm pp = 300			
					5.84				6	
6										
7					7.0		6,9,11 N = 20 Rec = 450mm pp = 200-250		7	
7.45	7.45	- becoming grey and orange-brown and black mottled below 7.3m depth		S	7.45					
		Bore discontinued at 7.45m								
		- limit of investigation								
8									8	
9									9	

RIG: DT250

DRILLER: GM

LOGGED: DCH

CASING: Uncased

TYPE OF BORING: Solid flight auger to 7.0m

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	W	Water seep	S	Standard penetration test
E	Environmental sample	W	Water level	V	Shear vane (kPa)

BOREHOLE LOG

CLIENT: NSW Department of Education
PROJECT: Hurlstone Agricultural High School (Hawkesbury)
LOCATION: Londonderry Road, Richmond

SURFACE LEVEL: 23.0 AHD
EASTING: 290634
NORTHING: 6278036
DIP/AZIMUTH: 90°/--

BORE No: 3
PROJECT No: 85644.00
DATE: 27/9/2016
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
23		TOPSOIL - dark grey-brown silty fine grained sand topsoil with a trace of fine grained gravel, dry to moist		A/E	0.1					
	0.5	SILTY SAND - dense to very dense, light grey-brown silty fine grained sand, slightly clayey, damp to moist		A/E	0.5					
	1			A/E	1.0		13,25,28 N = 53			
				S	1.45					
	2									
				S	2.5		16,22,20 N = 42			
					2.95					
	3									
	4.0	SILTY CLAY - very stiff, light grey and orange-brown mottled, silty clay with a trace of fine grained sand, clay fraction is low to medium plasticity, M<Wp		S	4.0		7,9,11 N = 20			
					4.45					
	5									
		5.5m: becoming light grey below 5.5m		S	5.5		6,10,13 N = 23			
					5.95					
	6									
		7.0m: becoming hard, light grey, orange-brown and yellow brown mottled below 7.0m		S	7.0		10,15,22 N = 37			
	7.45	Bore discontinued at 7.45m - limit of investigation			7.45					
	8									
	9									

RIG: Explora 140

DRILLER: JS

LOGGED: DCH

CASING: Uncased

TYPE OF BORING: Solid flight auger to 7.0m

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	W	Water seep	S	Standard penetration test
E	Environmental sample	W	Water level	V	Shear vane (kPa)

BOREHOLE LOG

CLIENT: NSW Department of Education
PROJECT: Hurlstone Agricultural High School (Hawkesbury)
LOCATION: Londonderry Road, Richmond

SURFACE LEVEL: 23.3 AHD
EASTING: 290772
NORTHING: 6278209
DIP/AZIMUTH: 90°/--

BORE No: 4
PROJECT No: 85644.00
DATE: 27/9/2016
SHEET 1 OF 1

[illegible]

RIG: Explora 140

DRILLER: JS

LOGGED: DCH

CASING: Uncased

TYPE OF BORING: Solid flight auger to 7.0m

WATER OBSERVATIONS: Free groundwater observed at 1.9m

REMARKS:

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	G	Gas sample
B	Bulk sample	P	Piston sample
BLK	Block sample	W	Tube sample (x mm dia.)
C	Core drilling	W	Water sample
D	Disturbed sample	W	Water seep
E	Environmental sample	W	Water level
		PID	Photo ionisation detector (ppm)
		PL(A)	Point load axial test Is(50) (MPa)
		PL(D)	Point load diametral test Is(50) (MPa)
		pp	Pocket penetrometer (kPa)
		S	Standard penetration test
		V	Shear vane (kPa)



BOREHOLE LOG

CLIENT: NSW Department of Education
PROJECT: Hurlstone Agricultural High School (Hawkesbury)
LOCATION: Londonderry Road, Richmond

SURFACE LEVEL: 23.2 AHD
EASTING: 290712
NORTHING: 6278122
DIP/AZIMUTH: 90°/-

BORE No: 5
PROJECT No: 85644.00
DATE: 28/9/2016
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
23	0.2	TOPSOIL - dark grey-brown, silty fine grained sand topsoil, dry to moist		A/E	0.1 0.2		0.2-1.0m: Bulk sample			
		SILTY SAND - medium dense, grey-brown silty fine grained sand, moist		A	0.5					
		- becoming wet below 0.9m								
1	1.0	CLAYEY SAND - medium dense, light grey and orange-brown mottled, clayey fine grained sand		A	1.0		3,4,19 N = 23			
				S	1.35					
2										
		- becoming orange-brown below 2.5m								
				S	2.5		9,15,13 N = 28			
					2.95					
3										
4										
				S	4.0		5,6,5 N = 11			
					4.4					
4.8										
5		SILTY CLAY - very stiff, grey and orange-brown mottled silty clay. Clay fraction is low to medium plasticity, M<Wp to M~Wp								
				S	5.5		6,10,13 N = 23 pp = 400			
					5.95					
6										
7										
				S	7.0		5,8,12 N = 20			
7.45							pp = 400			
		Bore discontinued at 7.45m - limit of investigation			7.45					
8										
9										
14										

RIG: Scout 4

DRILLER: RKE

LOGGED: DCH

CASING: Uncased

TYPE OF BORING: Solid flight auger to 7.0m

WATER OBSERVATIONS: Free groundwater observed at 0.9m

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	>	Water seep	S	Standard penetration test
E	Environmental sample	≡	Water level	V	Shear vane (kPa)

BOREHOLE LOG

CLIENT: NSW Department of Education
PROJECT: Hurlstone Agricultural High School (Hawkesbury)
LOCATION: Londonderry Road, Richmond

SURFACE LEVEL: 23.3 AHD
EASTING: 290772
NORTHING: 6278063
DIP/AZIMUTH: 90°/-

BORE No: 6
PROJECT No: 85644.00
DATE: 27/9/2016
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
23.3	0.2	TOPSOIL - dark grey-brown silty fine grained sand topsoil with some fine to medium subangular to angular gravel, dry		A	0.1					
				A	0.5					
		FILLING - very loose, dark grey-brown silty fine grained sand filling, slightly gravelly. Gravel fraction fine to medium subangular to angular		A	1.0					
		- with rubbish inclusions, plastic bags, rags and plastic bottles below 0.5m		S	1.45		0,1,2 N = 3			
		- becoming slightly clayey below 1.0m								
21	2.5	CLAYEY SAND - medium dense to dense, light yellow-grey and orange-brown mottled, clayey fine grained sand		S	2.5					
				S	2.95		13,14,16 N = 30			
19	4.0	SILTY CLAY - stiff, light grey and yellow-brown mottled, silty clay with some sand. Sand fraction is fine grained, clay is low plasticity		S	4.0					
				S	4.45		3,3,8 N = 11			
18	5.25	SILTY CLAY - very stiff, grey-brown and brown, silty clay with a trace of fine grained sand		S	5.5					
				S	5.95		8,10,15 N = 25			
17										
16		- becoming hard below 7.0m								
				S	7.0		10,14,17 N = 31			
	7.45	Bore discontinued at 7.45m - limit of investigation			7.45					
15										
14										

RIG: Explora 140

DRILLER: JS

LOGGED: DCH

CASING: Uncased

TYPE OF BORING: Solid flight auger to 7.0m

WATER OBSERVATIONS: Free groundwater observed at 1.0m

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	>	Water seep	S	Standard penetration test
E	Environmental sample	≡	Water level	V	Shear vane (kPa)

BOREHOLE LOG

CLIENT: NSW Department of Education
PROJECT: Hurlstone Agricultural High School (Hawkesbury)
LOCATION: Londonderry Road, Richmond

SURFACE LEVEL: 23.0 AHD
EASTING: 291004
NORTHING: 6278212
DIP/AZIMUTH: 90°/-

BORE No: 7
PROJECT No: 85644.00
DATE: 27/9/2016
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
23	0.1	TOPSOIL - dark grey-brown silty fine grained sand topsoil		A/E	0.1					
		SILTY SAND - dense, grey silty fine grained sand, wet - becoming yellow-brown below 0.4m								
	1	- becoming slightly clayey below 1.2m		S	1.0		11,24,15/100mm refusal			
					1.45					
	2									
	2.5	CLAYEY SAND - dense, light grey clayey fine grained sand, moist		S	2.5		10,13,17 N = 30			
					2.95					
	3									
	3.9	SILTY CLAY - very stiff, grey and yellow-brown mottled, silty clay with a trace of fine grained sand. Clay fraction is low plasticity, M<Wp		S	4.0		4,9,15 N = 24			
					4.85					
	5									
				S	5.5		6,11,13 N = 24			
					5.95					
	6									
		- becoming hard below 7.0m depth			7.0		15,22,22 N = 44			
				S	7.45					
	7.45	Bore discontinued at 7.45m - limit of investigation								
	8									
	9									

RIG: Explora 140

DRILLER: JS

LOGGED: DCH

CASING: Uncased

TYPE OF BORING: Solid flight auger to 7.0m

WATER OBSERVATIONS: Free groundwater observed at 0.3m

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	W	Water seep	S	Standard penetration test
E	Environmental sample	W	Water level	V	Shear vane (kPa)

BOREHOLE LOG

CLIENT: NSW Department of Education
PROJECT: Hurlstone Agricultural High School (Hawkesbury)
LOCATION: Londonderry Road, Richmond

SURFACE LEVEL: 22.9 AHD
EASTING: 290940
NORTHING: 6278122
DIP/AZIMUTH: 90°/-

BORE No: 8
PROJECT No: 85644.00
DATE: 27/9/2016
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
	0.3	TOPSOIL - dark grey-brown silty fine grained sand topsoil, dry to moist		A	0.1		0.0-1.0m: Bulk sample			
		SILTY SAND - dense, dark grey-brown, silty fine grained sand, dry to moist		A	0.5					
	1	- becoming light grey-brown below 0.9m		A	1.0		6,13,21 N = 34			
		- becoming slightly clayey below 1.1m		S	1.45					
	2									
		- becoming medium dense below 2.5m		S	2.5		7,11,15 N = 26			
	3				2.95					
	4	4.0 SILTY CLAY - stiff, light grey and orange-brown mottled, silty clay with a trace of fine grained sand, M<Wp		S	4.0		4,6,8 N = 14			
					4.45					
	5									
		- becoming very stiff below 5.5m		S	5.5		5,8,13 N = 21			
	6				5.95					
	7				7.0		7,10,11 N = 21			
	7.45	Bore discontinued at 7.45m - limit of investigation		S	7.45					
	8									
	9									

RIG: Scout 4

DRILLER: RKE

LOGGED: DCH

CASING: Uncased

TYPE OF BORING: Solid flight auger to 7.0m

WATER OBSERVATIONS: Free groundwater observed at 0.7m

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	W	Water seep	S	Standard penetration test
E	Environmental sample	W	Water level	V	Shear vane (kPa)



Douglas Partners
 Geotechnics | Environment | Groundwater

BOREHOLE LOG

CLIENT: NSW Department of Education
PROJECT: Hurlstone Agricultural High School (Hawkesbury)
LOCATION: Londonderry Road, Richmond

SURFACE LEVEL: 23.0 AHD
EASTING: 290856
NORTHING: 6278041
DIP/AZIMUTH: 90°/-

BORE No: 9
PROJECT No: 85644.00
DATE: 27/9/2016
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
23	0.1	TOPSOIL - dark grey-brown, silty fine grained sand topsoil, dry to moist		A	0.1					
				A	0.5					
21	0.9	CLAYEY SILTY SAND - medium dense, light grey and brown mottled clayey silty fine grained sand, wet		S	1.0		7,9,13 N = 22	1		
					1.45			2		
20	2.5	SILTY SAND - dense, light grey and brown mottled, silty fine grained sand, slightly clayey		S	2.5		14,19,19 N = 38	3		
					2.95			4		
19	4.0	SANDY SILT - stiff, light grey and brown mottled, sandy silt, slightly clayey, sand fraction is fine grained		S	4.0		4,5,5 N = 10	5		
					4.45			6		
18	5.0	SILTY CLAY - very stiff, light grey and brown mottled, silty clay with a trace of fine grained sand, M<Wp		S	5.0		5,9,11 N = 20	7		
					5.5			8		
17		- becoming hard below 7.0m		S	7.0		7,13,19 N = 32	9		
					7.45					
	7.45	Bore discontinued at 7.45m - limit of investigation								

RIG: Scout 4

DRILLER: RKE

LOGGED: DCH

CASING: Uncased

TYPE OF BORING: Solid flight auger to 7.0m

WATER OBSERVATIONS: Free groundwater observed at 0.9m

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	W	Water seep	S	Standard penetration test
E	Environmental sample	W	Water level	V	Shear vane (kPa)

BOREHOLE LOG

CLIENT: NSW Department of Education
PROJECT: Hurlstone Agricultural High School (Hawkesbury)
LOCATION: Londonderry Road, Richmond

SURFACE LEVEL: 22.8 AHD
EASTING: 291041
NORTHING: 6277983
DIP/AZIMUTH: 90°/--

BORE No: 10
PROJECT No: 85644.00
DATE: 27/9/2016
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
	0.5	TOPSOIL - dark grey-brown silty sand topsoil, dry								
	1.2	SILTY SAND - medium dense, light grey-brown silty sand with a trace of clay, moist			1.0		4,9,9 N = 18			
		CLAYEY SILTY SAND - medium dense, light grey and brown mottled, clayey silty fine grained sand		S	1.45					
					2.5		5,10,9 N = 19			
				S	2.95					
					4.0		5,9,12 N = 21			
	4.3	SILTY CLAY - very stiff, grey and brown mottled silty clay with a trace of fine grained sand, clay fraction is low plasticity		S	4.45					
					5.5		3,7,10 N = 17			
				S	5.95					
					7.0		6,11,18 N = 29			
	7.45	Bore discontinued at 7.45m - limit of investigation		S	7.45					

RIG: Scout 4

DRILLER: RKE

LOGGED: DCH

CASING: Uncased

TYPE OF BORING: Solid flight auger to 7.0m

WATER OBSERVATIONS: Free groundwater observed at 0.9m

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	W	Water seep	S	Standard penetration test
E	Environmental sample	W	Water level	V	Shear vane (kPa)

BOREHOLE LOG

CLIENT: NSW Department of Education
PROJECT: Hurlstone Agricultural High School (Hawkesbury)
LOCATION: Londonderry Road, Richmond

SURFACE LEVEL: 22.9 AHD
EASTING: 290991
NORTHING: 6277929
DIP/AZIMUTH: 90°/-

BORE No: 11
PROJECT No: 85644.00
DATE: 27/9/2016
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
	0.2	TOPSOIL - dark grey-brown, silty fine grained sand topsoil with rootlets, dry		A/E	0.1		0.0-1.0m: Bulk sample			
		SILTY SAND - medium dense, dark grey-brown, silty fine grained sand, dry		A/E	0.5					
		- becoming light grey-brown and moist below 0.6m		A/E	1.0					
	1.2	CLAYEY SAND - medium dense, light grey and orange-brown mottled, clayey fine grained sand with some silt, moist		S	1.45		3,3,19 N = 22			
				S	2.5		3,7,9 N = 16			
				S	2.95					
	4.2	SILTY CLAY - very stiff, light grey and orange-brown mottled, silty clay with a trace of fine grained sand. Clay fraction is low plasticity, M<Wp		S	4.0		6,9,12 N = 21			
				S	4.45					
		5.5m: becoming light grey below 5.5m		S	5.5		5,8,9 N = 17			
				S	5.95					
				S	7.0		5,7,12 N = 19			
	7.45	Bore discontinued at 7.45m - limit of investigation			7.45					

RIG: Scout 4

DRILLER: RKE

LOGGED: DCH

CASING: Uncased

TYPE OF BORING: Solid flight auger to 7.0m

WATER OBSERVATIONS: Free groundwater observed at 0.9m

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	W	Water seep	S	Standard penetration test
E	Environmental sample	W	Water level	V	Shear vane (kPa)

Appendix E

Laboratory Test Results

Table E1: Contaminant Concentrations in Soils

Sample/ Depth (m)	B	T	E	X	F1	F2	C ₁₀ -C ₃₆	+PAH	B.TEQ	+OCP	+OPP	+PCB	Phenol	Asbestos	As	Cd	Cr	Cu	Pb	Hg	Ni	Zn
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	(Y/N)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Filling Samples																						
BH6/0.5	<0.2	<0.5	<1	<3	<25	<50	<250	63	8.2	NIL	NIL	NIL	<5	N	<4	<0.4	11	12	44	<0.1	10	44
BH6/1.0	<0.2	<0.5	<1	<3	<25	<50	550	48	7.3	NIL	NIL	NIL	<5	N	<4	<0.4	12	11	45	0.1	10	200
Natural Samples																						
BH3/0.2	<0.2	<0.5	<1	<3	<25	<50	<250	NIL	<0.5	NIL	NIL	NIL	<5	N	6	<0.4	5	11	80	<0.1	4	61
BH5/0.5	<0.2	<0.5	<1	<3	<25	<50	<250	NIL	<0.5	NIL	NIL	NIL	<5	N	<4	<0.4	9	16	130	0.7	6	190
BH9/0.1	<0.2	<0.5	<1	<3	<25	<50	<250	NIL	<0.5	NIL	NIL	NIL	<5	N	<4	<0.4	3	2	4	<0.1	2	4

Notes: B = Benzene; T = Toluene; E = Ethylbenzene; X = Xylene; Napth. = Naphthalene; F1 = (C₆ – C₁₀) – BTEX; F2 = (C₁₁ – C₁₆) – Naphthalene; +PAH = Positive polycyclic aromatic hydrocarbons; B.TEQ = Carcinogenic PAHs (as B(a)P TEQ); B(a)P = Benzo(a)pyrene
OCP = Organochlorine pesticides; PCB = Polychlorinated biphenyls; As = Arsenic; Cd = Cadmium; Cr = Chromium; Cu = Copper; Pb = Lead; Hg = Mercury; Ni = Nickel; Zn = Zinc; NIL = below detection limits

Table E2: Adopted Comparative Criteria for Soils

Sample/ Depth (m)	B	T	E	X	F1	F2	C ₁₀ -C ₃₆	+PAH	B.TEQ	OCP	OPP	PCB	Phenol	Asbestos	As	Cd	Cr	Cu	Pb	Hg	Ni	Zn
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	(Y/N)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Adopted Investigation/Screening Levels (mg/kg)																						
Health-Based ¹	0.5	160	55	40	45	110		300	3		Various	1	3000		100	20	100	6000	300	40	400	7400
Ecological ²	65	105	125	45	180	120									100		190	140	1170		30	265

Notes: B = Benzene; T = Toluene; E = Ethylbenzene; X = Xylene; Napth. = Naphthalene; F1 = (C₆ – C₁₀) – BTEX; F2 = (C₁₁ – C₁₆) – Naphthalene; +PAH = Positive polycyclic aromatic hydrocarbons; B.TEQ = Carcinogenic PAHs (as B(a)P TEQ); B(a)P = Benzo(a)pyrene
OCP = Organochlorine pesticides; PCB = Polychlorinated biphenyls; As = Arsenic; Cd = Cadmium; Cr = Chromium; Cu = Copper; Pb = Lead; Hg = Mercury; Ni = Nickel; Zn = Zinc
¹Based on NEPM HIL A Sites; ²Based on most conservative value of NEPM ACL; ¹ & ²Based on NEPM coarse-grained soils



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CERTIFICATE OF ANALYSIS

154722

Client:

Douglas Partners Pty Ltd

96 Hermitage Rd

West Ryde

NSW 2114

Attention: Peter Oitmaa

Sample log in details:

Your Reference:

85644.00, Richmond

No. of samples:

7 Soils

Date samples received / completed instructions received

05/10/16

/ 05/10/16

Analysis Details:

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details:

Date results requested by: / Issue Date:

12/10/16

/ 11/10/16

Date of Preliminary Report:

Not Issued

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Accredited for compliance with ISO/IEC 17025 - Testing

Tests not covered by NATA are denoted with *.

Results Approved By:

David Springer
General Manager



Envirolab Reference: 154722

Revision No: R 00

vTRH(C6-C10)/BTEXN in Soil						
Our Reference:	UNITS	154722-1	154722-2	154722-3	154722-4	154722-5
Your Reference	-----	BH6	BH6	BH3	BH5	BH9
Depth	-					
Date Sampled	-----	0.5	1.0	0.2	0.5	0.1
Type of sample		27/09/2016	27/09/2016	27/09/2016	28/09/2016	27/09/2016
		Soil	Soil	Soil	Soil	Soil
Date extracted	-	06/10/2016	06/10/2016	06/10/2016	06/10/2016	06/10/2016
Date analysed	-	08/10/2016	08/10/2016	08/10/2016	08/10/2016	08/10/2016
TRHC ₆ - C ₉	mg/kg	<25	<25	<25	<25	<25
TRHC ₆ - C ₁₀	mg/kg	<25	<25	<25	<25	<25
vTPHC ₆ - C ₁₀ less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	75	76	75	73	76

svTRH (C10-C40) in Soil						
Our Reference:	UNITS	154722-1	154722-2	154722-3	154722-4	154722-5
Your Reference	-----	BH6	BH6	BH3	BH5	BH9
	-					
Depth	-----	0.5	1.0	0.2	0.5	0.1
Date Sampled		27/09/2016	27/09/2016	27/09/2016	28/09/2016	27/09/2016
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	06/10/2016	06/10/2016	06/10/2016	06/10/2016	06/10/2016
Date analysed	-	07/10/2016	07/10/2016	07/10/2016	07/10/2016	07/10/2016
TRHC ₁₀ - C ₁₄	mg/kg	<50	<50	<50	<50	<50
TRHC ₁₅ - C ₂₈	mg/kg	<100	180	<100	<100	<100
TRHC ₂₉ - C ₃₆	mg/kg	150	370	<100	<100	<100
TRH>C ₁₀ -C ₁₆	mg/kg	<50	<50	<50	<50	<50
TRH>C ₁₀ - C ₁₆ less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH>C ₁₆ -C ₃₄	mg/kg	190	440	<100	<100	<100
TRH>C ₃₄ -C ₄₀	mg/kg	110	380	<100	<100	<100
Surrogate o-Terphenyl	%	77	79	69	71	82

PAHs in Soil Our Reference: Your Reference	UNITS ----- -	154722-1 BH6	154722-2 BH6	154722-3 BH3	154722-4 BH5	154722-5 BH9
Depth	-----	0.5	1.0	0.2	0.5	0.1
Date Sampled		27/09/2016	27/09/2016	27/09/2016	28/09/2016	27/09/2016
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	06/10/2016	06/10/2016	06/10/2016	06/10/2016	06/10/2016
Date analysed	-	06/10/2016	06/10/2016	06/10/2016	06/10/2016	06/10/2016
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.4	0.4	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.3	0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	5.7	3.0	<0.1	<0.1	<0.1
Anthracene	mg/kg	1.1	0.7	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	12	8.7	<0.1	<0.1	<0.1
Pyrene	mg/kg	11	9.0	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	3.7	2.7	<0.1	<0.1	<0.1
Chrysene	mg/kg	3.8	2.8	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	7.8	6.6	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	5.8	5.3	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	4.8	4.0	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	0.7	0.6	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	5.4	4.4	<0.1	<0.1	<0.1
Benzo(a)pyrene TEQ calc (zero)	mg/kg	8.2	7.3	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	8.2	7.3	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	8.2	7.3	<0.5	<0.5	<0.5
Total Positive PAHs	mg/kg	63	48	NIL(+)VE	NIL(+)VE	NIL(+)VE
Surrogate p-Terphenyl-d14	%	91	95	98	94	102

Organochlorine Pesticides in soil	UNITS	154722-1	154722-2	154722-3	154722-4	154722-5
Our Reference:	-----	BH6	BH6	BH3	BH5	BH9
Your Reference	-					
Depth	-----	0.5	1.0	0.2	0.5	0.1
Date Sampled		27/09/2016	27/09/2016	27/09/2016	28/09/2016	27/09/2016
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	06/10/2016	06/10/2016	06/10/2016	06/10/2016	06/10/2016
Date analysed	-	08/10/2016	08/10/2016	08/10/2016	08/10/2016	08/10/2016
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	96	100	100	96	96

Organophosphorus Pesticides						
Our Reference:	UNITS	154722-1	154722-2	154722-3	154722-4	154722-5
Your Reference	-----	BH6	BH6	BH3	BH5	BH9
	-					
Depth	-----	0.5	1.0	0.2	0.5	0.1
Date Sampled		27/09/2016	27/09/2016	27/09/2016	28/09/2016	27/09/2016
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	06/10/2016	06/10/2016	06/10/2016	06/10/2016	06/10/2016
Date analysed	-	08/10/2016	08/10/2016	08/10/2016	08/10/2016	08/10/2016
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	96	100	100	96	96

PCBs in Soil Our Reference: Your Reference	UNITS ----- -	154722-1 BH6	154722-2 BH6	154722-3 BH3	154722-4 BH5	154722-5 BH9
Depth	-----	0.5	1.0	0.2	0.5	0.1
Date Sampled		27/09/2016	27/09/2016	27/09/2016	28/09/2016	27/09/2016
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	06/10/2016	06/10/2016	06/10/2016	06/10/2016	06/10/2016
Date analysed	-	08/10/2016	08/10/2016	08/10/2016	08/10/2016	08/10/2016
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	96	100	100	96	96

Acid Extractable metals in soil						
Our Reference:	UNITS	154722-1	154722-2	154722-3	154722-4	154722-5
Your Reference	-----	BH6	BH6	BH3	BH5	BH9
	-					
Depth	-----	0.5	1.0	0.2	0.5	0.1
Date Sampled		27/09/2016	27/09/2016	27/09/2016	28/09/2016	27/09/2016
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	06/10/2016	06/10/2016	06/10/2016	06/10/2016	06/10/2016
Date analysed	-	07/10/2016	07/10/2016	07/10/2016	07/10/2016	07/10/2016
Arsenic	mg/kg	<4	<4	6	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	11	12	5	9	3
Copper	mg/kg	12	11	11	16	2
Lead	mg/kg	44	45	80	130	4
Mercury	mg/kg	<0.1	0.1	<0.1	0.7	<0.1
Nickel	mg/kg	10	10	4	6	2
Zinc	mg/kg	44	200	61	190	4

Misc Soil - Inorg Our Reference: Your Reference	UNITS ----- -	154722-1 BH6	154722-2 BH6	154722-3 BH3	154722-4 BH5	154722-5 BH9
Depth	-----	0.5	1.0	0.2	0.5	0.1
Date Sampled		27/09/2016	27/09/2016	27/09/2016	28/09/2016	27/09/2016
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	06/10/2016	06/10/2016	06/10/2016	06/10/2016	06/10/2016
Date analysed	-	06/10/2016	06/10/2016	06/10/2016	06/10/2016	06/10/2016
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Moisture Our Reference: Your Reference	UNITS ----- -	154722-1 BH6	154722-2 BH6	154722-3 BH3	154722-4 BH5	154722-5 BH9
Depth Date Sampled Type of sample	----- ----- -----	0.5 27/09/2016 Soil	1.0 27/09/2016 Soil	0.2 27/09/2016 Soil	0.5 28/09/2016 Soil	0.1 27/09/2016 Soil
Date prepared	-	06/10/2016	06/10/2016	06/10/2016	06/10/2016	06/10/2016
Date analysed	-	07/10/2016	07/10/2016	07/10/2016	07/10/2016	07/10/2016
Moisture	%	8.3	14	15	15	11

Asbestos ID - soils Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- - -----	154722-1 BH6 0.5 27/09/2016 Soil	154722-2 BH6 1.0 27/09/2016 Soil	154722-3 BH3 0.2 27/09/2016 Soil	154722-4 BH5 0.5 28/09/2016 Soil	154722-5 BH9 0.1 27/09/2016 Soil
Date analysed	-	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016
Sample mass tested	g	Approx. 45g	Approx. 45g	Approx. 30g	Approx. 40g	Approx. 45g
Sample Description	-	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected

Misc Inorg - Soil Our Reference: Your Reference	UNITS ----- -	154722-4 BH5	154722-5 BH9	154722-6 BH7	154722-7 BH3
Depth	-----	0.5	0.1	2.5-2.95	7.0-7.45
Date Sampled		28/09/2016	27/09/2016	27/09/2016	27/09/2016
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	07/10/2016	07/10/2016	07/10/2016	07/10/2016
Date analysed	-	07/10/2016	07/10/2016	07/10/2016	07/10/2016
pH 1:5 soil:water	pH Units	6.8	5.6	6.9	6.7
Electrical Conductivity 1:5 soil:water	µS/cm	25	23	35	350
Chloride, Cl 1:5 soil:water	mg/kg	<10	<10	10	390
Sulphate, SO4 1:5 soil:water	mg/kg	<10	<10	10	58

MethodID	Methodology Summary
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-014	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-012	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'TEQ PQL' values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'TEQ zero' values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'TEQ half PQL' values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-005	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
Org-008	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Inorg-031	Total Phenolics by segmented flow analyser (in line distillation with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
Inorg-008	Moisture content determined by heating at 105+/-5 deg C for a minimum of 12 hours.
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
Inorg-001	pH - Measured using pH meter and electrode in accordance with APHA latest edition, 4500-H+. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
Inorg-002	Conductivity and Salinity - measured using a conductivity cell at 25oC in accordance with APHA latest edition 2510 and Rayment & Lyons.
Inorg-081	Anions - a range of Anions are determined by Ion Chromatography, in accordance with APHA latest edition, 4110-B. Alternatively determined by colourimetry/turbidity using Discrete Analyser.

QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
vTRH(C6-C10)/BTEXN in Soil						Base II Duplicate II %RPD		
Date extracted	-			06/10/2016	154722-1	06/10/2016 06/10/2016	LCS-6	06/10/2016
Date analysed	-			08/10/2016	154722-1	08/10/2016 08/10/2016	LCS-6	08/10/2016
TRHC ₆ - C ₉	mg/kg	25	Org-016	<25	154722-1	<25 <25	LCS-6	90%
TRHC ₆ - C ₁₀	mg/kg	25	Org-016	<25	154722-1	<25 <25	LCS-6	90%
Benzene	mg/kg	0.2	Org-016	<0.2	154722-1	<0.2 <0.2	LCS-6	78%
Toluene	mg/kg	0.5	Org-016	<0.5	154722-1	<0.5 <0.5	LCS-6	88%
Ethylbenzene	mg/kg	1	Org-016	<1	154722-1	<1 <1	LCS-6	93%
m+p-xylene	mg/kg	2	Org-016	<2	154722-1	<2 <2	LCS-6	95%
o-Xylene	mg/kg	1	Org-016	<1	154722-1	<1 <1	LCS-6	96%
naphthalene	mg/kg	1	Org-014	<1	154722-1	<1 <1	[NR]	[NR]
Surrogate aaa-Trifluorotoluene	%		Org-016	79	154722-1	75 80 RPD: 6	LCS-6	80%
QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
svTRH (C10-C40) in Soil						Base II Duplicate II %RPD		
Date extracted	-			06/10/2016	154722-1	06/10/2016 06/10/2016	LCS-6	06/10/2016
Date analysed	-			07/10/2016	154722-1	07/10/2016 07/10/2016	LCS-6	07/10/2016
TRHC ₁₀ - C ₁₄	mg/kg	50	Org-003	<50	154722-1	<50 <50	LCS-6	92%
TRHC ₁₅ - C ₂₈	mg/kg	100	Org-003	<100	154722-1	<100 <100	LCS-6	92%
TRHC ₂₈ - C ₃₆	mg/kg	100	Org-003	<100	154722-1	150 100 RPD: 40	LCS-6	82%
TRH>C ₁₀ -C ₁₆	mg/kg	50	Org-003	<50	154722-1	<50 <50	LCS-6	92%
TRH>C ₁₆ -C ₃₄	mg/kg	100	Org-003	<100	154722-1	190 110 RPD: 53	LCS-6	92%
TRH>C ₃₄ -C ₄₀	mg/kg	100	Org-003	<100	154722-1	110 <100	LCS-6	82%
Surrogate o-Terphenyl	%		Org-003	74	154722-1	77 77 RPD: 0	LCS-6	79%
QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Soil						Base II Duplicate II %RPD		
Date extracted	-			06/10/2016	154722-1	06/10/2016 06/10/2016	LCS-6	06/10/2016
Date analysed	-			06/10/2016	154722-1	06/10/2016 06/10/2016	LCS-6	06/10/2016
Naphthalene	mg/kg	0.1	Org-012	<0.1	154722-1	0.1 0.1 RPD: 0	LCS-6	103%
Acenaphthylene	mg/kg	0.1	Org-012	<0.1	154722-1	0.4 0.2 RPD: 67	[NR]	[NR]
Acenaphthene	mg/kg	0.1	Org-012	<0.1	154722-1	0.1 <0.1	[NR]	[NR]
Fluorene	mg/kg	0.1	Org-012	<0.1	154722-1	0.3 0.1 RPD: 100	LCS-6	110%
Phenanthrene	mg/kg	0.1	Org-012	<0.1	154722-1	5.7 2.0 RPD: 96	LCS-6	125%
Anthracene	mg/kg	0.1	Org-012	<0.1	154722-1	1.1 0.4 RPD: 93	[NR]	[NR]
Fluoranthene	mg/kg	0.1	Org-012	<0.1	154722-1	12 5.8 RPD: 70	LCS-6	113%
Pyrene	mg/kg	0.1	Org-012	<0.1	154722-1	11 5.6 RPD: 65	LCS-6	113%
Benzo(a)anthracene	mg/kg	0.1	Org-012	<0.1	154722-1	3.7 1.7 RPD: 74	[NR]	[NR]
Chrysene	mg/kg	0.1	Org-012	<0.1	154722-1	3.8 1.9 RPD: 67	[NR]	[NR]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-012	<0.2	154722-1	7.8 4.1 RPD: 62	[NR]	[NR]

QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Soil						Base II Duplicate II %RPD		
Benzo(a)pyrene	mg/kg	0.05	Org-012	<0.05	154722-1	5.8 3.2 RPD: 58	LCS-6	115%
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012	<0.1	154722-1	4.8 2.7 RPD: 56	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012	<0.1	154722-1	0.7 0.3 RPD: 80	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012	<0.1	154722-1	5.4 3.2 RPD: 51	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		Org-012	101	154722-1	91 94 RPD: 3	LCS-6	120%
QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Organochlorine Pesticides in soil						Base II Duplicate II %RPD		
Date extracted	-			06/10/2016	154722-1	06/10/2016 06/10/2016	LCS-6	06/10/2016
Date analysed	-			08/10/2016	154722-1	08/10/2016 08/10/2016	LCS-6	08/10/2016
HCB	mg/kg	0.1	Org-005	<0.1	154722-1	<0.1 <0.1	[NR]	[NR]
alpha-BHC	mg/kg	0.1	Org-005	<0.1	154722-1	<0.1 <0.1	LCS-6	120%
gamma-BHC	mg/kg	0.1	Org-005	<0.1	154722-1	<0.1 <0.1	[NR]	[NR]
beta-BHC	mg/kg	0.1	Org-005	<0.1	154722-1	<0.1 <0.1	LCS-6	97%
Heptachlor	mg/kg	0.1	Org-005	<0.1	154722-1	<0.1 <0.1	LCS-6	102%
delta-BHC	mg/kg	0.1	Org-005	<0.1	154722-1	<0.1 <0.1	[NR]	[NR]
Aldrin	mg/kg	0.1	Org-005	<0.1	154722-1	<0.1 <0.1	LCS-6	97%
Heptachlor Epoxide	mg/kg	0.1	Org-005	<0.1	154722-1	<0.1 <0.1	LCS-6	98%
gamma-Chlordane	mg/kg	0.1	Org-005	<0.1	154722-1	<0.1 <0.1	[NR]	[NR]
alpha-chlordane	mg/kg	0.1	Org-005	<0.1	154722-1	<0.1 <0.1	[NR]	[NR]
Endosulfan I	mg/kg	0.1	Org-005	<0.1	154722-1	<0.1 <0.1	[NR]	[NR]
pp-DDE	mg/kg	0.1	Org-005	<0.1	154722-1	<0.1 <0.1	LCS-6	96%
Dieldrin	mg/kg	0.1	Org-005	<0.1	154722-1	<0.1 <0.1	LCS-6	100%
Endrin	mg/kg	0.1	Org-005	<0.1	154722-1	<0.1 <0.1	LCS-6	105%
pp-DDD	mg/kg	0.1	Org-005	<0.1	154722-1	<0.1 <0.1	LCS-6	98%
Endosulfan II	mg/kg	0.1	Org-005	<0.1	154722-1	<0.1 <0.1	[NR]	[NR]
pp-DDT	mg/kg	0.1	Org-005	<0.1	154722-1	<0.1 <0.1	[NR]	[NR]
Endrin Aldehyde	mg/kg	0.1	Org-005	<0.1	154722-1	<0.1 <0.1	[NR]	[NR]
Endosulfan Sulphate	mg/kg	0.1	Org-005	<0.1	154722-1	<0.1 <0.1	LCS-6	111%
Methoxychlor	mg/kg	0.1	Org-005	<0.1	154722-1	<0.1 <0.1	[NR]	[NR]
Surrogate TCMX	%		Org-005	94	154722-1	96 99 RPD: 3	LCS-6	113%

QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Organophosphorus Pesticides						Base II Duplicate II %RPD		
Date extracted	-			06/10/2016	154722-1	06/10/2016 06/10/2016	LCS-6	06/10/2016
Date analysed	-			08/10/2016	154722-1	08/10/2016 08/10/2016	LCS-6	08/10/2016
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-008	<0.1	154722-1	<0.1 <0.1	[NR]	[NR]
Bromophos-ethyl	mg/kg	0.1	Org-008	<0.1	154722-1	<0.1 <0.1	[NR]	[NR]
Chlorpyrifos	mg/kg	0.1	Org-008	<0.1	154722-1	<0.1 <0.1	LCS-6	106%
Chlorpyrifos-methyl	mg/kg	0.1	Org-008	<0.1	154722-1	<0.1 <0.1	[NR]	[NR]
Diazinon	mg/kg	0.1	Org-008	<0.1	154722-1	<0.1 <0.1	[NR]	[NR]
Dichlorvos	mg/kg	0.1	Org-008	<0.1	154722-1	<0.1 <0.1	LCS-6	99%
Dimethoate	mg/kg	0.1	Org-008	<0.1	154722-1	<0.1 <0.1	[NR]	[NR]
Ethion	mg/kg	0.1	Org-008	<0.1	154722-1	<0.1 <0.1	LCS-6	105%
Fenitrothion	mg/kg	0.1	Org-008	<0.1	154722-1	<0.1 <0.1	LCS-6	107%
Malathion	mg/kg	0.1	Org-008	<0.1	154722-1	<0.1 <0.1	LCS-6	92%
Parathion	mg/kg	0.1	Org-008	<0.1	154722-1	<0.1 <0.1	LCS-6	117%
Ronnel	mg/kg	0.1	Org-008	<0.1	154722-1	<0.1 <0.1	LCS-6	103%
Surrogate TCMX	%		Org-008	94	154722-1	96 99 RPD: 3	LCS-6	94%
QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PCBs in Soil						Base II Duplicate II %RPD		
Date extracted	-			06/10/2016	154722-1	06/10/2016 06/10/2016	LCS-6	06/10/2016
Date analysed	-			08/10/2016	154722-1	08/10/2016 08/10/2016	LCS-6	08/10/2016
Aroclor 1016	mg/kg	0.1	Org-006	<0.1	154722-1	<0.1 <0.1	[NR]	[NR]
Aroclor 1221	mg/kg	0.1	Org-006	<0.1	154722-1	<0.1 <0.1	[NR]	[NR]
Aroclor 1232	mg/kg	0.1	Org-006	<0.1	154722-1	<0.1 <0.1	[NR]	[NR]
Aroclor 1242	mg/kg	0.1	Org-006	<0.1	154722-1	<0.1 <0.1	[NR]	[NR]
Aroclor 1248	mg/kg	0.1	Org-006	<0.1	154722-1	<0.1 <0.1	[NR]	[NR]
Aroclor 1254	mg/kg	0.1	Org-006	<0.1	154722-1	<0.1 <0.1	LCS-6	102%
Aroclor 1260	mg/kg	0.1	Org-006	<0.1	154722-1	<0.1 <0.1	[NR]	[NR]
Surrogate TCLMX	%		Org-006	94	154722-1	96 99 RPD: 3	LCS-6	94%

QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Acid Extractable metals in soil						Base II Duplicate II %RPD		
Date prepared	-			06/10/2016	154722-1	06/10/2016 06/10/2016	LCS-6	06/10/2016
Date analysed	-			07/10/2016	154722-1	07/10/2016 07/10/2016	LCS-6	07/10/2016
Arsenic	mg/kg	4	Metals-020	<4	154722-1	<4 <4	LCS-6	104%
Cadmium	mg/kg	0.4	Metals-020	<0.4	154722-1	<0.4 <0.4	LCS-6	103%
Chromium	mg/kg	1	Metals-020	<1	154722-1	11 8 RPD: 32	LCS-6	102%
Copper	mg/kg	1	Metals-020	<1	154722-1	12 9 RPD: 29	LCS-6	105%
Lead	mg/kg	1	Metals-020	<1	154722-1	44 38 RPD: 15	LCS-6	99%
Mercury	mg/kg	0.1	Metals-021	<0.1	154722-1	<0.1 <0.1	LCS-6	104%
Nickel	mg/kg	1	Metals-020	<1	154722-1	10 7 RPD: 35	LCS-6	98%
Zinc	mg/kg	1	Metals-020	<1	154722-1	44 39 RPD: 12	LCS-6	98%
QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Misc Soil - Inorg						Base II Duplicate II %RPD		
Date prepared	-			06/10/2016	154722-1	06/10/2016 06/10/2016	LCS-1	06/10/2016
Date analysed	-			06/10/2016	154722-1	06/10/2016 06/10/2016	LCS-1	06/10/2016
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	<5	154722-1	<5 <5	LCS-1	105%
QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Misc Inorg - Soil						Base II Duplicate II %RPD		
Date prepared	-			07/10/2016	[NT]	[NT]	LCS-6	07/10/2016
Date analysed	-			07/10/2016	[NT]	[NT]	LCS-6	07/10/2016
pH 1:5 soil:water	pH Units		Inorg-001	[NT]	[NT]	[NT]	LCS-6	101%
Electrical Conductivity 1:5 soil:water	µS/cm	1	Inorg-002	<1	[NT]	[NT]	LCS-6	105%
Chloride, Cl 1:5 soil:water	mg/kg	10	Inorg-081	<10	[NT]	[NT]	LCS-6	95%
Sulphate, SO4 1:5 soil:water	mg/kg	10	Inorg-081	<10	[NT]	[NT]	LCS-6	96%
QUALITYCONTROL	UNITS	Dup. Sm#		Duplicate		Spike Sm#	Spike % Recovery	
Misc Soil - Inorg				Base + Duplicate + %RPD				
Date prepared	-	[NT]		[NT]		154722-2	06/10/2016	
Date analysed	-	[NT]		[NT]		154722-2	06/10/2016	
Total Phenolics (as Phenol)	mg/kg	[NT]		[NT]		154722-2	94%	
QUALITYCONTROL	UNITS	Dup. Sm#		Duplicate				
Misc Inorg - Soil				Base + Duplicate + %RPD				
Date prepared	-	154722-4		07/10/2016 07/10/2016				
Date analysed	-	154722-4		07/10/2016 07/10/2016				
pH 1:5 soil:water	pH Units	154722-4		6.8 6.7 RPD: 1				
Electrical Conductivity 1:5 soil:water	µS/cm	154722-4		25 29 RPD: 15				

QUALITY CONTROL Misc Inorg - Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD		
Chloride, Cl 1:5 soil:water	mg/kg	154722-4	<10 20		
Sulphate, SO4 1:5 soil:water	mg/kg	154722-4	<10 <10		
QUALITY CONTROL Misc Inorg - Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date prepared	-	[NT]	[NT]	154722-5	07/10/2016
Date analysed	-	[NT]	[NT]	154722-5	07/10/2016
pH 1:5 soil:water	pH Units	[NT]	[NT]	[NR]	[NR]
Electrical Conductivity 1:5 soil:water	µS/cm	[NT]	[NT]	[NR]	[NR]
Chloride, Cl 1:5 soil:water	mg/kg	[NT]	[NT]	154722-5	84%
Sulphate, SO4 1:5 soil:water	mg/kg	[NT]	[NT]	154722-5	90%

Report Comments:

PAH_S:

The RPD for duplicate results is accepted due to the non homogenous nature of the sample/s.

Asbestos: A portion of the supplied sample was sub-sampled for asbestos analysis according to Envirolab procedures. We cannot guarantee that this sub-sample is indicative of the entire sample. Envirolab recommends supplying 40-50g of sample in its own container.

Note: Samples 154722-1 to 5 were sub-sampled from jars provided by the client.

Asbestos ID was analysed by Approved Identifier:

Matt Mansfield

Asbestos ID was authorised by Approved Signatory:

Matt Mansfield

INS: Insufficient sample for this test

PQL: Practical Quantitation Limit

NT: Not tested

NR: Test not required

RPD: Relative Percent Difference

NA: Test not required

<: Less than

>: Greater than

LCS: Laboratory Control Sample

Quality Control Definitions

Blank: This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.

Duplicate: This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.

Matrix Spike: A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

Surrogate Spike: Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

SAMPLE RECEIPT ADVICE

Client Details	
Client	Douglas Partners Pty Ltd
Attention	Peter Oitmaa

Sample Login Details	
Your Reference	85644.00, Richmond
Envirolab Reference	154722
Date Sample Received	05/10/2016
Date Instructions Received	05/10/2016
Date Results Expected to be Reported	12/10/2016

Sample Condition	
Samples received in appropriate condition for analysis	YES
No. of Samples Provided	7 Soils
Turnaround Time Requested	Standard
Temperature on receipt (°C)	10.8
Cooling Method	Ice Pack
Sampling Date Provided	YES

Comments
Samples will be held for 1 month for water samples and 2 months for soil samples from date of receipt of samples

Please direct any queries to:

Aileen Hie	Jacinta Hurst
Phone: 02 9910 6200	Phone: 02 9910 6200
Fax: 02 9910 6201	Fax: 02 9910 6201
Email: ahie@envirolabservices.com.au	Email: jhurst@envirolabservices.com.au

Sample and Testing Details on following page

Sample Id	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides	PCBs in Soil	Acid Extractable metals in soil	Total Phenolics (as Phenol)	Asbestos ID - soils	Chloride, Cl 1:5 soil:water	Electrical Conductivity 1:5 soil:water	pH 1:5 soil:water	Sulphate, SO4 1:5 soil:water
BH6-0.5	✓	✓	✓	✓	✓	✓	✓	✓	✓				
BH6-1.0	✓	✓	✓	✓	✓	✓	✓	✓	✓				
BH3-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
BH5-0.5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BH9-0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BH7-2.5-2.95										✓	✓	✓	✓
BH3-7.0-7.45										✓	✓	✓	✓

