Appendix A

Draft Concept Plan

CONCEPT PLAN

FE710

RIVERWOOD NORTH

RIVERWOOD NORTH URBAN RENEWAL PROJECT

RAYCE

TURNER ASSOCIATES

Appendix B

Testpit Logs

Test Pit No.: TP11 **Location:** Riverwood

Project: Riverwood North Renewal
Project No.: 41131
Client: MProjects
Project Manager: Sumi Dorairaj

Total Hole Depth: 0.9 m
Eastings: -
Northings: -
Date: 23/11/2010

Operator and Co.: Rory of Ken Cole
Excavation Method: Excavator
Log By: Tim Davis
Excavation Width: 450 mm

SUBSURFACE PROFILE			SAMPLE		
Depth	Visual	Description	Number	Condition	Observations
0.0		Ground Surface			
		FILL Silty Clay, brown, low plasticity, damp, heterogeneous with inclusions of shale pieces, rootlets and few ACM fragments.	0.1-0.2		ACM observed (4 g)
		Silty Clay Yellow orange, medium plasticity, damp and heterogeneous.			
1.0		**End of Hole at 0.9 m bgs**			
2.0					
3.0					
4.0					

Sample Method	*Sample Condition*		
HA - Hand Auger *SFA - Solid Flight Auger* *HFA - Hollow Flight Auger* *PT - Push Tubing*	*U - undisturbed tube sample* *D - disturbed sample* *CS - core sample*		

Test Pit No.: TP14 **Location:** Riverwood

Project: Riverwood North Renewal
Project No.: 41131
Client: MProjects
Project Manager: Sumi Dorairaj

Total Hole Depth: 1.2 m
Eastings: -
Northings: -
Date: 23/11/2010

Operator and Co.: Rory of Ken Cole
Excavation Method: Excavator
Log By: Tim Davis
Excavation Width: 450 mm

SUBSURFACE PROFILE			SAMPLE		
Depth	Visual	Description	Number	Condition	Observations
0.0		Ground Surface			
		FILL Silty Clay, brown, low plasticity, damp, heterogeneous with inclusions of ash/slag, numerous ACM fragments, brick pieces and tile fragments.	0.1-0.2		ACM observed (381 g)
1.0		**Silty Clay** Yellow orange, medium plasticity, damp and heterogeneous.			
		End of Hole at 1.2 m bgs			
2.0					
3.0					
4.0					

Sample Method	*Sample Condition*		
HA - Hand Auger *SFA - Solid Flight Auger* *HFA - Hollow Flight Auger* *PT - Push Tubing*	*U - undisturbed tube sample* *D - disturbed sample* *CS - core sample*		

Test Pit No.: TP17 **Location:** Riverwood

Project: Riverwood North Renewal
Project No.: 41131
Client: MProjects
Project Manager: Sumi Dorairaj

Total Hole Depth: 1.5 m
Eastings: -
Northings: -
Date: 23/11/2010

Operator and Co.: Rory of Ken Cole
Excavation Method: Excavator
Log By: Tim Davis
Excavation Width: 450 mm

SUBSURFACE PROFILE			SAMPLE		
Depth	Visual	Description	Number	Condition	Observations
0.0		Ground Surface			
		FILL Silty Clay, brown, low plasticity, damp, heterogeneous with inclusions of glass fragments, tiles and ACM fragments.	0.1-0.2		ACM observed (991 g)
1.0		**Silty Clay** Yellow orange, medium plasticity, damp and heterogeneous.			
		End of Hole at 1.5 m bgs			
2.0					
3.0					
4.0					

Sample Method	*Sample Condition*		
HA - Hand Auger *SFA - Solid Flight Auger* *HFA - Hollow Flight Auger* *PT - Push Tubing*	*U - undisturbed tube sample* *D - disturbed sample* *CS - core sample*		

Test Pit No.: TP2 ***Location:*** Riverwood

Project: Riverwood North Renewal
Project No.: 41131
Client: MProjects
Project Manager: Sumi Dorairaj

Total Hole Depth: 1.2 m
Eastings: -
Northings: -
Date: 23/11/2010

Operator and Co.: Rory of Ken Cole
Excavation Method: Excavator
Log By: Tim Davis
Excavation Width: 450 mm

SUBSURFACE PROFILE			SAMPLE		
Depth	Visual	Description	Number	Condition	Observations
0.0		Ground Surface			
		FILL Silty Clay, brown, low plasticity, damp, heterogeneous with inclusions of some ash/slag, tiles, concretem ACM fragments and rootlets.	0.3-0.4		ACM observed (181 g)
1.0		**Silty Clay** Yellow orange, medium plasticity, wet and heterogeneous.			
		End of Hole at 1.2 m bgs			
2.0					
3.0					
4.0					

Sample Method	***Sample Condition***		
HA - Hand Auger ***SFA - Solid Flight Auger*** ***HFA - Hollow Flight Auger*** ***PT - Push Tubing***	***U - undisturbed tube sample*** ***D - disturbed sample*** ***CS - core sample***		

Test Pit No.: TP21 **Location:** Riverwood

Project: Riverwood North Renewal
Project No.: 41131
Client: MProjects
Project Manager: Sumi Dorairaj

Total Hole Depth: 1.1 m
Eastings: -
Northings: -
Date: 24/11/2010

Operator and Co.: Rory of Ken Cole
Excavation Method: Excavator
Log By: Tim Davis
Excavation Width: 450 mm

SUBSURFACE PROFILE			SAMPLE		
Depth	Visual	Description	Number	Condition	Observations
0.0		Ground Surface			ACM observed (58 g)
		FILL Silty Clay, brown, low plasticity, damp, heterogeneous with inclusions of tiles, rootlets and ACM fragments.	0.1-0.2 QC1/1A		
		Silty Clay Yellow orange, medium plasticity, damp and heterogeneous.	0.7-0.8		
1.0		**End of Hole at 1.1 m bgs**			
2.0					
3.0					
4.0					

Sample Method	*Sample Condition*		
HA - Hand Auger *SFA - Solid Flight Auger* *HFA - Hollow Flight Auger* *PT - Push Tubing*	*U - undisturbed tube sample* *D - disturbed sample* *CS - core sample*		

Test Pit No.: TP28 **Location:** Riverwood

Project: Riverwood North Renewal
Project No.: 41131
Client: MProjects
Project Manager: Sumi Dorairaj

Total Hole Depth: 0.8 m
Eastings: -
Northings: -
Date: 24/11/2010

Operator and Co.: Rory of Ken Cole
Excavation Method: Excavator
Log By: Tim Davis
Excavation Width: 450 mm

SUBSURFACE PROFILE			SAMPLE		
Depth	Visual	Description	Number	Condition	Observations
0.0		Ground Surface			
		FILL Silty Clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets and ACM fragments	0.1-0.2 QC2/2A		ACM observed (74 g)
		Silty Clay Yellow brown, medium plasticity, damp and heterogeneous.	0.4-0.5		
1.0		**End of Hole at 0.8 m bgs**			
2.0					
3.0					
4.0					

Sample Method	Sample Condition		
HA - Hand Auger SFA - Solid Flight Auger HFA - Hollow Flight Auger PT - Push Tubing	U - undisturbed tube sample D - disturbed sample CS - core sample		

Test Pit No.: TP33 **Location:** Riverwood

Project: Riverwood North Renewal
Project No.: 41131
Client: MProjects
Project Manager: Sumi Dorairaj

Total Hole Depth: 0.9 m
Eastings: -
Northings: -
Date: 24/11/2010

Operator and Co.: Rory of Ken Cole
Excavation Method: Excavator
Log By: Tim Davis
Excavation Width: 450 mm

SUBSURFACE PROFILE			SAMPLE		
Depth	Visual	Description	Number	Condition	Observations
0.0		Ground Surface			
		FILL Silty Clay, brown, low plasticity, damp, heterogeneous with inclusions of roadbase gravels, ash/slag, tiles and ceramic pieces	0.1-0.2		
		Silty Clay Yellow brown, medium plasticity, damp and heterogeneous.			
1.0		**End of Hole at 0.9 m bgs**			
2.0					
3.0					
4.0					

Sample Method	*Sample Condition*		
HA - Hand Auger ***SFA - Solid Flight Auger*** ***HFA - Hollow Flight Auger*** ***PT - Push Tubing***	***U - undisturbed tube sample*** ***D - disturbed sample*** ***CS - core sample***		

Test Pit No.: TP8 **Location:** Riverwood

Project: Riverwood North Renewal
Project No.: 41131
Client: MProjects
Project Manager: Sumi Dorairaj

Total Hole Depth: 0.8 m
Eastings: -
Northings: -
Date: 23/11/2010

Operator and Co.: Rory of Ken Cole
Excavation Method: Excavator
Log By: Tim Davis
Excavation Width: 450 mm

SUBSURFACE PROFILE			SAMPLE		
Depth	Visual	Description	Number	Condition	Observations
0.0		Ground Surface			
		FILL Silty Clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets and few ACM fragments.	0.3-0.4		ACM observed (41 g)
		Silty Clay Yellow orange, medium plasticity, damp and heterogeneous.			
1.0		**End of Hole at 0.8 m bgs**			
2.0					
3.0					
4.0					

Sample Method	Sample Condition		
HA - Hand Auger SFA - Solid Flight Auger HFA - Hollow Flight Auger PT - Push Tubing	U - undisturbed tube sample D - disturbed sample CS - core sample		

Test Pit No.: TP86 **Location:** Riverwood

Project: Riverwood North Renewal
Project No.: 41131
Client: MProjects
Project Manager: Sumi Dorairaj

Total Hole Depth: 1.0 m
Eastings: -
Northings: -
Date: 30/11/2010

Operator and Co.: Ken Cole
Excavation Method: Excavator
Log By: Tim Davis
Excavation Width: 450 mm

SUBSURFACE PROFILE			SAMPLE		
Depth	Visual	Description	Number	Condition	Observations
0.0		Ground Surface			
		FILL Silty Clay, brown, low plasticity, damp, heterogeneous with inclusions of ACM fragments, rootlets, glass pieces and shale pieces.	0.1-0.2		ACM observed (72 g)
		Silty Clay Yellow orange, medium plasticity, damp and heterogeneous.	0.5-0.6		
1.0		**End of Hole at 1.0 m bgs**			
2.0					
3.0					
4.0					

Sample Method	*Sample Condition*		
HA - Hand Auger *SFA - Solid Flight Auger* *HFA - Hollow Flight Auger* *PT - Push Tubing*	*U - undisturbed tube sample* *D - disturbed sample* *CS - core sample*		

Test Pit No.: TP37 **Location:** Riverwood

Project: Riverwood North Renewal
Project No.: 41131
Client: MProjects
Project Manager: Sumi Dorairaj

Total Hole Depth: 1.1 m
Eastings: -
Northings: -
Date: 25/11/2010

Operator and Co.: Mike of Ken Cole
Excavation Method: Excavator
Log By: Tim Davis
Excavation Width: 450 mm

SUBSURFACE PROFILE			SAMPLE			
Depth	Visual	Description	Number	Condition	PID (ppm)	Observations
0.0		Ground Surface				
		FILL Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of ACM fragments, rootlets and shale pieces	0.1-0.2			ACM observed (24 g)
1.0		**Silty Clay** Yellow brown, medium plasticity, damp, heterogenous.	0.8-0.9			
		End Of Hole at 1.1 m bgs				
2.0						
3.0						
4.0						

Sample Method	*Sample Condition*		
HA - Hand Auger *SFA - Solid Flight Auger* *HFA - Hollow Flight Auger* *PT - Push Tubing*	*U - undisturbed tube sample* *D - disturbed sample* *CS - core sample*		

Test Pit No.: TP41 **Location:** Riverwood

Project: Riverwood North Renewal
Project No.: 41131
Client: MProjects
Project Manager: Sumi Dorairaj

Total Hole Depth: 1.2 m
Eastings: -
Northings: -
Date: 25/11/2010

Operator and Co.: Mike of Ken Cole
Excavation Method: Excavator
Log By: Tim Davis
Excavation Width: 450 mm

SUBSURFACE PROFILE			SAMPLE			
Depth	Visual	Description	Number	Condition	PID (ppm)	Observations
0.0		Ground Surface				
		FILL Silty clay, brown, low plasticity, damp, heterogeneous with numerous ACM fragments and shale pieces	0.1-0.2			ACM observed (7568 g)
1.0		**Silty Clay** Yellow brown, medium plasticity, damp, heterogenous.				
		End Of Hole at 1.2 m bgs				
2.0						
3.0						
4.0						

Sample Method	*Sample Condition*		
HA - Hand Auger *SFA - Solid Flight Auger* *HFA - Hollow Flight Auger* *PT - Push Tubing*	*U - undisturbed tube sample* *D - disturbed sample* *CS - core sample*		

Test Pit No.: TP43 **Location:** Riverwood

Project: Riverwood North Renewal
Project No.: 41131
Client: MProjects
Project Manager: Sumi Dorairaj

Total Hole Depth: 1.2 m
Eastings: -
Northings: -
Date: 25/11/2010

Operator and Co.: Mike of Ken Cole
Excavation Method: Excavator
Log By: Tim Davis
Excavation Width: 450 mm

SUBSURFACE PROFILE			SAMPLE			
Depth	Visual	Description	Number	Condition	PID (ppm)	Observations
0.0		Ground Surface				
		FILL Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets and ACM fragments	0.1-0.2			ACM observed (125 g)
1.0		**Silty Clay** Yellow brown, medium plasticity, damp, heterogenous.	0.8-0.9			
		End Of Hole at 1.2 m bgs				
2.0						
3.0						
4.0						

Sample Method	*Sample Condition*		
HA - Hand Auger *SFA - Solid Flight Auger* *HFA - Hollow Flight Auger* *PT - Push Tubing*	*U - undisturbed tube sample* *D - disturbed sample* *CS - core sample*		

Test Pit No.: TP46 **Location:** Riverwood

Project: Riverwood North Renewal
Project No.: 41131
Client: MProjects
Project Manager: Sumi Dorairaj

Total Hole Depth: 0.9 m
Eastings: -
Northings: -
Date: 25/11/2010

Operator and Co.: Mike of Ken Cole
Excavation Method: Excavator
Log By: Tim Davis
Excavation Width: 450 mm

SUBSURFACE PROFILE			SAMPLE			
Depth	Visual	Description	Number	Condition	PID (ppm)	Observations
0.0		Ground Surface				
		FILL Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets and ACM fragments	0.1-0.2			ACM observed (152 g)
		Silty Clay Yellow brown, medium plasticity, damp, heterogenous.	0.55-0.65			
1.0		**End Of Hole at 0.9 m bgs**				
2.0						
3.0						
4.0						

Sample Method	*Sample Condition*		
HA - Hand Auger *SFA - Solid Flight Auger* *HFA - Hollow Flight Auger* *PT - Push Tubing*	*U - undisturbed tube sample* *D - disturbed sample* *CS - core sample*		

Test Pit No.: TP47 **Location:** Riverwood

Project: Riverwood North Renewal
Project No.: 41131
Client: MProjects
Project Manager: Sumi Dorairaj

Total Hole Depth: 1.1 m
Eastings: -
Northings: -
Date: 25/11/2010

Operator and Co.: Mike of Ken Cole
Excavation Method: Excavator
Log By: Tim Davis
Excavation Width: 450 mm

SUBSURFACE PROFILE			SAMPLE			
Depth	Visual	Description	Number	Condition	PID (ppm)	Observations
0.0		Ground Surface				
		FILL Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets, concrete pieces and ACM fragments	0.1-0.2			ACM observed (99 g)
1.0		**Silty Clay** Yellow brown, medium plasticity, damp, heterogenous.				
		End Of Hole at 1.1 m bgs				
2.0						
3.0						
4.0						

Sample Method	Sample Condition		
HA - Hand Auger SFA - Solid Flight Auger HFA - Hollow Flight Auger PT - Push Tubing	U - undisturbed tube sample D - disturbed sample CS - core sample		

Test Pit No.: TP51 **Location:** Riverwood

Project: Riverwood North Renewal
Project No.: 41131
Client: MProjects
Project Manager: Sumi Dorairaj

Total Hole Depth: 1.1 m
Eastings: -
Northings: -
Date: 25/11/2010

Operator and Co.: Mike of Ken Cole
Excavation Method: Excavator
Log By: Tim Davis
Excavation Width: 450 mm

SUBSURFACE PROFILE			SAMPLE			
Depth	Visual	Description	Number	Condition	PID (ppm)	Observations
0.0		Ground Surface				
		FILL Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of a few concrete pieces, rootlets and a few ACM fragment	0.1-0.2			ACM observed (11 g)
1.0		**Silty Clay** Yellow brown, medium plasticity, damp, heterogenous.				
		End Of Hole at 1.1 m bgs				
2.0						
3.0						
4.0						

Sample Method	*Sample Condition*		
HA - Hand Auger *SFA - Solid Flight Auger* *HFA - Hollow Flight Auger* *PT - Push Tubing*	*U - undisturbed tube sample* *D - disturbed sample* *CS - core sample*		

Test Pit No.: TP52 **Location:** Riverwood

Project: Riverwood North Renewal
Project No.: 41131
Client: MProjects
Project Manager: Sumi Dorairaj

Total Hole Depth: 1.1 m
Eastings: -
Northings: -
Date: 25/11/2010

Operator and Co.: Mike of Ken Cole
Excavation Method: Excavator
Log By: Tim Davis
Excavation Width: 450 mm

SUBSURFACE PROFILE			SAMPLE			
Depth	Visual	Description	Number	Condition	PID (ppm)	Observations
0.0		Ground Surface				
		FILL Silty clay, brown, low plasticity heterogeneous with inclusions of shale pieces, roadbase gravels and rootlets	0.1-0.2			
		Silty Clay Yellow brown, medium plasticity, damp, heterogenous.	0.7-0.8			
1.0		**End Of Hole at 1.1 m bgs**				
2.0						
3.0						
4.0						

Sample Method	*Sample Condition*		
HA - Hand Auger *SFA - Solid Flight Auger* *HFA - Hollow Flight Auger* *PT - Push Tubing*	*U - undisturbed tube sample* *D - disturbed sample* *CS - core sample*		

Test Pit No.: TP58 **Location:** Riverwood

Project: Riverwood North Renewal
Project No.: 41131
Client: MProjects
Project Manager: Sumi Dorairaj

Total Hole Depth: 1.2 m
Eastings: -
Northings: -
Date: 25/11/2010

Operator and Co.: Mike of Ken Cole
Excavation Method: Excavator
Log By: Tim Davis
Excavation Width: 450 mm

SUBSURFACE PROFILE			SAMPLE			
Depth	Visual	Description	Number	Condition	PID (ppm)	Observations
0.0		Ground Surface				
		FILL Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of ACM fragments, rootlets and glass pieces	0.1-0.2 QC3/3A			ACM observed (976 g)
1.0		**Silty Clay** Yellow brown, medium plasticity, damp, heterogenous.				
		End Of Hole at 1.2 m bgs				
2.0						
3.0						
4.0						

Sample Method	*Sample Condition*		
HA - Hand Auger *SFA - Solid Flight Auger* *HFA - Hollow Flight Auger* *PT - Push Tubing*	*U - undisturbed tube sample* *D - disturbed sample* *CS - core sample*		

Test Pit No.: TP61 **Location:** Riverwood

Project: Riverwood North Renewal
Project No.: 41131
Client: MProjects
Project Manager: Sumi Dorairaj

Total Hole Depth: 0.9 m
Eastings: -
Northings: -
Date: 26/11/2010

Operator and Co.: Mike of Ken Cole
Excavation Method: Excavator
Log By: Tim Davis
Excavation Width: 450 mm

SUBSURFACE PROFILE			SAMPLE			
Depth	Visual	Description	Number	Condition	PID (ppm)	Observations
0.0		Ground Surface				
		FILL Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of ACM fragments and rootlets	0.1-0.2			ACM observed (115)
		Silty Clay Yellow brown, medium plasticity.				
1.0		**End Of Hole at 0.9 m bgs**				
2.0						
3.0						
4.0						

Sample Method	Sample Condition		
HA - Hand Auger SFA - Solid Flight Auger HFA - Hollow Flight Auger PT - Push Tubing	U - undisturbed tube sample D - disturbed sample CS - core sample		

Test Pit No.: TP66 **Location:** Riverwood

Project: Riverwood North Renewal
Project No.: 41131
Client: MProjects
Project Manager: Sumi Dorairaj

Total Hole Depth: 1.0 m
Eastings: -
Northings: -
Date: 26/11/2010

Operator and Co.: Mike of Ken Cole
Excavation Method: Excavator
Log By: Tim Davis
Excavation Width: 450 mm

SUBSURFACE PROFILE			SAMPLE			
Depth	Visual	Description	Number	Condition	PID (ppm)	Observations
0.0		Ground Surface				
		FILL Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of ACM fragments and rootlets	0.1-0.3			ACM observed (14 g)
		Silty Clay Yellow brown, medium plasticity, damp, heterogeneous				
1.0		**End Of Hole at 1.0 m bgs**				
2.0						
3.0						
4.0						

Sample Method	*Sample Condition*		
HA - Hand Auger *SFA - Solid Flight Auger* *HFA - Hollow Flight Auger* *PT - Push Tubing*	*U - undisturbed tube sample* *D - disturbed sample* *CS - core sample*		

Test Pit No.: TP69 **Location:** Riverwood

Project: Riverwood North Renewal
Project No.: 41131
Client: MProjects
Project Manager: Sumi Dorairaj

Total Hole Depth: 1.0 m
Eastings: -
Northings: -
Date: 26/11/2010

Operator and Co.: Mike of Ken Cole
Excavation Method: Excavator
Log By: Tim Davis
Excavation Width: 450 mm

SUBSURFACE PROFILE			SAMPLE			
Depth	Visual	Description	Number	Condition	PID (ppm)	Observations
0.0		Ground Surface				
		FILL Silty clay, brown, heterogeneous, damp, firm, low plasticity with inclusions of ACM fragments glass and concrete	0.1-0.2			ACM observed (60 g)
		Silty Clay Mottled orange brown grey, heterogeneous, damp, moderate plasticity with inclusions of mature roots				
1.0		**End Of Hole at 1.0 m bgs**				
2.0						
3.0						
4.0						

Sample Method	*Sample Condition*		
HA - Hand Auger *SFA - Solid Flight Auger* *HFA - Hollow Flight Auger* *PT - Push Tubing*	*U - undisturbed tube sample* *D - disturbed sample* *CS - core sample*		

Test Pit No.: TP72 **Location:** Riverwood

Project: Riverwood North Renewal
Project No.: 41131
Client: MProjects
Project Manager: Sumi Dorairaj

Total Hole Depth: 1.0 m
Eastings: -
Northings: -
Date: 26/11/2010

Operator and Co.: Mike of Ken Cole
Excavation Method: Excavator
Log By: Tim Davis
Excavation Width: 450 mm

SUBSURFACE PROFILE			SAMPLE			
Depth	Visual	Description	Number	Condition	PID (ppm)	Observations
0.0		Ground Surface				
		FILL Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets and ACM fragments	0.1-0.2			ACM observed (67 g)
		Silty Clay Yellow brown, medium plasticity, damp, heterogeneous	0.6-0.7			
1.0		**End Of Hole at 1.0 m bgs**				
2.0						
3.0						
4.0						

Sample Method	Sample Condition		
HA - Hand Auger SFA - Solid Flight Auger HFA - Hollow Flight Auger PT - Push Tubing	U - undisturbed tube sample D - disturbed sample CS - core sample		

Test Pit No.: TP74 **Location:** Riverwood

Project: Riverwood North Renewal
Project No.: 41131
Client: MProjects
Project Manager: Sumi Dorairaj

Total Hole Depth: 1.0 m
Eastings: -
Northings: -
Date: 26/11/2010

Operator and Co.: Mike of Ken Cole
Excavation Method: Excavator
Log By: Tim Davis
Excavation Width: 450 mm

SUBSURFACE PROFILE			SAMPLE			
Depth	Visual	Description	Number	Condition	PID (ppm)	Observations
0.0		Ground Surface				
		FILL Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of a few brick fragments and ACM fragments	0.1-0.2			ACM observed (54 g)
		Silty Clay Yellow brown, medium plasticity, damp, heterogeneous				
1.0		**End Of Hole at 1.0 m bgs**				
2.0						
3.0						
4.0						

Sample Method	*Sample Condition*		
HA - Hand Auger *SFA - Solid Flight Auger* *HFA - Hollow Flight Auger* *PT - Push Tubing*	*U - undisturbed tube sample* *D - disturbed sample* *CS - core sample*		

Test Pit No.: TP77 **Location:** Riverwood

Project: Riverwood North Renewal
Project No.: 41131
Client: MProjects
Project Manager: Sumi Dorairaj

Total Hole Depth: 0.8 m
Eastings: -
Northings: -
Date: 30/11/2010

Operator and Co.: Mike of Ken Cole
Excavation Method: Excavator
Log By: Tim Davis
Excavation Width: 450 mm

SUBSURFACE PROFILE			SAMPLE			
Depth	Visual	Description	Number	Condition	PID (ppm)	Observations
0.0		Ground Surface				
		FILL Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of glass fragments and ACM fragments	0.1-0.2 QC4/4A			ACM observed (64 g)
		Silty Clay Yellow brown				
1.0		**End Of Hole at 0.8 m bgs**				
2.0						
3.0						
4.0						

Sample Method	Sample Condition		
HA - Hand Auger SFA - Solid Flight Auger HFA - Hollow Flight Auger PT - Push Tubing	U - undisturbed tube sample D - disturbed sample CS - core sample		

Test Pit No.: TP79 **Location:** Riverwood

Project: Riverwood North Renewal
Project No.: 41131
Client: MProjects
Project Manager: Sumi Dorairaj

Total Hole Depth: 1.0 m
Eastings: -
Northings: -
Date: 30/11/2010

Operator and Co.: Mike of Ken Cole
Excavation Method: Excavator
Log By: Tim Davis
Excavation Width: 450 mm

SUBSURFACE PROFILE			SAMPLE			
Depth	Visual	Description	Number	Condition	PID (ppm)	Observations
0.0		Ground Surface				
		FILL Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of ACM fragments and rootlet	0.1-0.2			ACM observed (686 g)
		Silty Clay Yellow brown, medium plasticity, damp, heterogeneous	0.5-0.6			
1.0		**End Of Hole at 1.0 m bgs**				
2.0						
3.0						
4.0						

Sample Method	Sample Condition		
HA - Hand Auger SFA - Solid Flight Auger HFA - Hollow Flight Auger PT - Push Tubing	U - undisturbed tube sample D - disturbed sample CS - core sample		

Test Pit No.: TP84 **Location:** Riverwood

Project: Riverwood North Renewal
Project No.: 41131
Client: MProjects
Project Manager: Sumi Dorairaj

Total Hole Depth: 0.9 m
Eastings: -
Northings: -
Date: 30/11/2010

Operator and Co.: Mike of Ken Cole
Excavation Method: Excavator
Log By: Tim Davis
Excavation Width: 450 mm

SUBSURFACE PROFILE			SAMPLE			
Depth	Visual	Description	Number	Condition	PID (ppm)	Observations
0.0		Ground Surface				
		FILL Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of ACM fragments, rootlets and glass fragments	0.1-0.2 QC5/5A			ACM observed (59 g)
		Silty Clay Orange yellow, medium plasticity, damp, heterogeneous				
1.0		**End Of Hole at 0.9 m bgs**				
2.0						
3.0						
4.0						

Sample Method	*Sample Condition*		
HA - Hand Auger ***SFA - Solid Flight Auger*** ***HFA - Hollow Flight Auger*** ***PT - Push Tubing***	***U - undisturbed tube sample*** ***D - disturbed sample*** ***CS - core sample***		

Appendix C

Field Testpit Logs

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP19

Project Riverwood North Renewal Project No 41131

Total Hole Depth 1.0m Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

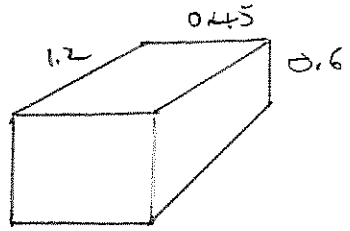
Drill Co Ken Cole Method _____

Driller RORY Log By T.Davis Date 24/11/10 Permit # _____

COMMENTS

87 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
0					GRASS COVER
		0.1-0.2			FILL: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets, glass fragments, Ash fragments
0.6					Silty CLAY, yellow brown, low-med plasticity, damp, heterogeneous
1.0					END OF INVESTIGATION 1.0



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP20

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

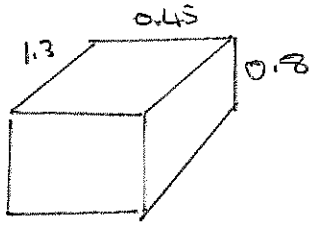
Drill Co Ken Cole Method Excavator

Driller Rory Log By T.Davis Date 24/11/10 Permit # _____

COMMENTS

48 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plasticity, damp, heterogenous with inclusions of glass fragments, rootlets, ACM fragments
	0.8				
		NS			Silty clay, yellow brown, medium plasticity, damp, heterogenous
	1.2				END of INVESTIGATION 1.2m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP22

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

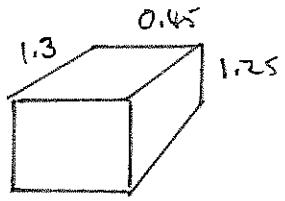
Drill Co Ken Cole Method Excavator

Driller Rory Log By T.Davis Date 24/11/10 Permit # _____

COMMENTS

27 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plast, damp, heterogeneous with inclusions of rootlets, few shale pieces and plastic pieces, few ACM fragments
1.25					
		NS			Silty CLAY, yellow brown, medium plasticity, damp, heterogeneous
1.6					
					END OF INVESTIGATION 1.6m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP23

Project Riverwood North Renewal Project No 41131

Total Hole Depth 1.0m Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

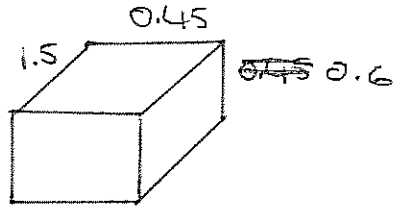
Drill Co Ken Cole Method Excavator

Driller Rory Log By T.Davis Date 24/11/10 Permit # _____

COMMENTS

6 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets, few shale and glass pieces, one ACM fragment
	0.6				
		NS			Silty CLAY, yellow brown, medium plasticity, damp, heterogeneous
	1.0				END OF INVESTIGATION 1.0m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP24

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

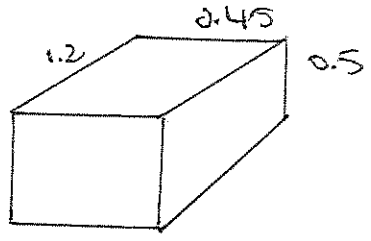
Drill Co Ken cole Method Excavator

Driller Rory Log By T.Davis Date 24/11/10 Permit # _____

COMMENTS

52 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of ACM fragments, shale pieces
0.5					
		NS			Silty clay, yellow brown, medium plasticity, damp, heterogeneous
0.9					END OF INVESTIGATION 0.9m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

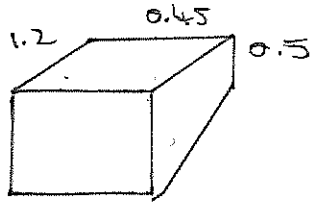
JBS ENVIRONMENTAL — Drilling Log

Borehole # TP25

Project Riverwood North Renewal Project No 41131
Total Hole Depth 0.9m Northing _____ Easting _____
Top of Casing _____ Water Level Initial _____ Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type/Size _____
Drill Co Ken Cole Method _____
Driller RORY Log By T.Davis Date 24/11/10 Permit # _____

COMMENTS
99 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets, few ACM fragments
	0.5				
		0.5-0.6			Silty clay, yellow brown, medium plasticity, damp, heterogeneous
	0.9				
					END OF INVESTIGATION 0.9



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP26

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

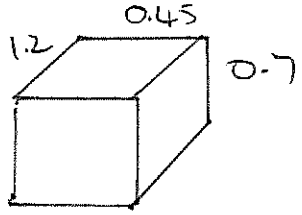
Drill Co Ken Cole Method _____

Driller Rory Log By T.Davis Date 24/11/10 Permit # _____

COMMENTS

116 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
		0.1-0.2			Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets, plastic, ACM fragments
	0.7				
		NS			Silty clay, yellow brown, medium plasticity, damp, heterogeneous
					END OF INVESTIGATION



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sortad	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP27

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

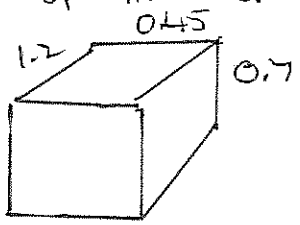
Drill Co Ken Cole Method _____

Driller Rory Log By T.Davis Date 24/11/10 Permit # _____

COMMENTS

1164 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: Silty clay, brown, low plasticity, damp, heterogeneous with inclusions rootlets, large quantity on ACM fragments
0.7					
		NS			Silty clay, yellow brown, medium plasticity, damp, heterogeneous
1.1					END OF INVESTIGATION 1.1m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP29

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

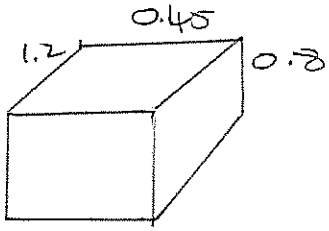
Drill Co Ken Cole Method EXCAVATOR

Driller ROAN Log By T.Davis Date 24/11/10 Permit # _____

COMMENTS

1055 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets, numerous ACM fragments
	0.8				
		NS			Silty CLAY, yellow brown, medium plasticity, damp, heterogeneous
	1.2				END OF INVESTIGATION 1.2m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP30

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

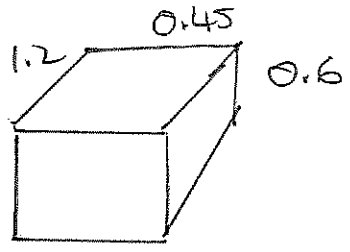
Drill Co Ken Cole Method EXCAVATOR

Driller Rory Log By T.Davis Date 24/11/10 Permit # _____

COMMENTS

288. grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill; Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets, numerous ACM fragments,
	0.6				
		NS			Silty clay, yellow brown, medium plasticity, damp, heterogeneous
	1.0				
					END OF INVESTIGATION 1.0m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP31

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

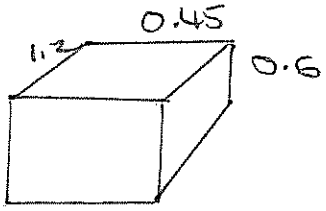
Drill Co Ken cole Method _____

Driller RORY Log By T.Davis Date 24/11/10 Permit # _____

COMMENTS

13 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions rootlets few ACM fragments
	0.6				
		0.6-0.7			Silty CLAY, yellow brown, medium plasticity, damp, heterogeneous
	1.0				END OF INVESTIGATION 1.0m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP32

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

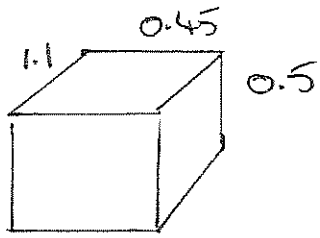
Drill Co Kan Ode Method _____

Driller ROBY Log By T.Davis Date 24/11/10 Permit # _____

COMMENTS

23 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: Silty clay, dark brown, low plasticity, damp, heterogeneous with inclusions of rootlets, ACM fragments
0.5					
		N3			Silty CLAY, yellow brown, medium plasticity, damp, heterogeneous
0.9					
					END of INVESTIGATION 0.9m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP34

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

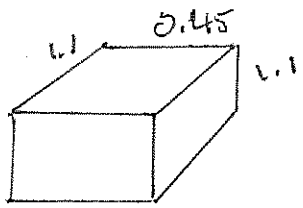
Drill Co Ken Cole Method Excavator

Driller Rory Log By T.Davis Date 24/11/10 Permit # _____

COMMENTS

727 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill; silty clay, dark brown, low plasticity, damp, heterogeneous with inclusions of rootlet, brick + concrete pieces, ACM fragments
	1.1				
		1.1-1.2			Silty clay, yellow brown, medium plasticity, damp, heterogeneous
	1.4				
					END OF INVESTIGATION 1.4m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP35

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

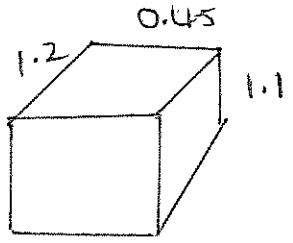
Drill Co Ken Cole Method Excavator

Driller Rory Log By T.Davis Date 24/11/10 Permit # _____

COMMENTS

1012 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
					Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets, ACM fragments
1.1					
					silty clay, yellow brown, medium plasticity, damp, heterogeneous
1.4					
					END OF INVESTIGATION 1.4m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP36

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

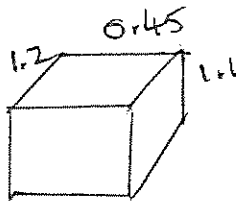
Drill Co Ken Cole Method _____

Driller Rory Log By T.Davis Date 24/11/10 Permit # _____

COMMENTS

249 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, dark brown, low plasticity, damp, heterogeneous with inclusions of ACM fragments, shale pieces
	1.1				
		NS			Silty CLAY, yellow brown, med plasticity, damp, heterogeneous
	1.5				
					END OF INVESTIGATION 1.5m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP38

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

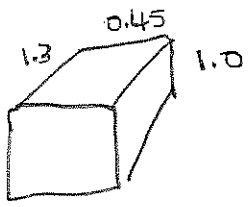
Drill Co Ken Cole Method _____

Driller MICK Log By T.Davis Date 25/11/10 Permit # _____

COMMENTS

279 grass

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			FILL: Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets, ACM fragments
1.0					
		NS			Silty clay, yellow brown, medium plasticity, damp, heterogeneous
1.5					END OF INVESTIGATION 1.5M



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP39

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

Drill Co _____ Method _____

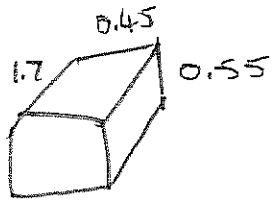
Driller _____ Log By T.Davis Date _____ Permit # _____

COMMENTS

790
800 +
738

2.328 kg

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS cover
		0.1-0.2			Fill: Silty clay, brown, low plasticity, damp, heterogeneous, with inclusions of numerous ACM fragments
0.55					
		NS			Silty clay, yellow brown, medium plasticity, damp, heterogeneous
1.0					END OF INVESTIGATION 1.0m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

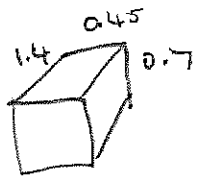
JBS ENVIRONMENTAL — Drilling Log

Borehole # TP40

Project Riverwood North Renewal Project No 41131
Total Hole Depth 1.1m Northing _____ Easting _____
Top of Casing _____ Water Level Initial _____ Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type/Size _____
Drill Co Ken Cole Method Excavator
Driller Mick Log By T.Davis Date 25/11/10 Permit # _____

COMMENTS
1018
978 +
800
2796 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plasticity, damp, heterogeneous, with inclusions of rubble & large quantity of ACM fragments
	0.7				
		NS			Silty Clay, yellow brown, medium plasticity, damp, heterogeneous
	1.1				
					END OF INVESTIGATION 1.1m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP42

Project Riverwood North Renewal Project No 41131

Total Hole Depth ____ Northing ____ Easting ____

Top of Casing ____ Water Level Initial ____ Static ____

Screen: Dia ____ Length ____ Type/Size ____

Casing: Dia ____ Length ____ Type/Size ____

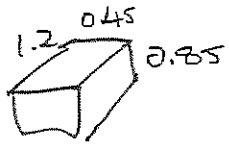
Drill Co Ken Cole Method ____

Driller MICK Log By T.Davis Date 25/11/10 Permit # ____

COMMENTS

195 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets, ACM fragments
	0.85				
		NS			Silty clay, yellow brown, medium plasticity, damp, heterogeneous
	1.2				
					END OF INVESTIGATION 1.2m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP44

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

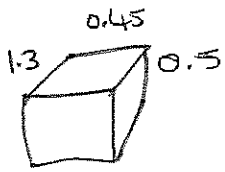
Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 25/11/10 Permit # _____

COMMENTS

410 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets, ACM fragments
	0.5				
		N3			Silty clay, yellow brown, medium plasticity, damp, heterogeneous
	0.9				
					END OF INVESTIGATION 0.9m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP45

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

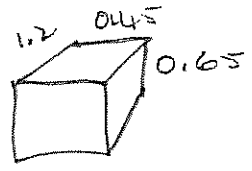
Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 25/11/10 Permit # _____

COMMENTS

29 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets, one ACM fragment
	0.65				
		NS			Silty clay, yellow brown, medium plasticity, damp, heterogeneous
	1.2				END OF INVESTIGATION 1.2m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stretified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP49

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

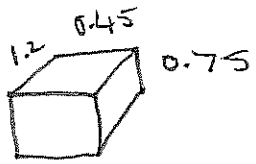
Drill Co Ken Cole Method _____

Driller Mick Log By T.Davis Date 25/11/10 Permit # _____

COMMENTS

27 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets, ACM fragments
	0.75				
		NS			Silty clay, yellow brown, medium plasticity, damp, heterogeneous
	1.1m				
					END OF INVESTIGATION 1.1m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP49

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

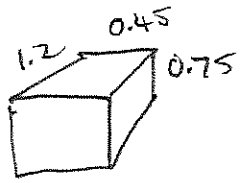
Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 25/11/10 Permit # _____

COMMENTS

66 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1 - 0.2			Fill: Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets
0.75					
		NS			Silty CLAY, yellow brown, medium plasticity, damp, heterogeneous
1.1					END of INVESTIGATION 1.1



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP54

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

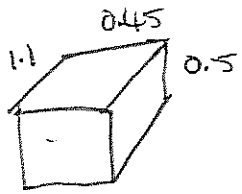
Drill Co Ken Cole Method _____

Driller MICK Log By T.Davis Date 25/11/10 Permit # _____

COMMENTS

60 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1 - 0.2			Fill: Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of ACM fragments, rootlets, tiles, glass
0.5					
		NS			Silty clay, yellow brown, medium plasticity, damp, heterogeneous
1.0					
					END OF INVESTIGATION 1.0m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP55

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

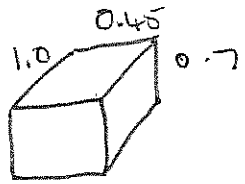
Drill Co Kencole Method _____

Driller MICK Log By T.Davis Date 25/11/10 Permit # _____

COMMENTS

44 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1 - 0.2			Fill: silty clay, low plasticity, damp, heterogeneous with inclusions of shale pieces, few ACM fragments
	0.7				
		N/S			silty CLAY, yellow brown, medium plasticity, damp, heterogeneous
	1.1				END OF INVESTIGATION 1.1m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	end (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

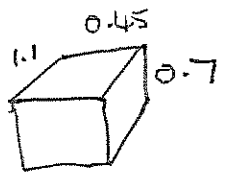
JBS ENVIRONMENTAL — Drilling Log

Borehole # TP56

Project Riverwood North Renewal Project No 41131
Total Hole Depth 1.1m Northing _____ Easting _____
Top of Casing _____ Water Level Initial _____ Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type/Size _____
Drill Co Ken cole Method Excavator
Driller MICK Log By T.Davis Date 25/11/19 Permit # _____

COMMENTS
12 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions few ACM fragments, plastic, tile, rootlets
0.7					
		NS			silty CLAY, yellow brown, medium plasticity, damp, heterogeneous
1.1					
					END OF INVESTIGATION 1.1m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP57

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

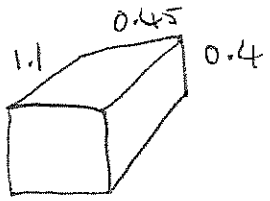
Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 26/11/10 Permit # _____

COMMENTS

9 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1 - 0.2			Fill: Silty clay, brown, low plasticity, damp, heterogeneous with rootlets shale pieces, one ACM fragment
	0.4				Silty CLAY, yellow Brown, medium plasticity, damp, heterogeneous
					Refusal on concrete slab 0.4
					END OF INVESTIGATION



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP59

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

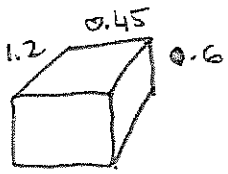
Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 26/11/10 Permit # _____

COMMENTS

281 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plast, damp, heterogeneous with inclusion of ACM fragments, rootlets
	0.6				
		0.6-0.7			silty clay, yellow brown, medium plasticity, damp, heterogeneous
	1.0				
					END of INVESTIGATION ~~0.5~~ 1.0m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP62

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

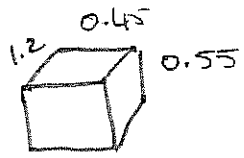
Drill Co _____ Method EXCAVATOR

Driller MICK Log By T.Davis Date 26/11/10 Permit # _____

COMMENTS

60 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
		0.1-0.2			GRASS COVER Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets, few ACM fragments
	0.55	0.55-0.65			Silty CLAY, yellow brown, medium plasticity, damp, heterogeneous
	0.9				END of INVESTIGATION 0.9m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP63

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

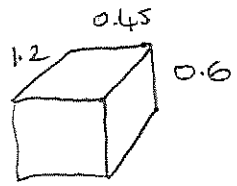
Drill Co Ken Cole Method Excavator

Driller Mick Log By T.Davis Date 26/11/10 Permit # _____

COMMENTS

63 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: Silty clay, brown, low plasticity, damp, heterogeneous with inclusion of ACM fragments, glass, rootlets
	0.6				
		NS			Silty CLAY, yellow brown, medium plasticity, damp, heterogeneous
	1.0m				
					END OF INVESTIGATION 1.0m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP65

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

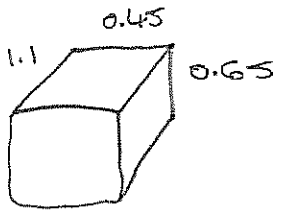
Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 26/11/18 Permit # _____

COMMENTS

147 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1 - 0.2			fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of ACM fragments, rootlets
	0.65				
		NS			Silty CLAY, yellow brown, medium plasticity, damp
	1.1				END OF INVESTIGATION 1.1m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP67

Project Riverwood North Renewal Project No 41131

Total Hole Depth 0.8 m Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

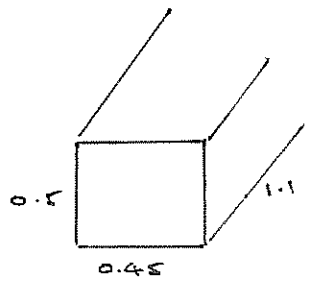
Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 26.11.10 Permit # _____

COMMENTS

323 grass

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					Grass
	0.0				0.0
		0.1 - 0.2			All: silty clay brown hetero damp firm low plasticity with inclusions of ACM & terracotta pipe
	0.5				0.5
		NS			silty clay orange brown hetero damp medium density
	0.8				0.8
					EOH @ 0.8 m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP68

Project Riverwood North Renewal Project No 41131

Total Hole Depth 0.8 m Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

Drill Co _____ Method _____

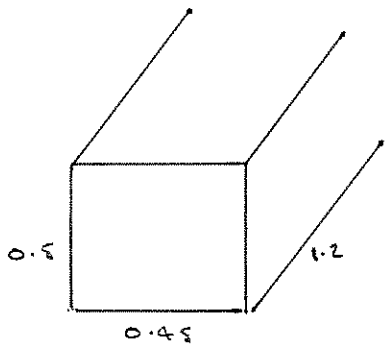
Driller _____ Log By T.Davis Date 26.4.10 Permit # _____

COMMENTS

939 gram

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					Grass
	0.0				0.0
		0.2 - 0.3			Fill silty clay brown hetero damp firm low to moderate plasticity with inclusions of ACM & shale gravels & tile fragments
	0.5				0.5
		0.6 - 0.7			silty CLAY orange brown hetero damp moderate plasticity
	0.8				0.8

EOH @ 0.8 m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP70

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

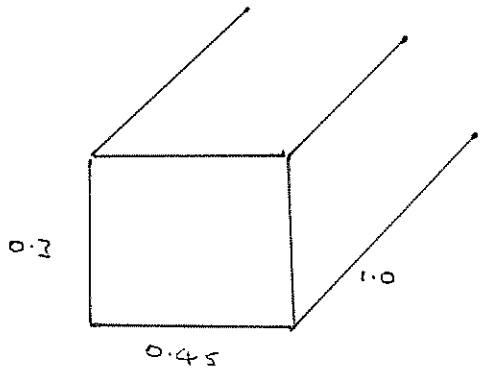
Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 26.11.10 Permit # _____

COMMENTS

29 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
	0.0				Grass
		0.1 - 0.2			0.0 — Fill: silty clay brown hetero dry to damp firm low plasticity with inclusions of ash glass & shale gravels
	0.3				0.3 — silty CLAY orange brown hetero damp firm low to moderate plasticity
		NS			
	0.6				0.6 — COH @ 0.6 m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP71

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

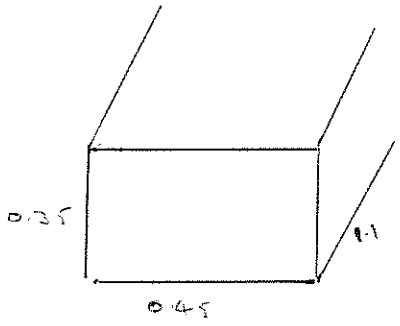
Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 26.11.10 Permit # _____

COMMENTS

613 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
	0.0				Grass — 0.0
		0.1 - 0.2			fill: silty clay brown hetero dry firm non to low plasticity with inclusions of ACM less plastic
	0.35				0.35
		NS			silty clay orange brown hetero dry stiff low plasticity
	0.7				0.7
					EOH @ 0.7 m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP73

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

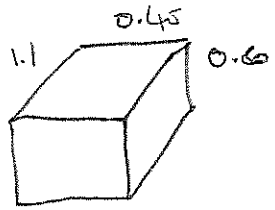
Drill Co Ken cole Method Excavator

Driller Mick Log By T.Davis Date 26/11/10 Permit # _____

COMMENTS

609 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1 - 0.2			Fill: Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets, ACM fragments
	0.6				
		N3			Silty CLAY, yellow brown, medium plasticity, damp, heterogeneous
	1.0				
					END OF INVESTIGATION 1.0



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP75

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

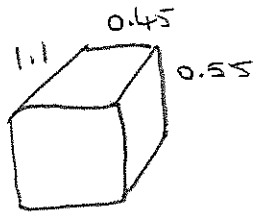
Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 26/11/19 Permit # _____

COMMENTS

71 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of ACM fragments, rootlets
	0.55				
		MS			Silty CLAY, yellow orange, medium plasticity, damp, heterogeneous
	1.0				
					END OF INVESTIGATION 1.0



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP76

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

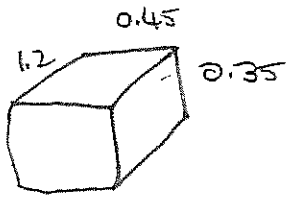
Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 26/11/10 Permit # _____

COMMENTS

195 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, ~~yellow~~ brown ~~orange~~, low plasticity, damp, with inclusions of ACM fragments
	0.35				
		0.4-0.5			Silty clay, yellow orange, medium plasticity, damp, heterogeneous
	0.4				
					END OF INVESTIGATION 0.4



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP78

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

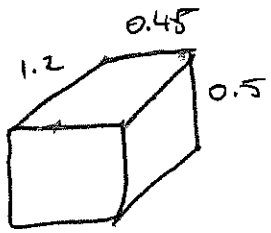
Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 30/1/10 Permit # _____

COMMENTS

296 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of glass pieces, ACM fragments, rootlets
	0.5				
					Silty clay, yellow brown, medium plasticity, damp, heterogeneous



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse send	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP80

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

Drill Co _____ Method Excavator

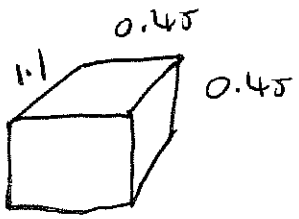
Driller _____ Log By T.Davis Date 30/11/10 Permit # _____

COMMENTS

3 grabs

P

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plast, damp, heterogeneous with inclusions of rootlets, ACM fragments (small)
0.45					
					Silty clay, yellow brown, medium plasticity, damp, heterogeneous



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP81

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

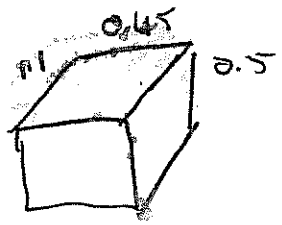
Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 30/11/10 Permit # _____

COMMENTS

21 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
0.5		0.1-0.2			GRASS COVER Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of ash fragments, rootlets Silty clay, yellow brown, medium plasticity, damp, heterogeneous



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP82

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

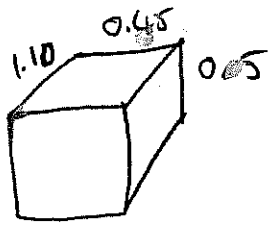
Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 30/11/10 Permit # _____

COMMENTS

9 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
		0.1 - 0.2			GRASS COVER fill: silty clay, brown, low plasticity, damp, heterogeneous, with inclusions of rootlets, few ACM fragments
0.5		0.5 - 0.6			Silty clay, yellow brown, medium plasticity, damp, heterogeneous END of INVESTIGATION 1.0m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP83

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

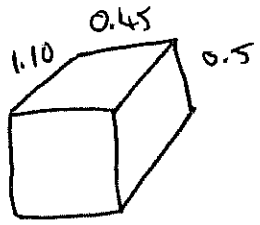
Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 30/11/10 Permit # _____

COMMENTS

435 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusion of small amounts of ash/slag, ACM fragments, shale pieces
0.5					
		NS			Silty CLAY, orange yellow, medium plasticity, damp, heterogeneous



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP85

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

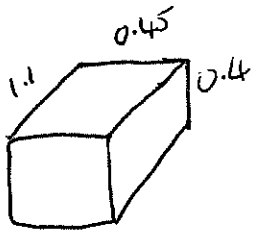
Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 30/11/10 Permit # _____

COMMENTS

107 geony

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets, ACM fragments
	0.4				
		NS			Silty CLAY, yellow orange, medium plasticity, damp, heterogeneous



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP87

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

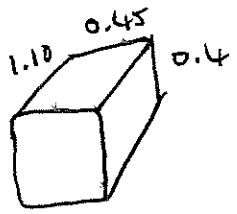
Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 30/11/10 Permit # _____

COMMENTS

26 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets, ACM fragments
0.4					
		NS			Silty CLAY, yellow brown-orange, medium plasticity, damp, heterogeneous
0.9					END OF INVESTIGATION 0.9m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP50

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

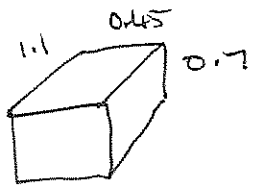
Drill Co Ken cole Method _____

Driller Mick Log By T.Davis Date 25/11/10 Permit # _____

COMMENTS

NO ACM

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1 - 0.2			Fill: Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets
	0.7				
		NS			Silty clay, yellow brown, medium, plasticity, damp, heterogeneous
					END OF INVESTIGATION 1.0m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP9

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

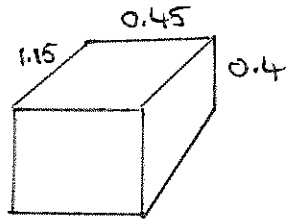
Casing: Dia _____ Length _____ Type/Size _____

Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 23/11/10 Permit # _____

COMMENTS

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plasticity, damp, heterogenous with inclusions of rootlets, shale pieces
	0.4				
		0.4-0.5			Silty CLAY, yellow brown, medium plasticity, damp, heterogenous
	0.7				END OF INVESTIGATION 0.7m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP12

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

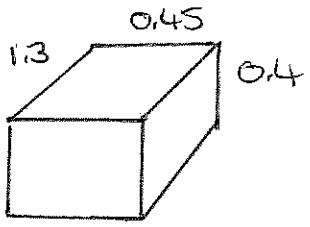
Casing: Dia _____ Length _____ Type/Size _____

Drill Co Ken Cole Method _____

Driller Rory Log By T.Davis Date 23/11/10 Permit # _____

COMMENTS

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets
0.4		0.4-0.5			Silty CLAY, Yellow brown, medium plasticity, damp, heterogeneous
0.7					END INVESTIGATION 0.7m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

MProject Reports / RO2 attachments

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP2

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

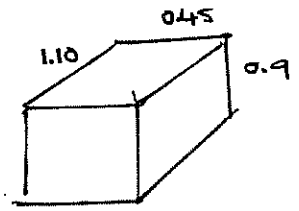
Drill Co Ken Cole Method _____

Driller Rory Log By T.Davis Date 23/11/10 Permit # _____

COMMENTS

181 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.3-0.4			Fill: Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of some ash/slag, tiles & concrete pieces, ACM fragments from 3cm² - 10cm², rootlets
0.9					
					Silty CLAY, yellow orange, medium plasticity, wet, heterogeneous
1.2m					END OF INVESTIGATION 1.2m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP8

Project Riverwood North Renewal Project No 41131

Total Hole Depth 0.8m Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

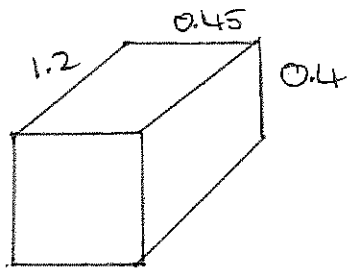
Drill Co Ken Cole Method _____

Driller Rory Log By T.Davis Date 23/11/10 Permit # _____

COMMENTS

4 grabs

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
					Fill: silty clay, brown, low plastic, damp, heterogeneous with inclusions of rootlets, few ACM fragments
	0.4				
					Silty CLAY, yellow brown, med plasticity, damp, heterogeneous
	0.8				END OF INVESTIGATION 0.8m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	
TOPSOIL		grey	root holes		hard					Contamination
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP11

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

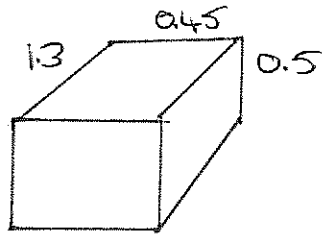
Drill Co Ken Oe Method Excavator

Driller Rory Log By T.Davis Date 23/11/10 Permit # _____

COMMENTS

4 grabs

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of shale pieces, rootlets, few ACM fragments.
	0.5				
		NS			Silty clay, yellow brown, medium plasticity, damp, heterogeneous
	0.9				
					END OF INVESTIGATION 0.9m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP14

Project Riverwood North Renewal Project No 41131

Total Hole Depth 1.2m Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

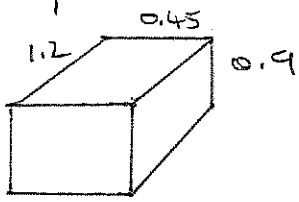
Drill Co Ken Cole Method _____

Driller Rory Log By T.Davis Date 23/11/10 Permit # _____

COMMENTS

381 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of ash/clay, numerous ACM fragments, brick pieces, tile fragments
	0.9				
		N3			Silty clay, yellow brown, medium plasticity, damp, heterogeneous
	1.2				END OF INVESTIGATION 1.2m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP17

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

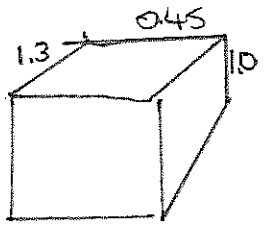
Drill Co Ken Cole Method _____

Driller Andy Log By T.Davis Date 23/11/10 Permit # _____

COMMENTS

991 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of glass fragments, tiles, ACM fragments.
	1.0				
		NS			Silty CLAY, yellow brown, medium plasticity, damp, heterogeneous
	1.5				END OF INVESTIGATION 1.5m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP21

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

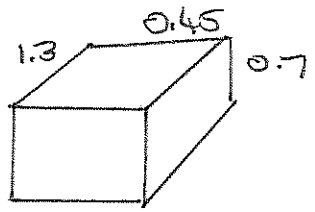
Drill Co Ken Cole Method Excavator

Driller Rory Log By T.Davis Date 24/11/10 Permit # _____

COMMENTS

58 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2 ↑ QC1/1A			Fill; Silty clay, brown, low plasticity, damp, heterogenous with inclusions of tiles, rootlets, ACM fragments
	0.7				
		0.7-0.9			Silty CLAY, yellow brown, medium plasticity, damp, heterogeneous
	1.1				END OF INVESTIGATION 1.1m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP28

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

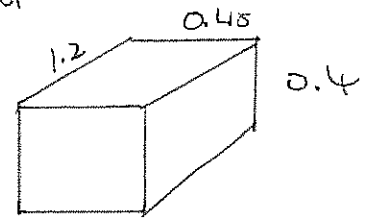
Drill Co Ken Cole Method _____

Driller Rory Log By T.Davis Date 24/11/10 Permit # _____

COMMENTS

74 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2 ↑ QC2/2A			Fill: Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets + ACM fragments
0.4		0.4-0.5			Silty CLAY, yellow brown, medium plasticity, damp, heterogeneous
					END OF INVESTIGATION



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP33

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

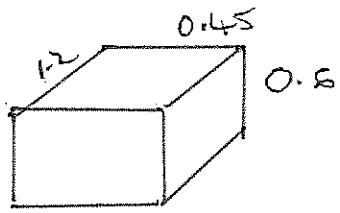
Casing: Dia _____ Length _____ Type/Size _____

Drill Co Ken Cole Method EXCAVATOR

Driller Rory Log By T.Davis Date 24/11/10 Permit # _____

COMMENTS

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions roadbase gravels, ash/slag, tile + ceramic pieces
	0.6				
		NS			Silty clay, yellow brown, med plasticity, damp, heterogeneous
	0.9				
					END OF INVESTIGATION 0.9m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP37

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

Drill Co _____ Method _____

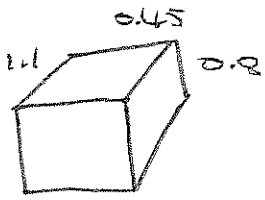
Driller _____ Log By T.Davis Date 25/11/10 Permit # _____

COMMENTS

~~[illegible] grams~~

24

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			FILL: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of PCM fragments, rootlets, shale pieces
	0.8				
		0.8-0.9			Silty clay, yellow brown, medium plasticity, damp, heterogeneous
	1.1				END OF INVESTIGATION 1.1m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	
TOPSOIL		grey	root holes		hard					Contamination
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP41

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

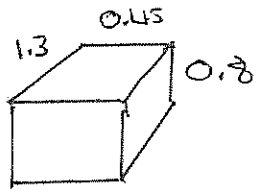
Casing: Dia _____ Length _____ Type/Size _____

Drill Co Ken Cole Method Excavator

Driller Mick Log By T.Davis Date 25/11/10 Permit # _____

COMMENTS
1355
1175
1058
917
1171
980
912
7.568 kg

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: Silty clay, brown, low plasticity, damp, heterogeneous with numerous ACM fragments, shale pieces ↓ up to 4kg
	0.8				
		N3			Silty clay, yellow brown, medium plasticity, damp, heterogeneous
	1.2				END OF INVESTIGATION 1.2 m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP43

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

Drill Co Ken cole Method Excavator

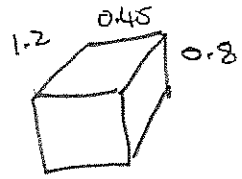
Driller MIKE Log By T.Davis Date 25/11/10 Permit # _____

COMMENTS

Elect

125 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill; silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets ACM fragments
	0.8				
		0.8-0.9			Silty clay, yellow brown, medium plasticity, damp, heterogeneous
	1.2m				
					END of INVESTIGATION 1.2m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP46

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

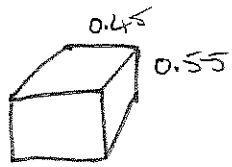
Casing: Dia _____ Length _____ Type/Size _____

Drill Co Ken cole Method Excavator

Driller Mick Log By T.Davis Date 25/11/16 Permit # _____

COMMENTS
152 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets, ACM fragments
	0.55				
		0.55-0.65			Silty clay, yellow brown, medium plasticity, damp, heterogeneous
	0.9				
					END OF INVESTIGATION 0.9m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP47

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

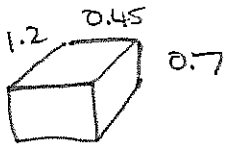
Drill Co Kencade Method EXCAVATOR

Driller Mick Log By T.Davis Date 25/11/10 Permit # _____

COMMENTS

99 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets, concrete pieces, ACM fragments
	0.7				
		NS			Silty CLAY, yellow brown, medium plasticity, damp, heterogeneous
	1.1				
					END OF INVESTIGATION 1.1m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

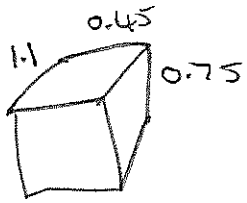
JBS ENVIRONMENTAL — Drilling Log

Borehole # TP51

Project Riverwood North Renewal Project No 41131
Total Hole Depth 1.1m Northing _____ Easting _____
Top of Casing _____ Water Level Initial _____ Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type/Size _____
Drill Co Ken cole Method Excavator
Driller Mick Log By T.Davis Date 25/11/10 Permit # _____

COMMENTS
11 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			FILL: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of few concrete pieces, rootlets, few ACM fragments
	0.75	NS			SILTY CLAY, yellow brown, medium plasticity, damp, heterogeneous
	1.1m				END OF INVESTIGATION 1.1m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP52

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

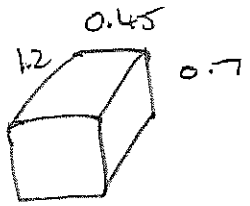
Casing: Dia _____ Length _____ Type/Size _____

Drill Co Ken Cole Method Excavator

Driller Mike Log By T.Davis Date 25/11/10 Permit # _____

COMMENTS

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of shale pieces, roadbase gravels, rootlets
	0.7				
		0.7-0.9			Silty clay, yellow brown, medium plasticity, damp, heterogeneous ~~with root~~
	1.1				END OF INVESTIGATION 1.1m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP58

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

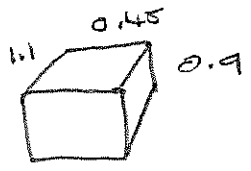
Drill Co _____ Method _____

Driller _____ Log By T.Davis Date _____ Permit # _____

COMMENTS

976 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2 ↑ QC3/3A			Fill: Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of ACM fragments, rootlets, glass pieces
	0.9				
		NS			Silty clay, yellow brown, medium plasticity, damp, heterogeneous
	1.2				
					END OF INVESTIGATION 1.2m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP61

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

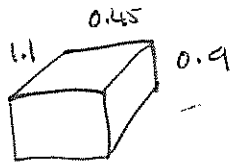
Drill Co _____ Method EXCAVATOR

Driller _____ Log By T.Davis Date 26/11/18 Permit # _____

COMMENTS

115 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			FILL: Silty clay, brown, low plasticity, damp, heterogenous with inclusions of ACM fragments, rootlets
	0.5				
		NS			Silty clay, yellow brown, medium plasticity
	0.9				
					END OF INVESTIGATION 0.9m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP66

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

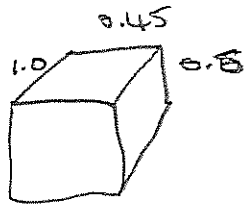
Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 26/11/10 Permit # _____

COMMENTS

14 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.3			Fill: silty clay, brown, low plast, damp, heterogeneous with inclusions of ACM fragments, rootlets
0.5		NS			Silty clay, yellow brown, medium plasticity, damp, heterogeneous
1.0					END OF INVESTIGATION 1.0m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP69

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

Drill Co _____ Method _____

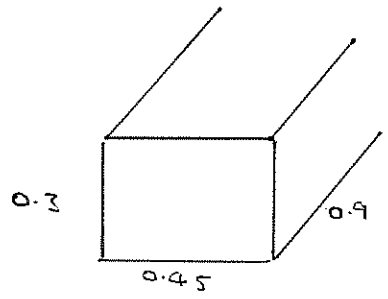
Driller _____ Log By T.Davis Date 26.11.15 Permit # _____

COMMENTS

60 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
	0.0				Grass — 0.0
		0.1 - 0.3			Fill: silty clay brown hetero damp firm low plasticity with inclusions of ACM, glass & concrete
	0.3				0.3
		NS			silty CLAY mottled orange brown grey hetero damp moderate plasticity with inclusions of mature roots
	1.0				1.0

EOH @ 1.0 m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

Drilling Log

JBS ENVIRONMENTAL

Borehole # TP72

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

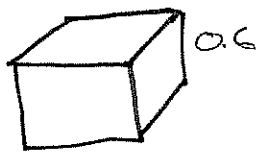
Drill Co _____ Method Excavator

Driller _____ Log By T.Davis Date 26/11/10 Permit # _____

COMMENTS

67 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets, ACM fragments
	0.6				
		0.6-0.7			Silty CLAY, yellow brown, medium plasticity, damp, heterogeneous
	1.0				
					END of INVESTIGATION 1.0m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP74

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

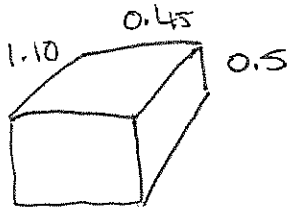
Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 26/11/10 Permit # _____

COMMENTS

54 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of few brick fragments, ACM fragments
	0.5	NS			Silty CLAY, yellow brown, medium plasticity, damp, heterogeneous
	1.0				END OF INVESTIGATION 1.0



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP77

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

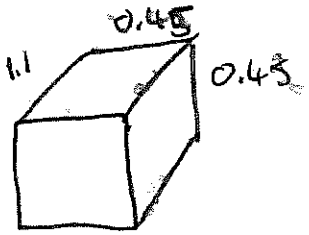
Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 30/11/10 Permit # _____

COMMENTS

64 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
		0.1 - 0.2 ↑ QC4/4A			GRASS COVER Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of glass fragments, ACM fragments
	0.45				Silty clay, yellow brown



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP79

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

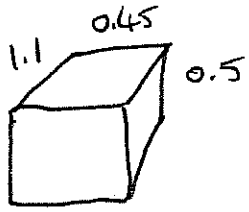
Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 30/11/10 Permit # _____

COMMENTS

686 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusion of ACM fragments, rootlets
	0.5	0.5-0.6			Silty clay, yellow brown, medium plasticity, damp, heterogeneous
	1.0m				END OF INVESTIGATION 1.0m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP84

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

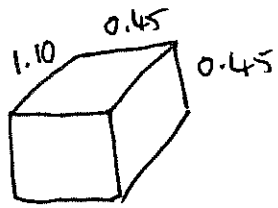
Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 30/11/10 Permit # _____

COMMENTS

59 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
		0.1-0.2 → QC5/5A			GRASS COVER Fill: Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of ACM fragments, rootlets, glass fragments
0.45		NS			Silty CLAY, Orange Yellow, medium plasticity, damp, heterogeneous ~~fill~~



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP86

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

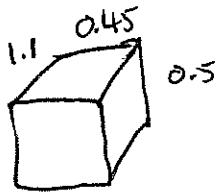
Drill Co _____ Method EXCAVATOR

Driller _____ Log By T.Davis Date 30/11/10 Permit # _____

COMMENTS

72 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
		0.1-0.2			GRASS COVER Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of ACM fragments, rootlets, glass pieces, Shale pieces
0.5		0.5-0.6			Silty Clay, yellow orange, medium plasticity, damp, heterogeneous
1.0					END OF INVESTIGATION 1.0m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP53

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

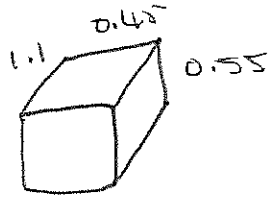
Casing: Dia _____ Length _____ Type/Size _____

Drill Co Ken Cole Method Excavator

Driller Mike Log By T.Davis Date 25/11/10 Permit # _____

COMMENTS

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets, one tile piece
	0.55				
		NS			silty clay, yellow brown, medium plasticity, damp, heterogeneous
	1.0				
					END OF INVESTIGATION 1.0m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP60

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

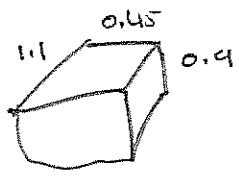
Casing: Dia _____ Length _____ Type/Size _____

Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 26/11/10 Permit # _____

COMMENTS

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets
	0.6				
		MS			Silty CLAY, yellow brown, medium plasticity, damp, heterogeneous
	0.9				End of investigation 0.9m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	
TOPSOIL		grey	root holes		hard					Contamination
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP64

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

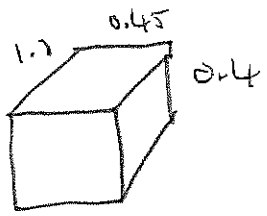
Casing: Dia _____ Length _____ Type/Size _____

Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 26/11/10 Permit # _____

COMMENTS

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions rootlets
	0.4				
		NS			Silty clay, yellow brown, medium plasticity, damp, heterogeneous
	1.0				
					END OF INVESTIGATION 1.0



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	
TOPSOIL		grey	root holes		hard					Contamination
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP1

Project Riverwood North Renewal Project No 41131

Total Hole Depth 1.35m Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

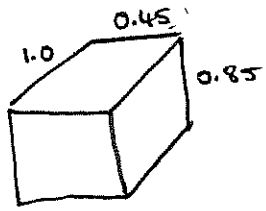
Drill Co Kencoles Method _____

Driller Rory Log By T.Davis Date 23/11/10 Permit # _____

COMMENTS

125 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
		0.3-0.4			GRASS COVER Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of glass + tile pieces, rootlets, bitumen + concrete pieces, numerous asbestos fragments increasing with depth
	0.85				Silty CLAY, yellow orange, medium plasticity, damp, heterogeneous
	0.35				END OF INVESTIGATION 1.35m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP3

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

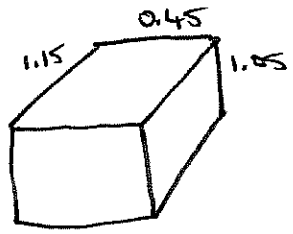
Drill Co Ken Cole Method _____

Driller Rory Log By T.Davis Date 23/11/10 Permit # _____

COMMENTS

64 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.2-0.3			Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets, shale pieces, ACM fragments, small amount of ashslag
	1.05				
		1.1-1.2			Silty CLAY, yellow brown, medium plasticity, damp, heterogeneous
	1.45				
					END OF INVESTIGATION 1.45m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	
TOPSOIL		grey	root holes		hard					Contamination
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP4

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

Drill Co Ken Cole Method _____

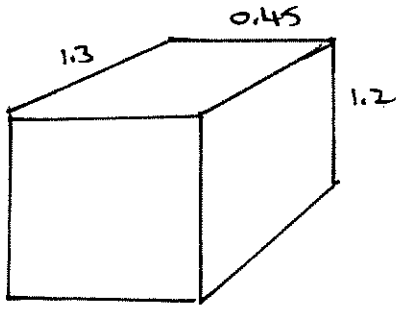
Driller Rory Log By T.Davis Date 23/11/10 Permit # _____

COMMENTS

732 grams
1125 +
568
480
595

3.500 kg

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
					Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets, shale pieces, numerous PCM fragments from 5cm² - 15cm²
1.2					Silty CLAY, yellow brown, low plasticity, damp, heterogeneous
1.5					END OF INVESTIGATION 1.5m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP5

Project Riverwood North Renewal Project No 41131

Total Hole Depth 0.9m Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

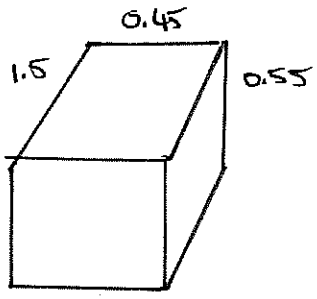
Drill Co Ken Coles Method _____

Driller Rory Log By T.Davis Date 23/11/10 Permit # _____

COMMENTS

99 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
		0.2-0.3			GRASS COVER Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets
	0.55				Silty CLAY, yellow brown, medium plasticity, damp, heterogeneous
	0.9m				END OF INVESTIGATION 0.9m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP6

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

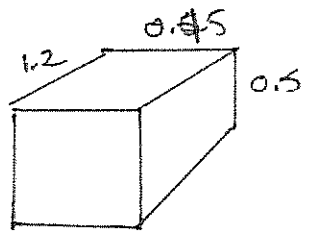
Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 23/11/10 Permit # _____

COMMENTS

594 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.2-0.3			Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets, ACM fragments (numerous)
	0.5				
		0.6-0.7			Silty clay, yellow brown, medium plasticity, heterogeneous
	0.9m				END of INVESTIGATION 0.9m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated fens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP7

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

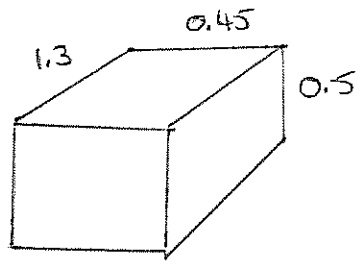
Drill Co Ken cole Method _____

Driller Rory Log By T.Davis Date 23/11/10 Permit # _____

COMMENTS

16 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets, one ACM fragment
	0.5				
		NS			Silty CLAY, yellow brown, medium plasticity, damp, heterogeneous
	0.8m				END OF INVESTIGATION 0.8m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP10

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

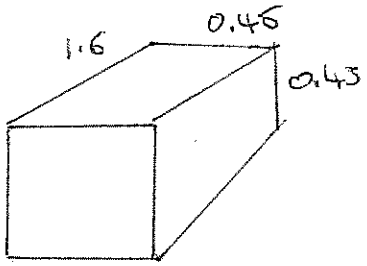
Drill Co Ken Cole Method _____

Driller ROAY Log By T.Davis Date 23/10/10 Permit # _____

COMMENTS

5 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
					fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of rootlets, one ACM fragment
0.45					
					Silty clay, yellow brown, medium plasticity, damp, heterogeneous
0.8					END OF INVESTIGATION 0.8m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP13

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

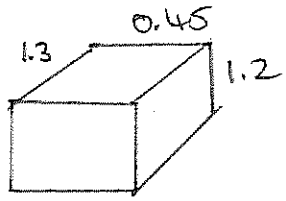
Drill Co Ken Cole Method _____

Driller RORY Log By T.Davis Date 23/11/10 Permit # _____

COMMENTS

~~100~~ grano 701

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
					Fill: Silty clay, brown, low plasticity, damp, heterogeneous, with inclusions of rootlets, ACM fragments, tiles, brick pieces
1.2					
					Silty CLAY, yellow orange, medium plasticity, damp, heterogeneous
1.5					
					END OF INVESTIGATION 1.5m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP15

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

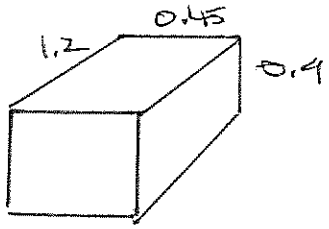
Drill Co Ken cole Method Excavator

Driller Rory Log By T.Davis Date 23/11/10 Permit # _____

COMMENTS

459 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.3-0.4			Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of shale + terracotta pieces, ACM fragments, tiles
	0.9				
		0.9-1.0			Silty clay, yellow brown, medium plasticity, damp, heterogeneous
	1.3				END OF INVESTIGATION ~~Depth~~ 1.3



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP16

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

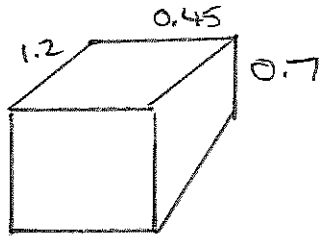
Drill Co _____ Method _____

Driller _____ Log By T.Davis Date 23/11/10 Permit # _____

COMMENTS

21 grey

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		Q1-Q2			FILL: Silty clay, brown, low plasticity, damp, heterogeneous with inclusions of
	0.7				
		NS			Silty CLAY, yellow brown, medium plasticity, damp, heterogeneous
	1.0				END OF INVESTIGATION 1.0m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL CLAY SILT SAND GRAVEL TOPSOIL PEAT	clayey silty sandy gravelly organic	red yellow white black brown grey mottled	homogenous heterogeneous stratified laminated lens root holes occasional	dry damp moist wet saturated	very soft soft firm stiff very stiff hard	non-plastic low plasticity mod plasticity high plasticity	very loose loose medium dense dense very dense	boulders cobbles coarse gravel fine gravel coarse sand	poorly sorted (well graded) well sorted (poorly graded)	and (35-50%) some (20-35%) little (10-20%) trace (0-10%) Contamination odour

JBS ENVIRONMENTAL — Drilling Log

Borehole # TP18

Project Riverwood North Renewal Project No 41131

Total Hole Depth _____ Northing _____ Easting _____

Top of Casing _____ Water Level Initial _____ Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type/Size _____

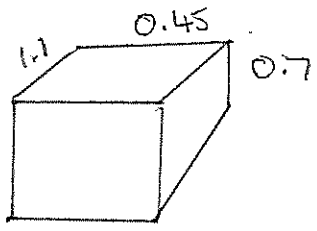
Drill Co Ken Cole Method _____

Driller Rory Log By T.Davis Date 23/11/10 Permit # _____

COMMENTS

12 grams

DEPTH (METRES)	WELL CONSTRUCTION	SAMPLE ID (INCL. QA/QC REFERENCE)	PID (PPM)	USCS CLASS	DESCRIPTION
					GRASS COVER
		0.1-0.2			Fill: silty clay, brown, low plasticity, damp, heterogeneous with inclusions of glass fragments, ACM fragments, rootlets
0.7					
		0.7-0.8			Silty CLAY, yellow brown, medium plasticity, damp, heterogeneous
1.1					END OF INVESTIGATION 1.1m



Description		Colour	Structure	Moisture	Cohesive Soils		Sand & Gravel			Secondary
FILL	clayey	red	homogenous	dry	very soft	non-plastic	very loose	boulders	poorly sorted	and (35-50%)
CLAY	silty	yellow	heterogeneous	damp	soft	low plasticity	loose	cobbles	(well graded)	some (20-35%)
SILT	sandy	white	stratified	moist	firm	mod plasticity	medium dense	coarse gravel	well sorted	little (10-20%)
SAND	gravelly	black	laminated	wet	stiff	high plasticity	dense	fine gravel	(poorly	trace (0-10%)
GRAVEL	organic	brown	lens	saturated	very stiff		very dense	coarse sand	graded)	Contamination
TOPSOIL		grey	root holes		hard					
PEAT		mottled	occasional							odour

Appendix D

Laboratory Reports and Chain of Custody Documentation

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
enquiries@envirolabservices.com.au
www.envirolabservices.com.au

CERTIFICATE OF ANALYSIS 48995

Client:
JBS Environmental Pty Ltd
P.O. Box 940
MASCOT
NSW 1460

Attention: Sumi Dorairaj / Tim Davis

Sample log in details:

Your Reference:	**41131**
No. of samples:	66 Soils, 2 Waters, 1 Material
Date samples received:	26/11/10, 30/11/10
Date completed instructions received:	30/11/10

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:	7/12/10
Date of Preliminary Report:	Not issued
Issue Date:	7/12/10

NATA accreditation number 2901. This document shall not be reproduced except in full.
This document is issued in accordance with NATA's accreditation requirements.
Accredited for compliance with ISO/IEC 17025.
Tests not covered by NATA are denoted with *.

Results Approved By:

Matt Mansfield
Approved Signatory

Rhian Morgan
Reporting Supervisor

Nancy Zhang
Chemist

ACCREDITED FOR TECHNICAL COMPETENCE

vTRH & BTEX in Soil						
Our Reference:	UNITS	48995-2	48995-6	48995-14	48995-18	48995-19
Your Reference	----------	TP37	TP41	TP47	TP51	TP52
Depth	----------	0.8-0.9	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		25/11/2010	25/11/2010	25/11/2010	25/11/2010	25/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Date analysed	-	05/12/2010	05/12/2010	05/12/2010	05/12/2010	05/12/2010
vTRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
m+p-xylene	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0
o-Xylene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Surrogate aaa-Trifluorotoluene	%	104	109	107	114	108

vTRH & BTEX in Soil						
Our Reference:	UNITS	48995-26	48995-28	48995-30	48995-36	48995-40
Your Reference	----------	TP58	TP59	TP61	TP66	TP69
Depth	----------	0.1-0.2	0.6-0.7	0.1-0.2	0.1-0.3	0.1-0.2
Date Sampled		26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Date analysed	-	05/12/2010	05/12/2010	05/12/2010	05/12/2010	05/12/2010
vTRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
m+p-xylene	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0
o-Xylene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Surrogate aaa-Trifluorotoluene	%	116	116	110	108	108

vTRH & BTEX in Soil						
Our Reference:	UNITS	48995-43	48995-46	48995-49	48995-52	48995-58
Your Reference	----------	TP72	TP74	TP77	TP79	TP84
Depth	----------	0.1-0.2	0.1-0.2	0.1-0.2	0.5-0.6	0.1-0.2
Date Sampled		26/11/2010	26/11/2010	30/11/2010	30/11/2010	30/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Date analysed	-	05/12/2010	05/12/2010	05/12/2010	05/12/2010	05/12/2010
vTRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
m+p-xylene	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0
o-Xylene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Surrogate aaa-Trifluorotoluene	%	120	116	111	112	79

vTRH & BTEX in Soil				
Our Reference:	UNITS	48995-61	48995-63	48995-65
Your Reference	----------	TP86	QC3	QC5
Depth	----------	0.5-0.6	-	-
Date Sampled		30/11/2010	26/11/2010	30/11/2010
Type of sample		Soil	Soil	Soil
Date extracted	-	02/12/2010	02/12/2010	02/12/2010
Date analysed	-	05/12/2010	05/12/2010	05/12/2010
vTRH C_6 - C_9	mg/kg	<25	<25	<25
Benzene	mg/kg	<0.5	<0.5	<0.5
Toluene	mg/kg	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1.0	<1.0	<1.0
m+p-xylene	mg/kg	<2.0	<2.0	<2.0
o-Xylene	mg/kg	<1.0	<1.0	<1.0
Surrogate aaa-Trifluorotoluene	%	114	110	110

sTRH in Soil (C10-C36)						
Our Reference:	UNITS	48995-2	48995-6	48995-14	48995-18	48995-19
Your Reference	----------	TP37	TP41	TP47	TP51	TP52
Depth	----------	0.8-0.9	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		25/11/2010	25/11/2010	25/11/2010	25/11/2010	25/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Date analysed	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	140	<100	120	120
Surrogate o-Terphenyl	%	104	121	108	101	109

sTRH in Soil (C10-C36)						
Our Reference:	UNITS	48995-26	48995-28	48995-30	48995-36	48995-40
Your Reference	----------	TP58	TP59	TP61	TP66	TP69
Depth	----------	0.1-0.2	0.6-0.7	0.1-0.2	0.1-0.3	0.1-0.2
Date Sampled		26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Date analysed	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Surrogate o-Terphenyl	%	100	96	96	103	100

sTRH in Soil (C10-C36)						
Our Reference:	UNITS	48995-43	48995-46	48995-49	48995-52	48995-58
Your Reference	----------	TP72	TP74	TP77	TP79	TP84
Depth	----------	0.1-0.2	0.1-0.2	0.1-0.2	0.5-0.6	0.1-0.2
Date Sampled		26/11/2010	26/11/2010	30/11/2010	30/11/2010	30/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Date analysed	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Surrogate o-Terphenyl	%	97	97	92	94	93

sTRH in Soil (C10-C36)				
Our Reference:	UNITS	48995-61	48995-63	48995-65
Your Reference	----------	TP86	QC3	QC5
Depth	----------	0.5-0.6	-	-
Date Sampled		30/11/2010	26/11/2010	30/11/2010
Type of sample		Soil	Soil	Soil
Date extracted	-	02/12/2010	02/12/2010	02/12/2010
Date analysed	-	02/12/2010	02/12/2010	02/12/2010
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100
Surrogate o-Terphenyl	%	88	94	89

PAHs in Soil						
Our Reference:	UNITS	48995-2	48995-6	48995-14	48995-18	48995-19
Your Reference	----------	TP37	TP41	TP47	TP51	TP52
Depth	----------	0.8-0.9	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		25/11/2010	25/11/2010	25/11/2010	25/11/2010	25/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Date analysed	-	03/12/2010	03/12/2010	03/12/2010	03/12/2010	03/12/2010
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	0.1	0.2	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	0.1	<0.1
Phenanthrene	mg/kg	<0.1	0.3	0.9	2.0	0.2
Anthracene	mg/kg	<0.1	<0.1	0.1	0.3	<0.1
Fluoranthene	mg/kg	<0.1	0.8	1.7	3.5	0.5
Pyrene	mg/kg	<0.1	0.8	1.7	3.4	0.5
Benzo(a)anthracene	mg/kg	<0.1	0.3	0.5	1.1	0.2
Chrysene	mg/kg	<0.1	0.3	0.6	1.2	0.2
Benzo(b+k)fluoranthene	mg/kg	<0.2	0.6	1.2	2.4	0.3
Benzo(a)pyrene	mg/kg	<0.05	0.4	1	1.8	0.2
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	0.3	0.6	1.3	0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	0.3	0.7	1.4	0.2
Surrogate p-Terphenyl-d_{14}	%	86	88	80	74	80

PAHs in Soil						
Our Reference:	UNITS	48995-26	48995-28	48995-30	48995-36	48995-40
Your Reference	----------	TP58	TP59	TP61	TP66	TP69
Depth	----------	0.1-0.2	0.6-0.7	0.1-0.2	0.1-0.3	0.1-0.2
Date Sampled		26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Date analysed	-	03/12/2010	03/12/2010	03/12/2010	03/12/2010	03/12/2010
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.4	<0.1	<0.1	0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.7	<0.1	0.1	0.2	<0.1
Pyrene	mg/kg	0.7	<0.1	0.1	0.2	<0.1
Benzo(a)anthracene	mg/kg	0.2	<0.1	<0.1	0.1	<0.1
Chrysene	mg/kg	0.2	<0.1	<0.1	0.2	<0.1
Benzo(b+k)fluoranthene	mg/kg	0.4	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	0.3	<0.05	0.05	0.1	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.2	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	0.2	<0.1	<0.1	<0.1	<0.1
Surrogate p-Terphenyl-d_{14}	%	75	73	73	78	75

PAHs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- ----------	48995-43 TP72 0.1-0.2 26/11/2010 Soil	48995-46 TP74 0.1-0.2 26/11/2010 Soil	48995-49 TP77 0.1-0.2 30/11/2010 Soil	48995-52 TP79 0.5-0.6 30/11/2010 Soil	48995-58 TP84 0.1-0.2 30/11/2010 Soil
Date extracted	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Date analysed	-	03/12/2010	03/12/2010	03/12/2010	03/12/2010	03/12/2010
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	0.1	0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	0.1	0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	0.05	0.05	0.06	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate p-Terphenyl-d_{14}	%	74	78	73	75	72

PAHs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- ----------	48995-61 TP86 0.5-0.6 30/11/2010 Soil	48995-63 QC3 - 26/11/2010 Soil	48995-65 QC5 - 30/11/2010 Soil
Date extracted	-	02/12/2010	02/12/2010	02/12/2010
Date analysed	-	03/12/2010	03/12/2010	03/12/2010
Naphthalene	mg/kg	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	0.2	<0.1
Pyrene	mg/kg	<0.1	0.2	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	0.1	<0.1
Benzo(b+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	0.1	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	0.1	<0.1
Surrogate p-Terphenyl-d_{14}	%	71	73	71

Organochlorine Pesticides in soil						
Our Reference:	UNITS	48995-6	48995-14	48995-18	48995-19	48995-26
Your Reference	----------	TP41	TP47	TP51	TP52	TP58
Depth	----------	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		25/11/2010	25/11/2010	25/11/2010	25/11/2010	26/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Date analysed	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
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 TCLMX	%	129	118	113	120	114

Organochlorine Pesticides in soil						
Our Reference:	UNITS	48995-30	48995-36	48995-40	48995-43	48995-46
Your Reference	----------	TP61	TP66	TP69	TP72	TP74
Depth	----------	0.1-0.2	0.1-0.3	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Date analysed	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
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 TCLMX	%	110	114	116	114	113

Organochlorine Pesticides in soil					
Our Reference:	UNITS	48995-49	48995-58	48995-63	48995-65
Your Reference	----------	TP77	TP84	QC3	QC5
Depth	----------	0.1-0.2	0.1-0.2	-	-
Date Sampled		30/11/2010	30/11/2010	26/11/2010	30/11/2010
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Date analysed	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	100	110	93	106

Organophosphorus Pesticides						
Our Reference:	UNITS	48995-6	48995-14	48995-18	48995-19	48995-26
Your Reference	----------	TP41	TP47	TP51	TP52	TP58
Depth	----------	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		25/11/2010	25/11/2010	25/11/2010	25/11/2010	26/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Date analysed	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Diazinon	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
Chlorpyriphos-methyl	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
Chlorpyriphos	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
Bromophos-ethyl	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
Surrogate TCLMX	%	129	118	113	120	114

Organophosphorus Pesticides						
Our Reference:	UNITS	48995-30	48995-36	48995-40	48995-43	48995-46
Your Reference	----------	TP61	TP66	TP69	TP72	TP74
Depth	----------	0.1-0.2	0.1-0.3	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Date analysed	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Diazinon	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
Chlorpyriphos-methyl	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
Chlorpyriphos	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
Bromophos-ethyl	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
Surrogate TCLMX	%	110	114	116	114	113

Organophosphorus Pesticides					
Our Reference:	UNITS	48995-49	48995-58	48995-63	48995-65
Your Reference	----------	TP77	TP84	QC3	QC5
Depth	----------	0.1-0.2	0.1-0.2	-	-
Date Sampled		30/11/2010	30/11/2010	26/11/2010	30/11/2010
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Date analysed	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	100	110	93	106

PCBs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- ----------	48995-6 TP41 0.1-0.2 25/11/2010 Soil	48995-14 TP47 0.1-0.2 25/11/2010 Soil	48995-18 TP51 0.1-0.2 25/11/2010 Soil	48995-19 TP52 0.1-0.2 25/11/2010 Soil	48995-26 TP58 0.1-0.2 26/11/2010 Soil
Date extracted	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Date analysed	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Arochlor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1221*	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	129	118	113	120	114

PCBs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- ----------	48995-30 TP61 0.1-0.2 26/11/2010 Soil	48995-36 TP66 0.1-0.3 26/11/2010 Soil	48995-40 TP69 0.1-0.2 26/11/2010 Soil	48995-43 TP72 0.1-0.2 26/11/2010 Soil	48995-46 TP74 0.1-0.2 26/11/2010 Soil
Date extracted	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Date analysed	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Arochlor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1221*	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	110	114	116	114	113

PCBs in Soil					
Our Reference:	UNITS	48995-49	48995-58	48995-63	48995-65
Your Reference	----------	TP77	TP84	QC3	QC5
Depth	----------	0.1-0.2	0.1-0.2	-	-
Date Sampled		30/11/2010	30/11/2010	26/11/2010	30/11/2010
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Date analysed	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Arochlor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1
Arochlor 1221*	mg/kg	<0.1	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	100	110	93	106

Acid Extractable metals in soil						
Our Reference:	UNITS	48995-2	48995-6	48995-14	48995-18	48995-19
Your Reference	----------	TP37	TP41	TP47	TP51	TP52
Depth	----------	0.8-0.9	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		25/11/2010	25/11/2010	25/11/2010	25/11/2010	25/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date digested	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Date analysed	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Arsenic	mg/kg	5	11	7	8	6
Cadmium	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	mg/kg	14	30	21	27	7
Copper	mg/kg	12	34	19	31	23
Lead	mg/kg	18	62	67	50	50
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	5	6	5	9	11
Zinc	mg/kg	10	65	120	71	91

Acid Extractable metals in soil						
Our Reference:	UNITS	48995-26	48995-28	48995-30	48995-36	48995-40
Your Reference	----------	TP58	TP59	TP61	TP66	TP69
Depth	----------	0.1-0.2	0.6-0.7	0.1-0.2	0.1-0.3	0.1-0.2
Date Sampled		26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date digested	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Date analysed	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Arsenic	mg/kg	10	9	9	6	7
Cadmium	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	mg/kg	23	36	29	23	11
Copper	mg/kg	14	4	53	50	14
Lead	mg/kg	66	22	49	61	48
Mercury	mg/kg	<0.1	<0.1	<0.1	0.1	<0.1
Nickel	mg/kg	5	3	5	11	6
Zinc	mg/kg	55	4	43	440	190

Acid Extractable metals in soil						
Our Reference:	UNITS	48995-43	48995-46	48995-49	48995-52	48995-58
Your Reference	----------	TP72	TP74	TP77	TP79	TP84
Depth	----------	0.1-0.2	0.1-0.2	0.1-0.2	0.5-0.6	0.1-0.2
Date Sampled		26/11/2010	26/11/2010	30/11/2010	30/11/2010	30/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date digested	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Date analysed	-	02/12/2010	02/12/2010	02/12/2010	02/12/2010	02/12/2010
Arsenic	mg/kg	11	10	10	12	9
Cadmium	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	mg/kg	19	30	28	34	24
Copper	mg/kg	50	12	79	3	13
Lead	mg/kg	390	50	68	21	71
Mercury	mg/kg	<0.1	0.2	0.1	<0.1	<0.1
Nickel	mg/kg	6	4	4	2	4
Zinc	mg/kg	230	34	56	3	64

Acid Extractable metals in soil				
Our Reference:	UNITS	48995-61	48995-63	48995-65
Your Reference	----------	TP86	QC3	QC5
Depth	----------	0.5-0.6	-	-
Date Sampled		30/11/2010	26/11/2010	30/11/2010
Type of sample		Soil	Soil	Soil
Date digested	-	02/12/2010	02/12/2010	02/12/2010
Date analysed	-	02/12/2010	02/12/2010	02/12/2010
Arsenic	mg/kg	11	9	8
Cadmium	mg/kg	<0.5	<0.5	<0.5
Chromium	mg/kg	31	24	180
Copper	mg/kg	1	16	26
Lead	mg/kg	19	60	62
Mercury	mg/kg	<0.1	0.1	<0.1
Nickel	mg/kg	2	5	6
Zinc	mg/kg	2	58	58

Moisture						
Our Reference:	UNITS	48995-2	48995-6	48995-14	48995-18	48995-19
Your Reference	----------	TP37	TP41	TP47	TP51	TP52
Depth	----------	0.8-0.9	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		25/11/2010	25/11/2010	25/11/2010	25/11/2010	25/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	2/12/2010	2/12/2010	2/12/2010	2/12/2010	2/12/2010
Date analysed	-	3/12/2010	3/12/2010	3/12/2010	3/12/2010	3/12/2010
Moisture	%	24	24	23	17	15

Moisture						
Our Reference:	UNITS	48995-26	48995-28	48995-30	48995-36	48995-40
Your Reference	----------	TP58	TP59	TP61	TP66	TP69
Depth	----------	0.1-0.2	0.6-0.7	0.1-0.2	0.1-0.3	0.1-0.2
Date Sampled		26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	2/12/2010	2/12/2010	2/12/2010	2/12/2010	2/12/2010
Date analysed	-	3/12/2010	3/12/2010	3/12/2010	3/12/2010	3/12/2010
Moisture	%	18	25	24	20	19

Moisture						
Our Reference:	UNITS	48995-43	48995-46	48995-49	48995-52	48995-58
Your Reference	----------	TP72	TP74	TP77	TP79	TP84
Depth	----------	0.1-0.2	0.1-0.2	0.1-0.2	0.5-0.6	0.1-0.2
Date Sampled		26/11/2010	26/11/2010	30/11/2010	30/11/2010	30/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	2/12/2010	2/12/2010	2/12/2010	2/12/2010	2/12/2010
Date analysed	-	3/12/2010	3/12/2010	3/12/2010	3/12/2010	3/12/2010
Moisture	%	6.0	17	17	19	27

Moisture				
Our Reference:	UNITS	48995-61	48995-63	48995-65
Your Reference	----------	TP86	QC3	QC5
Depth	----------	0.5-0.6	-	-
Date Sampled		30/11/2010	26/11/2010	30/11/2010
Type of sample		Soil	Soil	Soil
Date prepared	-	2/12/2010	2/12/2010	2/12/2010
Date analysed	-	3/12/2010	3/12/2010	3/12/2010
Moisture	%	19	18	24

Asbestos ID - soils						
Our Reference:	UNITS	48995-1	48995-2	48995-3	48995-4	48995-5
Your Reference	----------	TP37	TP37	TP38	TP39	TP40
Depth	----------	0.1-0.2	0.8-0.9	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		25/11/2010	25/11/2010	25/11/2010	25/11/2010	25/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	3/12/2010	3/12/2010	3/12/2010	3/12/2010	3/12/2010
Sample Description	-	Approx 30g Soil	Approx 30g Soil	Approx 30g Soil	Approx 30g Soil	Approx 33g Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	Chrysotile asbestos detected
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Asbestos ID - soils						
Our Reference:	UNITS	48995-6	48995-7	48995-8	48995-10	48995-11
Your Reference	----------	TP41	TP42	TP43	TP44	TP45
Depth	----------	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		25/11/2010	25/11/2010	25/11/2010	25/11/2010	25/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	3/12/2010	3/12/2010	3/12/2010	3/12/2010	3/12/2010
Sample Description	-	Approx 30g Soil	Approx 27g Soil	Approx 30g Soil	Approx 30g Soil	Approx 30g Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Asbestos ID - soils						
Our Reference:	UNITS	48995-12	48995-14	48995-15	48995-16	48995-17
Your Reference	----------	TP46	TP47	TP48	TP49	TP50
Depth	----------	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		25/11/2010	25/11/2010	25/11/2010	25/11/2010	25/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	3/12/2010	3/12/2010	3/12/2010	3/12/2010	3/12/2010
Sample Description	-	Approx 33g Soil	Approx 30g Soil	Approx 30g Soil	Approx 30g Soil	Approx 30g Soil
Asbestos ID in soil	-	Chrysotile asbestos detected	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Asbestos ID - soils						
Our Reference:	UNITS	48995-18	48995-19	48995-21	48995-22	48995-23
Your Reference	----------	TP51	TP52	TP53	TP54	TP55
Depth	----------	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		25/11/2010	25/11/2010	25/11/2010	25/11/2010	25/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	3/12/2010	3/12/2010	3/12/2010	3/12/2010	3/12/2010
Sample Description	-	Approx 30g Soil	Approx 30g Soil	Approx 30g Soil	Approx 30g Soil	Approx 30g Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Asbestos ID - soils						
Our Reference:	UNITS	48995-24	48995-25	48995-26	48995-27	48995-28
Your Reference	----------	TP56	TP57	TP58	TP59	TP59
Depth	----------	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.6-0.7
Date Sampled		25/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	3/12/2010	3/12/2010	3/12/2010	3/12/2010	3/12/2010
Sample Description	-	Approx 30g Soil	Approx 30g Soil	Approx 30g Soil	Approx 30g Soil	Approx 30g Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Asbestos ID - soils						
Our Reference:	UNITS	48995-29	48995-30	48995-31	48995-33	48995-34
Your Reference	----------	TP60	TP61	TP62	TP63	TP64
Depth	----------	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	3/12/2010	3/12/2010	3/12/2010	3/12/2010	3/12/2010
Sample Description	-	Approx 30g Soil	Approx 30g Soil	Approx 30g Soil	Approx 30g Soil	Approx 30g Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Asbestos ID - soils						
Our Reference:	UNITS	48995-35	48995-36	48995-37	48995-38	48995-40
Your Reference	----------	TP65	TP66	TP67	TP68	TP69
Depth	----------	0.1-0.2	0.1-0.3	0.1-0.2	0.2-0.3	0.1-0.2
Date Sampled		26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	3/12/2010	3/12/2010	3/12/2010	3/12/2010	3/12/2010
Sample Description	-	Approx 30g Soil	Approx 30g Soil	Approx 27g Soil	Approx 30g Soil	Approx 30g Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Asbestos ID - soils						
Our Reference:	UNITS	48995-41	48995-42	48995-43	48995-45	48995-46
Your Reference	----------	TP70	TP71	TP72	TP73	TP74
Depth	----------	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	3/12/2010	3/12/2010	3/12/2010	3/12/2010	6/12/2010
Sample Description	-	Approx 27g Soil	Approx 27g Soil	Approx 35g Soil	Approx 35g Soil	Approx 35g Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	Chrysotile asbestos detected Amosite asbestos detected	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Asbestos ID - soils						
Our Reference:	UNITS	48995-47	48995-48	48995-49	48995-50	48995-51
Your Reference	----------	TP75	TP76	TP77	TP78	TP79
Depth	----------	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		26/11/2010	26/11/2010	30/11/2010	30/11/2010	30/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	6/12/2010	6/12/2010	6/12/2010	6/12/2010	6/12/2010
Sample Description	-	Approx 15g Soil	Approx 35g Soil	Approx 30g Soil	Approx 30g Soil	Approx 30g Soil
Asbestos ID in soil	-	Chrysotile asbestos detected	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Asbestos ID - soils						
Our Reference:	UNITS	48995-52	48995-53	48995-54	48995-55	48995-57
Your Reference	----------	TP79	TP80	TP81	TP82	TP83
Depth	----------	0.5-0.6	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		30/11/2010	30/11/2010	30/11/2010	30/11/2010	30/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	6/12/2010	6/12/2010	6/12/2010	6/12/2010	6/12/2010
Sample Description	-	Approx 30g Soil	Approx 30g Soil	Approx 30g Soil	Approx 30g Soil	Approx 30g Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	Chrysotile asbestos detected
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Asbestos ID - soils						
Our Reference:	UNITS	48995-58	48995-59	48995-60	48995-61	48995-62
Your Reference	----------	TP84	TP85	TP86	TP86	TP87
Depth	----------	0.1-0.2	0.1-0.2	0.1-0.2	0.5-0.6	0.1-0.2
Date Sampled		30/11/2010	30/11/2010	30/11/2010	30/11/2010	30/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	6/12/2010	6/12/2010	6/12/2010	6/12/2010	6/12/2010
Sample Description	-	Approx 20g Soil	Approx 30g Soil	Approx 30g Soil	Approx 30g Soil	Approx 30g Soil
Asbestos ID in soil	-	Chrysotile asbestos detected	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Asbestos ID - soils			
Our Reference:	UNITS	48995-63	48995-65
Your Reference	----------	QC3	QC5
Depth	----------	-	-
Date Sampled		26/11/2010	30/11/2010
Type of sample		Soil	Soil
Date analysed	-	6/12/2010	6/12/2010
Sample Description	-	Approx 30g Soil	Approx 30g Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected

BTEX in Water			
Our Reference:	UNITS	48995-66	48995-67
Your Reference	----------	Trip Blank	Trip Spike
Depth	----------	-	-
Date Sampled		30/11/2010	30/11/2010
Type of sample		Water	Water
Date extracted	-	04/12/2010	04/12/2010
Date analysed	-	04/12/2010	04/12/2010
Benzene	µg/L	<1.0	92%
Toluene	µg/L	<1.0	93%
Ethylbenzene	µg/L	<1.0	90%
m+p-xylene	µg/L	<2.0	90%
o-xylene	µg/L	<1.0	90%
Surrogate Dibromofluoromethane	%	99	101
Surrogate toluene-d8	%	96	102
Surrogate 4-BFB	%	104	100

Method ID	Methodology Summary
GC.16	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.
GC.3	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID.
GC.12 subset	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
GC-5	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
GC.8	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
GC-6	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Metals.20 ICP-AES	Determination of various metals by ICP-AES.
Metals.21 CV-AAS	Determination of Mercury by Cold Vapour AAS.
LAB.8	Moisture content determined by heating at 105 deg C for a minimum of 4 hours.
AS4964-2004	Asbestos ID - Qualitative identification of asbestos type fibres in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques.

QUALITY CONTROL vTRH & BTEX in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			02/12/2010	48995-6	02/12/2010 || 02/12/2010	LCS-7	02/12/2010
Date analysed	-			05/12/2010	48995-6	05/12/2010 || 05/12/2010	LCS-7	05/12/2010
vTRH C_6 - C_9	mg/kg	25	GC.16	<25	48995-6	<25 || <25	LCS-7	81%
Benzene	mg/kg	0.5	GC.16	<0.5	48995-6	<0.5 || <0.5	LCS-7	75%
Toluene	mg/kg	0.5	GC.16	<0.5	48995-6	<0.5 || <0.5	LCS-7	76%
Ethylbenzene	mg/kg	1	GC.16	<1.0	48995-6	<1.0 || <1.0	LCS-7	82%
m+p-xylene	mg/kg	2	GC.16	<2.0	48995-6	<2.0 || <2.0	LCS-7	86%
o-Xylene	mg/kg	1	GC.16	<1.0	48995-6	<1.0 || <1.0	LCS-7	89%
Surrogate aaa-Trifluorotoluene	%		GC.16	122	48995-6	109 || 109 || RPD: 0	LCS-7	119%

QUALITY CONTROL sTRH in Soil (C10-C36)	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			02/12/2010	48995-6	02/12/2010 || 02/12/2010	LCS-7	02/12/2010
Date analysed	-			02/12/2010	48995-6	02/12/2010 || 02/12/2010	LCS-7	02/12/2010
TRH C_{10} - C_{14}	mg/kg	50	GC.3	<50	48995-6	<50 || <50	LCS-7	86%
TRH C_{15} - C_{28}	mg/kg	100	GC.3	<100	48995-6	<100 || <100	LCS-7	85%
TRH C_{29} - C_{36}	mg/kg	100	GC.3	<100	48995-6	140 || 140 || RPD: 0	LCS-7	81%
Surrogate o-Terphenyl	%		GC.3	93	48995-6	121 || 102 || RPD: 17	LCS-7	101%

QUALITY CONTROL PAHs in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			02/12/2010	48995-6	02/12/2010 || 02/12/2010	LCS-4	02/12/2010
Date analysed	-			03/12/2010	48995-6	03/12/2010 || 03/12/2010	LCS-4	03/12/2010
Naphthalene	mg/kg	0.1	GC.12 subset	<0.1	48995-6	<0.1 || <0.1	LCS-4	77%
Acenaphthylene	mg/kg	0.1	GC.12 subset	<0.1	48995-6	<0.1 || <0.1	[NR]	[NR]
Acenaphthene	mg/kg	0.1	GC.12 subset	<0.1	48995-6	<0.1 || <0.1	[NR]	[NR]
Fluorene	mg/kg	0.1	GC.12 subset	<0.1	48995-6	<0.1 || <0.1	LCS-4	89%
Phenanthrene	mg/kg	0.1	GC.12 subset	<0.1	48995-6	0.3 || 0.3 || RPD: 0	LCS-4	98%
Anthracene	mg/kg	0.1	GC.12 subset	<0.1	48995-6	<0.1 || <0.1	[NR]	[NR]
Fluoranthene	mg/kg	0.1	GC.12 subset	<0.1	48995-6	0.8 || 0.6 || RPD: 29	LCS-4	91%
Pyrene	mg/kg	0.1	GC.12 subset	<0.1	48995-6	0.8 || 0.6 || RPD: 29	LCS-4	91%

QUALITY CONTROL PAHs in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Benzo(a)anthracene	mg/kg	0.1	GC.12 subset	<0.1	48995-6	0.3 || 0.2 || RPD: 40	[NR]	[NR]
Chrysene	mg/kg	0.1	GC.12 subset	<0.1	48995-6	0.3 || 0.2 || RPD: 40	LCS-4	111%
Benzo(b+k)fluoranthene	mg/kg	0.2	GC.12 subset	<0.2	48995-6	0.6 || 0.4 || RPD: 40	[NR]	[NR]
Benzo(a)pyrene	mg/kg	0.05	GC.12 subset	<0.05	48995-6	0.4 || 0.3 || RPD: 29	LCS-4	94%
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	GC.12 subset	<0.1	48995-6	0.3 || 0.2 || RPD: 40	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	0.1	GC.12 subset	<0.1	48995-6	<0.1 || <0.1	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	0.1	GC.12 subset	<0.1	48995-6	0.3 || 0.3 || RPD: 0	[NR]	[NR]
Surrogate p-Terphenyl-d_{14}	%		GC.12 subset	66	48995-6	88 || 72 || RPD: 20	LCS-4	70%

QUALITY CONTROL Organochlorine Pesticides in soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			02/12/2010	48995-6	02/12/2010 || 02/12/2010	LCS-7	02/12/2010
Date analysed	-			02/12/2010	48995-6	02/12/2010 || 02/12/2010	LCS-7	02/12/2010
HCB	mg/kg	0.1	GC-5	<0.1	48995-6	<0.1 || <0.1	[NR]	[NR]
alpha-BHC	mg/kg	0.1	GC-5	<0.1	48995-6	<0.1 || <0.1	LCS-7	78%
gamma-BHC	mg/kg	0.1	GC-5	<0.1	48995-6	<0.1 || <0.1	[NR]	[NR]
beta-BHC	mg/kg	0.1	GC-5	<0.1	48995-6	<0.1 || <0.1	LCS-7	77%
Heptachlor	mg/kg	0.1	GC-5	<0.1	48995-6	<0.1 || <0.1	LCS-7	71%
delta-BHC	mg/kg	0.1	GC-5	<0.1	48995-6	<0.1 || <0.1	[NR]	[NR]
Aldrin	mg/kg	0.1	GC-5	<0.1	48995-6	<0.1 || <0.1	LCS-7	76%
Heptachlor Epoxide	mg/kg	0.1	GC-5	<0.1	48995-6	<0.1 || <0.1	LCS-7	75%
gamma-Chlordane	mg/kg	0.1	GC-5	<0.1	48995-6	<0.1 || <0.1	[NR]	[NR]
alpha-chlordane	mg/kg	0.1	GC-5	<0.1	48995-6	<0.1 || <0.1	[NR]	[NR]
Endosulfan I	mg/kg	0.1	GC-5	<0.1	48995-6	<0.1 || <0.1	[NR]	[NR]
pp-DDE	mg/kg	0.1	GC-5	<0.1	48995-6	<0.1 || <0.1	LCS-7	74%
Dieldrin	mg/kg	0.1	GC-5	<0.1	48995-6	<0.1 || <0.1	LCS-7	76%
Endrin	mg/kg	0.1	GC-5	<0.1	48995-6	<0.1 || <0.1	LCS-7	75%
pp-DDD	mg/kg	0.1	GC-5	<0.1	48995-6	<0.1 || <0.1	LCS-7	76%
Endosulfan II	mg/kg	0.1	GC-5	<0.1	48995-6	<0.1 || <0.1	[NR]	[NR]
pp-DDT	mg/kg	0.1	GC-5	<0.1	48995-6	<0.1 || <0.1	[NR]	[NR]
Endrin Aldehyde	mg/kg	0.1	GC-5	<0.1	48995-6	<0.1 || <0.1	[NR]	[NR]
Endosulfan Sulphate	mg/kg	0.1	GC-5	<0.1	48995-6	<0.1 || <0.1	LCS-7	76%
Methoxychlor	mg/kg	0.1	GC-5	<0.1	48995-6	<0.1 || <0.1	[NR]	[NR]
Surrogate TCLMX	%		GC-5	104	48995-6	129 || 100 || RPD: 25	LCS-7	104%

QUALITY CONTROL Organophosphorus Pesticides	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			02/12/2010	48995-6	02/12/2010 || 02/12/2010	LCS-7	02/12/2010
Date analysed	-			02/12/2010	48995-6	02/12/2010 || 02/12/2010	LCS-7	02/12/2010
Diazinon	mg/kg	0.1	GC.8	<0.1	48995-6	<0.1 || <0.1	[NR]	[NR]
Dimethoate	mg/kg	0.1	GC.8	<0.1	48995-6	<0.1 || <0.1	[NR]	[NR]
Chlorpyriphos-methyl	mg/kg	0.1	GC.8	<0.1	48995-6	<0.1 || <0.1	[NR]	[NR]
Ronnel	mg/kg	0.1	GC.8	<0.1	48995-6	<0.1 || <0.1	[NR]	[NR]
Chlorpyriphos	mg/kg	0.1	GC.8	<0.1	48995-6	<0.1 || <0.1	LCS-7	118%
Fenitrothion	mg/kg	0.1	GC.8	<0.1	48995-6	<0.1 || <0.1	LCS-7	129%
Bromophos-ethyl	mg/kg	0.1	GC.8	<0.1	48995-6	<0.1 || <0.1	[NR]	[NR]
Ethion	mg/kg	0.1	GC.8	<0.1	48995-6	<0.1 || <0.1	LCS-7	97%
Surrogate TCLMX	%		GC.8	104	48995-6	129 || 100 || RPD: 25	LCS-7	111%

QUALITY CONTROL PCBs in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			02/12/2010	48995-6	02/12/2010 || 02/12/2010	LCS-7	02/12/2010
Date analysed	-			02/12/2010	48995-6	02/12/2010 || 02/12/2010	LCS-7	02/12/2010
Arochlor 1016	mg/kg	0.1	GC-6	<0.1	48995-6	<0.1 || <0.1	[NR]	[NR]
Arochlor 1221*	mg/kg	0.1	GC-6	<0.1	48995-6	<0.1 || <0.1	[NR]	[NR]
Arochlor 1232	mg/kg	0.1	GC-6	<0.1	48995-6	<0.1 || <0.1	[NR]	[NR]
Arochlor 1242	mg/kg	0.1	GC-6	<0.1	48995-6	<0.1 || <0.1	[NR]	[NR]
Arochlor 1248	mg/kg	0.1	GC-6	<0.1	48995-6	<0.1 || <0.1	[NR]	[NR]
Arochlor 1254	mg/kg	0.1	GC-6	<0.1	48995-6	<0.1 || <0.1	LCS-7	102%
Arochlor 1260	mg/kg	0.1	GC-6	<0.1	48995-6	<0.1 || <0.1	[NR]	[NR]
Surrogate TCLMX	%		GC-6	104	48995-6	129 || 100 || RPD: 25	LCS-7	100%

QUALITY CONTROL Acid Extractable metals in soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date digested	-			02/12/2010	48995-6	02/12/2010 || 02/12/2010	LCS-2	02/12/2010
Date analysed	-			02/12/2010	48995-6	02/12/2010 || 02/12/2010	LCS-2	02/12/2010
Arsenic	mg/kg	4	Metals.20 ICP-AES	<4	48995-6	11 || 9 || RPD: 20	LCS-2	98%
Cadmium	mg/kg	0.5	Metals.20 ICP-AES	<0.5	48995-6	<0.5 || <0.5	LCS-2	99%
Chromium	mg/kg	1	Metals.20 ICP-AES	<1	48995-6	30 || 23 || RPD: 26	LCS-2	97%
Copper	mg/kg	1	Metals.20 ICP-AES	<1	48995-6	34 || 34 || RPD: 0	LCS-2	102%

QUALITY CONTROL Acid Extractable metals in soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Lead	mg/kg	1	Metals.20 ICP-AES	<1	48995-6	62 || 65 || RPD: 5	LCS-2	98%
Mercury	mg/kg	0.1	Metals.21 CV-AAS	<0.1	48995-6	<0.1 || <0.1	LCS-2	112%
Nickel	mg/kg	1	Metals.20 ICP-AES	<1	48995-6	6 || 6 || RPD: 0	LCS-2	103%
Zinc	mg/kg	1	Metals.20 ICP-AES	<1	48995-6	65 || 67 || RPD: 3	LCS-2	98%

QUALITY CONTROL Moisture	UNITS	PQL	METHOD	Blank
Date prepared	-			02/12/2010
Date analysed	-			03/12/2010
Moisture	%	0.1	LAB.8	<0.10

QUALITY CONTROL Asbestos ID - soils	UNITS	PQL	METHOD	Blank
Date analysed	-			[NT]

QUALITY CONTROL BTEX in Water	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			04/12/2010	[NT]	[NT]	LCS-W1	04/12/2010
Date analysed	-			04/12/2010	[NT]	[NT]	LCS-W1	04/12/2010
Benzene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	99%
Toluene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	99%
Ethylbenzene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	100%
m+p-xylene	µg/L	2	GC.16	<2.0	[NT]	[NT]	LCS-W1	99%
o-xylene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	100%
Surrogate Dibromofluoromethane	%		GC.16	105	[NT]	[NT]	LCS-W1	101%
Surrogate toluene-d8	%		GC.16	102	[NT]	[NT]	LCS-W1	101%
Surrogate 4-BFB	%		GC.16	107	[NT]	[NT]	LCS-W1	102%

QUALITY CONTROL vTRH & BTEX in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	48995-46	02/12/2010 || 02/12/2010	48995-14	02/12/2010
Date analysed	-	48995-46	05/12/2010 || 05/12/2010	48995-14	05/12/2010
vTRH C_6 - C_9	mg/kg	48995-46	<25 || <25	48995-14	78%
Benzene	mg/kg	48995-46	<0.5 || <0.5	48995-14	73%
Toluene	mg/kg	48995-46	<0.5 || <0.5	48995-14	74%
Ethylbenzene	mg/kg	48995-46	<1.0 || <1.0	48995-14	78%

QUALITY CONTROL vTRH & BTEX in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
m+p-xylene	mg/kg	48995-46	<2.0 || <2.0	48995-14	83%
o-Xylene	mg/kg	48995-46	<1.0 || <1.0	48995-14	85%
Surrogate aaa-Trifluorotoluene	%	48995-46	116 || 110 || RPD: 5	48995-14	106%
QUALITY CONTROL sTRH in Soil (C10-C36)	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	48995-46	02/12/2010 || 02/12/2010	48995-5	02/12/2010
Date analysed	-	48995-46	02/12/2010 || 02/12/2010	48995-5	02/12/2010
TRH C_{10} - C_{14}	mg/kg	48995-46	<50 || <50	48995-5	95%
TRH C_{15} - C_{28}	mg/kg	48995-46	<100 || <100	48995-5	101%
TRH C_{29} - C_{36}	mg/kg	48995-46	<100 || <100	48995-5	103%
Surrogate o-Terphenyl	%	48995-46	97 || 91 || RPD: 6	48995-5	102%
QUALITY CONTROL PAHs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	48995-46	02/12/2010 || 02/12/2010	48995-14	02/12/2010
Date analysed	-	48995-46	03/12/2010 || 03/12/2010	48995-14	03/12/2010
Naphthalene	mg/kg	48995-46	<0.1 || <0.1	48995-14	100%
Acenaphthylene	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
Acenaphthene	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
Fluorene	mg/kg	48995-46	<0.1 || <0.1	48995-14	107%
Phenanthrene	mg/kg	48995-46	<0.1 || <0.1	48995-14	#
Anthracene	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
Fluoranthene	mg/kg	48995-46	0.1 || 0.1 || RPD: 0	48995-14	#
Pyrene	mg/kg	48995-46	0.1 || 0.1 || RPD: 0	48995-14	#
Benzo(a)anthracene	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
Chrysene	mg/kg	48995-46	<0.1 || <0.1	48995-14	#
Benzo(b+k)fluoranthene	mg/kg	48995-46	<0.2 || <0.2	[NR]	[NR]
Benzo(a)pyrene	mg/kg	48995-46	0.05 || <0.05	48995-14	#
Indeno(1,2,3-c,d)pyrene	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
Surrogate p-Terphenyl-d_{14}	%	48995-46	78 || 70 || RPD: 11	48995-14	75%

QUALITY CONTROL Organochlorine Pesticides in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	48995-46	02/12/2010 || 02/12/2010	48995-14	02/12/2010
Date analysed	-	48995-46	02/12/2010 || 02/12/2010	48995-14	02/12/2010
HCB	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
alpha-BHC	mg/kg	48995-46	<0.1 || <0.1	48995-14	85%
gamma-BHC	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
beta-BHC	mg/kg	48995-46	<0.1 || <0.1	48995-14	84%
Heptachlor	mg/kg	48995-46	<0.1 || <0.1	48995-14	89%
delta-BHC	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
Aldrin	mg/kg	48995-46	<0.1 || <0.1	48995-14	83%
Heptachlor Epoxide	mg/kg	48995-46	<0.1 || <0.1	48995-14	83%
gamma-Chlordane	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
alpha-chlordane	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
Endosulfan I	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
pp-DDE	mg/kg	48995-46	<0.1 || <0.1	48995-14	81%
Dieldrin	mg/kg	48995-46	<0.1 || <0.1	48995-14	85%
Endrin	mg/kg	48995-46	<0.1 || <0.1	48995-14	87%
pp-DDD	mg/kg	48995-46	<0.1 || <0.1	48995-14	82%
Endosulfan II	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
pp-DDT	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
Endrin Aldehyde	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
Endosulfan Sulphate	mg/kg	48995-46	<0.1 || <0.1	48995-14	86%
Methoxychlor	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
Surrogate TCLMX	%	48995-46	113 || 104 || RPD: 8	48995-14	116%

QUALITY CONTROL Organophosphorus Pesticides	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	48995-46	02/12/2010 || 02/12/2010	48995-14	02/12/2010
Date analysed	-	48995-46	02/12/2010 || 02/12/2010	48995-14	02/12/2010
Diazinon	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
Dimethoate	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
Chlorpyriphos-methyl	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
Ronnel	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
Chlorpyriphos	mg/kg	48995-46	<0.1 || <0.1	48995-14	123%
Fenitrothion	mg/kg	48995-46	<0.1 || <0.1	48995-14	129%
Bromophos-ethyl	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
Ethion	mg/kg	48995-46	<0.1 || <0.1	48995-14	100%
Surrogate TCLMX	%	48995-46	113 || 104 || RPD: 8	48995-14	106%
QUALITY CONTROL PCBs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	48995-46	02/12/2010 || 02/12/2010	48995-14	02/12/2010
Date analysed	-	48995-46	02/12/2010 || 02/12/2010	48995-14	02/12/2010
Arochlor 1016	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
Arochlor 1221*	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
Arochlor 1232	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
Arochlor 1242	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
Arochlor 1248	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
Arochlor 1254	mg/kg	48995-46	<0.1 || <0.1	48995-14	107%
Arochlor 1260	mg/kg	48995-46	<0.1 || <0.1	[NR]	[NR]
Surrogate TCLMX	%	48995-46	113 || 104 || RPD: 8	48995-14	99%
QUALITY CONTROL Acid Extractable metals in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date digested	-	48995-46	02/12/2010 || 02/12/2010	48995-14	02/12/2010
Date analysed	-	48995-46	02/12/2010 || 02/12/2010	48995-14	02/12/2010
Arsenic	mg/kg	48995-46	10 || 11 || RPD: 10	48995-14	97%
Cadmium	mg/kg	48995-46	<0.5 || <0.5	48995-14	90%
Chromium	mg/kg	48995-46	30 || 31 || RPD: 3	48995-14	86%
Copper	mg/kg	48995-46	12 || 10 || RPD: 18	48995-14	103%
Lead	mg/kg	48995-46	50 || 43 || RPD: 15	48995-14	93%
Mercury	mg/kg	48995-46	0.2 || <0.1	48995-14	109%
Nickel	mg/kg	48995-46	4 || 4 || RPD: 0	48995-14	99%
Zinc	mg/kg	48995-46	34 || 28 || RPD: 19	48995-14	74%

Report Comments:

Sample 48995-5; Chrysotile found embedded in a fragment of fibre cement (total weight 0.012g). It is estimated that plaster or fibre cement sheet can contain up to 50% chrysotile asbestos fibres by weight. This gives up to 0.006g of chrysotile fibres, which in 33g of soil gives 0.18g/kg.

Sample 48995-12; Chrysotile found embedded in a fragment of fibre cement (total weight 0.33g). It is estimated that plaster or fibre cement sheet can contain up to 30% chrysotile asbestos fibres by weight. This gives up to 0.099g of chrysotile fibres, which in 33g of soil gives 3.0g/kg.

Sample 48995-42; Chrysotile & Amosite found embedded in several fragments of fibre cement (total weight 0.42g). It is estimated that plaster or fibre cement sheet can contain up to 15% chrysotile & amosite asbestos fibres by weight. This gives up to 0.063g of chrysotile fibres, which in 27g of soil gives 2.3g/kg.

Sample 48995-47; Chrysotile found embedded in several fragments of fibre cement (total weight 0.0081g). It is estimated that plaster or fibre cement sheet can contain up to 40% chrysotile asbestos fibres by weight. This gives up to 0.0032g of chrysotile fibres, which in 15g of soil gives 0.21g/kg.

Sample 48995-57; Chrysotile found embedded in a fragment of fibre cement (total weight 0.0338g). It is estimated that plaster or fibre cement sheet can contain up to 40% chrysotile asbestos fibres by weight. This gives up to 0.0135g of chrysotile fibres, which in 30g of soil gives 0.45g/kg.

PAH's in soil: # Percent recovery is not possible to report due to interference from analytes (other than those being tested) in the sample/s.

PAH in Soil: # Percent recovery is not possible to report due to interference from analytes (other than those being tested) in the sample/s.
Sample 48995-58; Chrysotile found embedded in a fragment of fibre cement (total weight 0.0216g). It is estimated that plaster or fibre cement sheet can contain up to 40% chrysotile asbestos fibres by weight. This gives up to 0.0086g of chrysotile fibres, which in 20g of soil gives 0.43g/kg.

Sample 48995-7, Loose Crocidolite fibres found in soil, however this is below the reporting limit of 0.1g/kg

Sample 48995-37, Loose amosite fibres found in soil, however this is below the reporting limit of 0.1g/kg

Sample 48995-41, Loose chrysotile & amosite fibres found in soil, however this is below the reporting limit of 0.1g/kg

Asbestos ID was analysed by Approved Identifier:	Matt Mansfield
Asbestos ID was authorised by Approved Signatory:	Matt Mansfield
Asbestos counting was analysed by Approved Counter:	@ERROR
Asbestos counting was authorised by Approved Signatory:	@ERROR

INS: Insufficient sample for this test	PQL: Practical Quantitation Limit	NT: Not tested
NA: 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 batched of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.
Matrix Spikes and LCS: Generally 70-130% for inorganics/metals; 60-140% for organics and 10-140% for SVOC and speciated phenols is acceptable.

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
enquiries@envirolabservices.com.au
www.envirolabservices.com.au

SAMPLE RECEIPT ADVICE

Client:

JBS Environmental Pty Ltd
P.O. Box 940
MASCOT NSW 1460

ph: 8338 1013
Fax: 8338 1700

Attention: Sumi Dorairaj / Tim Davis

Sample log in details:

Your reference:	**41131**
Envirolab Reference:	**48995**
Date received:	26/11/10, 30/11/10
Date results expected to be reported:	**7/12/10**

Samples received in appropriate condition for analysis:	YES
No. of samples provided	66 Soils, 2 Waters, 1 Material
Turnaround time requested:	Standard
Temperature on receipt	Cool
Cooling Method:	Ice Pack

Comments:

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

Contact details:

Please direct any queries to Aileen Hie or Jacinta Hurst
ph: 02 9910 6200 fax: 02 9910 6201
email: ahie@envirolabservices.com.au or jhurst@envirolabservices.com.au

CHAIN OF CUSTODY

JBS ENVIRONMENTAL

PROJECT NO.: 41131
PROJECT NAME: RIVERWOOD NORTH RENEWAL
SEND REPORT TO: T. DAVIS / S. DORARAJ SEND INVOICE TO: A. WORTH
DATE NEEDED BY: STANDARD TURN AROUND
COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:

LABORATORY BATCH NO.:
SAMPLERS: T. DAVIS
PHONE: 02 83381011 EMAIL: tdavis@jbsgroup.com.au
QC LEVEL: NEPM 1999 (✓) sdoraraj@jbsgroup.com.au

	SAMPLE ID	MATRIX	DATE	TIME	TYPE & PRESERVATIVE	pH	ASBESTOS	COMBO 6a	COMBO 3a	HOLD	NOTES
1	TP37 - 0.1-0.2	Soil	25/11/10	–	BAG + JAR + ICE		X				
2	TP37 - 0.8-0.9			–					X		
3	TP38 - 0.1-0.2			–			X				
4	TP39 - 0.1-0.3			–			X				
5	TP40 - 0.1-0.2			–			X				
6	TP41 - 0.1-0.2			–				X			
7	TP42 - 0.1-0.2			–			X				
8	TP43 - 0.1-0.2			–			X				
9	TP43 - 0.8-0.9			–						X	
10	TP44 - 0.1-0.2			–			X				
11	TP45 - 0.1-0.2			–			X				
12	TP46 - 0.1-0.2			–			X				
13	TP46 - 0.55-0.65			–						X	
14	TP47 - 0.1-0.2			–				X			
15	TP48 - 0.1-0.2			–			X				
16	TP49 - 0.1-0.2			–			X				
17	TP50 - 0.1-0.2			–			X				
18	TP51 - 0.1-0.2	↓	↓	–	↓			X			

Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: 9910 6200

Job No: 48995
Date received: 30/11/10
Time received: 3.30pm
Received by: Z.L.
Temp: Cool/Ambient
Cooling: Icepack
Security: Intact/Broken/None

RELINQUISHED BY:	METHOD OF SHIPMENT:	RECEIVED BY:	FOR RECEIVING LAB USE ONLY:
NAME: Tim Davis DATE: 26/11/10	CONSIGNMENT NOTE NO. 26/11/10	NAME: Z.L. DATE: 30/11/10	COOLER SEAL – Yes ... No ... Intact ... Broken ...
OF: JBS	TRANSPORT CO. dc	OF: ELS	COOLER TEMP ... deg C
NAME: DATE:	CONSIGNMENT NOTE NO.	NAME: DATE:	COOLER SEAL – Yes ... No ... Intact ... Broken ...
OF:	TRANSPORT CO	OF:	COOLER TEMP ... deg C

Container & Preservative Codes: P = Plastic; J = Soil Jar; B = Glass Bottle; N = Nitric Acid Prsvd.; C = Sodium Hydroxide Prsvd; VC = Hydrochloric Acid Prsvd Vial; VS = Sulfuric Acid Prsvd Vial; S = Sulfuric Acid Prsvd; Z = Zinc Prsvd; E = EDTA Prsvd; ST = Sterile Bottle; O = Other

CHAIN OF CUSTODY

JBS ENVIRONMENTAL

PROJECT NO.: 41131	LABORATORY BATCH NO.:
PROJECT NAME: RIVERWOOD NORTH RENEWAL	SAMPLERS: T.DAVIS
SEND REPORT TO: T.DAVIS / S.DORARAJ SEND INVOICE TO: A.WORTH	PHONE: 02 83381011 EMAIL: tdavis@jbsgroup.com.au
DATE NEEDED BY: STANDARD TURN AROUND	QC LEVEL: NEPM 1999 (✓) sdoraraj@jbsgroup.com.au
COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:	

	SAMPLE ID	MATRIX	DATE	TIME	TYPE & PRESERVATIVE	pH	ASBESTOS	6a COMBO	3a COMBO	HOLD	NOTES
19	TP52 - 0.1 - 0.2	SOIL	25/11/10	-	BAG + JAR + ICE			X			
20	TP52 - 0.7 - 0.8			-						X	
21	TP53 - 0.1 - 0.2			-			X				
22	TP54 - 0.1 - 0.2			-			X				
23	TP55 - 0.1 - 0.2			-			X				
24	TP56 - 0.1 - 0.2			-			X				
25	TP57 - 0.1 - 0.2		26/11/10	-			X				
26	TP58 - 0.1 - 0.2			-				X			
27	TP59 - 0.1 - 0.2			-			X				
28	TP59 - 0.6 - 0.7			-					X		
29	TP60 - 0.1 - 0.2			-			X				
30	TP61 - 0.1 - 0.2			-				X			
31	TP62 - 0.1 - 0.2			-			X				
32	TP62 - 0.55 - 0.65			-						X	
33	TP63 - 0.1 - 0.2			-			X				
34	TP64 - 0.1 - 0.2			-			X				
35	TP65 - 0.1 - 0.2			-			X				
36	TP66 - 0.1 - 0.3			-				X			

RELINQUISHED BY:	METHOD OF SHIPMENT:	RECEIVED BY:	FOR RECEIVING LAB USE ONLY:
NAME: Tim Davis DATE:	CONSIGNMENT NOTE NO.	NAME: Z.L. DATE:	COOLER SEAL - Yes..... No..... Intact..... Broken.....
OF: JBS & E 26/11/10	TRANSPORT CO. CLC 26/11/10	OF: ELS 30/11/10	COOLER TEMP..... deg C
NAME: DATE:	CONSIGNMENT NOTE NO.	NAME: DATE:	COOLER SEAL - Yes..... No..... Intact..... Broken.....
OF:	TRANSPORT CO	OF:	COOLER TEMP..... deg C

Container & Preservative Codes: P = Plastic; J = Soil Jar; B = Glass Bottle; N = Nitric Acid Prsvd.; C = Sodium Hydroxide Prsvd; VC = Hydrochloric Acid Prsvd Vial; VS = Sulfuric Acid Prsvd Vial; S = Sulfuric Acid Prsvd; Z = Zinc Prsvd; E = EDTA Prsvd; ST = Sterile Bottle; O = Other

JBS Environmental Pty Ltd ABN 67 071 842 638
Phone: (02) 8338-1011
Fax: (02) 8338-1700
Suite 2, 595 Gardeners Road MASCOT NSW 2020
PO Box 940 MASCOT NSW 1460
www.jbsgroup.com.au

CHAIN OF CUSTODY

JBS ENVIRONMENTAL

PROJECT NO.: 41131
PROJECT NAME: RIVERWOOD NORTH RENEWAL
SEND REPORT TO: T.DAVIS / S.DORARAJ SEND INVOICE TO: A.WORTH
DATE NEEDED BY: STANDARD TURN AROUND
COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:

LABORATORY BATCH NO.:
SAMPLERS T.DAVIS
PHONE: 02 83381011 EMAIL: tdavis@jbsgroup.com.au sdoraraj@jbsgroup.com.au
QC LEVEL: NEPM 1999 (✓)

	SAMPLE ID	MATRIX	DATE	TIME	TYPE & PRESERVATIVE	pH	Asbestos	Combo 6a	Combo 3a	HOLD	NOTES
37	TP67 - 0.1-0.2	SOIL	26/11/10	-	BAG + JAR ICE		X				
38	TP68 - 0.2-0.3			-			X				
39	TP68 - 0.6-0.7			-						X	
40	TP69 - 0.1-0.2			-				X			
41	TP70 - 0.1-0.2			-			X				
42	TP71 - 0.1-0.2			-			X				
43	TP72 - 0.1-0.2			-				X			
44	TP72 - 0.6-0.7			-						X	
45	TP73 - 0.1-0.2			-			X				
46	TP74 - 0.1-0.2			-				X			
47	TP75 - 0.1-0.2			-			X				
48	TP76 - 0.1-0.2	↓		-			X				
49	TP77 - 0.1-0.2	30/11/10		-				X			
50	TP78 - 0.1-0.2			-			X				
51	TP79 - 0.1-0.2			-			X				
52	TP79 - 0.5-0.6			-					X		
53	TP80 - 0.1-0.2			-			X				
54	TP81 - 0.1-0.2	↓	↓	-	↓		X				

RELINQUISHED BY:	METHOD OF SHIPMENT:	RECEIVED BY:	FOR RECEIVING LAB USE ONLY:
NAME: Tim Davis DATE:	CONSIGNMENT NOTE NO.	NAME: Z-L. DATE:	COOLER SEAL - Yes..... No ..... Intact ..... Broken .....
OF: JBS 26/11/10	TRANSPORT CO. clc	OF: ELS 30/11/10	COOLER TEMP ..... deg C
NAME: DATE:	CONSIGNMENT NOTE NO.	NAME: DATE:	COOLER SEAL - Yes..... No ..... Intact ..... Broken .....
OF:	TRANSPORT CO	OF:	COOLER TEMP ..... deg C

Container & Preservative Codes: P = Plastic; J = Soil Jar; B = Glass Bottle; N = Nitric Acid Prsvd.; C = Sodium Hydroxide Prsvd; VC = Hydrochloric Acid Prsvd Vial; VS = Sulfuric Acid Prsvd Vial; S = Sulfuric Acid Prsvd; Z = Zinc Prsvd; E = EDTA Prsvd; ST = Sterile Bottle; O = Other

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Phone: (02) 8338-1011
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Suite 2, 595 Gardeners Road MASCOT NSW 2020
PO Box 940 MASCOT NSW 1460
www.jbsgroup.com.au

JBS ENVIRONMENTAL

CHAIN OF CUSTODY

PROJECT NO.: 41131
PROJECT NAME: RIVERWOOD NORTH RENEWAL
SEND REPORT TO: T.DAVIS / S.DORARAT SEND INVOICE TO: A.WORTH
DATE NEEDED BY: STANDARD TURN AROUND
COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:

LABORATORY BATCH NO.:
SAMPLERS: T.DAVIS
PHONE: 02 8338 1011 EMAIL: tdavis@jbsgroup.com.au
QC LEVEL: NEPM 1999 (√) sdorarat@jbsgroup.com.au

	SAMPLE ID	MATRIX	DATE	TIME	TYPE & PRESERVATIVE	pH	Asbestos	Combo 6a	Combo 3a	Hold	BTEX	NOTES
55	TP82 - 0.1-0.2	SOIL	30/11/10	-	BAG + ICE + JAR		X					
56	TP82 - 0.5-0.6			-						X		
57	TP83 - 0.1-0.2			-			X					
58	TP84 - 0.1-0.2			-				X				
59	TP85 - 0.1-0.2			-			X					
60	TP86 - 0.1-0.2			-			X					
61	TP86 - 0.5-0.6			-					X			
62	TP87 - 0.1-0.2			-			X					
63	QC3		26/11/10	-				X				
	QC3A			-			Please Send to SGS + PICKFORD (BAG)					
64	QC4		30/11/10	-						X		
	QC4A			-			Please Send to SGS + PICKFORD (BAG)					
65	QC5			-				X				
	QC5A			-			Please Send to SGS + PICKFORD (BAG)					
66	TRIP BLANK	WATER		-	ICE						X	
67	TRIP SPIKE			-							X	
68	TP40	Material	25/11/10									
69	TP76-0.1-0.5	Soil										

RELINQUISHED BY:	METHOD OF SHIPMENT:	RECEIVED BY:	FOR RECEIVING LAB USE ONLY:
NAME: Tim Davis DATE: 30/11/10	CONSIGNMENT NOTE NO.	NAME: Z.L. DATE:	COOLER SEAL – Yes..... No..... Intact ..... Broken .....
OF: JBS	TRANSPORT CO. CLC	OF: ELS 30/11/10	COOLER TEMP ..... deg C
NAME: DATE:	CONSIGNMENT NOTE NO.	NAME: DATE:	COOLER SEAL – Yes..... No..... Intact ..... Broken .....
OF:	TRANSPORT CO	OF:	COOLER TEMP ..... deg C

Container & Preservative Codes: P = Plastic; J = Soil Jar; B = Glass Bottle; N = Nitric Acid Prsvd.; C = Sodium Hydroxide Prsvd; VC = Hydrochloric Acid Prsvd Vial; VS = Sulfuric Acid Prsvd Vial; S = Sulfuric Acid Prsvd; Z = Zinc Prsvd; E = EDTA Prsvd; ST = Sterile Bottle; O = Other

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Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
enquiries@envirolabservices.com.au
www.envirolabservices.com.au

CERTIFICATE OF ANALYSIS 48761

Client:
JBS Environmental Pty Ltd
P.O. Box 940
MASCOT
NSW 1460

Attention: Sumi Dorairaj / Tim Davis

Sample log in details:

Your Reference:	**41131**
No. of samples:	50 Soils, 1 Water
Date samples received:	25/11/10
Date completed instructions received:	25/11/10

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:	2/12/10
Date of Preliminary Report:	Not Issued
Issue Date:	2/12/10

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Results Approved By:

Sandra Taylor
Assistant Lab Manager

Rhian Morgan
Reporting Supervisor

Nancy Zhang
Chemist

Matt Mansfield
Approved Signatory

Jacinta Hurst
Laboratory Manager

NATA
ACCREDITED FOR TECHNICAL COMPETENCE

vTRH & BTEX in Soil						
Our Reference:	UNITS	48761-2	48761-10	48761-14	48761-18	48761-22
Your Reference	----------	TP2	TP8	TP11	TP14	TP17
Depth	----------	0.3-0.4	0.3-0.4	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		23/11/2010	23/11/2010	23/11/2010	23/11/2010	23/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
Date analysed	-	01/12/2010	01/12/2010	01/12/2010	01/12/2010	01/12/2010
vTRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
m+p-xylene	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0
o-Xylene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Surrogate aaa-Trifluorotoluene	%	96	93	98	97	99

vTRH & BTEX in Soil						
Our Reference:	UNITS	48761-24	48761-27	48761-36	48761-37	48761-43
Your Reference	----------	TP18	TP21	TP28	TP28	TP33
Depth	----------	0.7-0.8	0.1-0.2	0.1-0.2	0.4-0.5	0.1-0.2
Date Sampled		23/11/2010	23/11/2010	23/11/2010	23/11/2010	23/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
Date analysed	-	01/12/2010	01/12/2010	01/12/2010	01/12/2010	01/12/2010
vTRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
m+p-xylene	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0
o-Xylene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Surrogate aaa-Trifluorotoluene	%	99	94	96	94	100

vTRH & BTEX in Soil			
Our Reference:	UNITS	48761-48	48761-49
Your Reference	----------	QC1	QC2
Depth	----------	-	-
Date Sampled		23/11/2010	23/11/2010
Type of sample		Soil	Soil
Date extracted	-	26/11/2010	26/11/2010
Date analysed	-	01/12/2010	01/12/2010
vTRH C_6 - C_9	mg/kg	<25	<25
Benzene	mg/kg	<0.5	<0.5
Toluene	mg/kg	<0.5	<0.5
Ethylbenzene	mg/kg	<1.0	<1.0
m+p-xylene	mg/kg	<2.0	<2.0
o-Xylene	mg/kg	<1.0	<1.0
Surrogate aaa-Trifluorotoluene	%	93	85

sTRH in Soil (C10-C36)						
Our Reference:	UNITS	48761-2	48761-10	48761-14	48761-18	48761-22
Your Reference	----------	TP2	TP8	TP11	TP14	TP17
Depth	----------	0.3-0.4	0.3-0.4	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		23/11/2010	23/11/2010	23/11/2010	23/11/2010	23/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
Date analysed	-	26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Surrogate o-Terphenyl	%	99	100	98	100	98

sTRH in Soil (C10-C36)						
Our Reference:	UNITS	48761-24	48761-27	48761-36	48761-37	48761-43
Your Reference	----------	TP18	TP21	TP28	TP28	TP33
Depth	----------	0.7-0.8	0.1-0.2	0.1-0.2	0.4-0.5	0.1-0.2
Date Sampled		23/11/2010	23/11/2010	23/11/2010	23/11/2010	23/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
Date analysed	-	26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Surrogate o-Terphenyl	%	101	99	98	100	101

sTRH in Soil (C10-C36)			
Our Reference:	UNITS	48761-48	48761-49
Your Reference	----------	QC1	QC2
Depth	----------	-	-
Date Sampled		23/11/2010	23/11/2010
Type of sample		Soil	Soil
Date extracted	-	26/11/2010	26/11/2010
Date analysed	-	26/11/2010	26/11/2010
TRH C_{10} - C_{14}	mg/kg	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100
Surrogate o-Terphenyl	%	101	97

PAHs in Soil						
Our Reference:	UNITS	48761-2	48761-10	48761-14	48761-18	48761-22
Your Reference	----------	TP2	TP8	TP11	TP14	TP17
Depth	----------	0.3-0.4	0.3-0.4	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		23/11/2010	23/11/2010	23/11/2010	23/11/2010	23/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
Date analysed	-	27/11/2010	27/11/2010	27/11/2010	27/11/2010	27/11/2010
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.3	<0.1	0.9	0.8	2.0
Anthracene	mg/kg	<0.1	<0.1	0.2	0.1	0.2
Fluoranthene	mg/kg	0.4	<0.1	1.1	1.6	3.7
Pyrene	mg/kg	0.4	<0.1	1.0	1.6	3.5
Benzo(a)anthracene	mg/kg	0.1	<0.1	0.3	0.4	0.9
Chrysene	mg/kg	0.2	<0.1	0.4	0.6	1.2
Benzo(b+k)fluoranthene	mg/kg	0.2	<0.2	0.5	1.0	2.2
Benzo(a)pyrene	mg/kg	0.2	<0.05	0.3	0.8	1.6
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	0.1	0.3	0.7
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	0.1	0.4	0.7
Surrogate p-Terphenyl-d_{14}	%	108	107	109	104	109

PAHs in Soil						
Our Reference:	UNITS	48761-24	48761-27	48761-36	48761-37	48761-43
Your Reference	----------	TP18	TP21	TP28	TP28	TP33
Depth	----------	0.7-0.8	0.1-0.2	0.1-0.2	0.4-0.5	0.1-0.2
Date Sampled		23/11/2010	23/11/2010	23/11/2010	23/11/2010	23/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
Date analysed	-	27/11/2010	27/11/2010	27/11/2010	27/11/2010	27/11/2010
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	0.5	<0.1	<0.1	0.6
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	0.9	<0.1	<0.1	1.1
Pyrene	mg/kg	<0.1	0.9	<0.1	<0.1	1.1
Benzo(a)anthracene	mg/kg	<0.1	0.2	<0.1	<0.1	0.3
Chrysene	mg/kg	<0.1	0.3	<0.1	<0.1	0.4
Benzo(b+k)fluoranthene	mg/kg	<0.2	0.5	<0.2	<0.2	0.7
Benzo(a)pyrene	mg/kg	<0.05	0.3	<0.05	<0.05	0.5
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	0.1	<0.1	<0.1	0.2
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	0.2	<0.1	<0.1	0.3
Surrogate p-Terphenyl-d_{14}	%	110	112	105	104	104

PAHs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- ----------	48761-48 QC1 - 23/11/2010 Soil	48761-49 QC2 - 23/11/2010 Soil
Date extracted	-	26/11/2010	26/11/2010
Date analysed	-	27/11/2010	27/11/2010
Naphthalene	mg/kg	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1
Phenanthrene	mg/kg	0.5	<0.1
Anthracene	mg/kg	<0.1	<0.1
Fluoranthene	mg/kg	0.9	<0.1
Pyrene	mg/kg	0.9	<0.1
Benzo(a)anthracene	mg/kg	0.2	<0.1
Chrysene	mg/kg	0.3	<0.1
Benzo(b+k)fluoranthene	mg/kg	0.6	<0.2
Benzo(a)pyrene	mg/kg	0.5	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.2	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	0.2	<0.1
Surrogate p-Terphenyl-d_{14}	%	106	107

Organochlorine Pesticides in soil						
Our Reference:	UNITS	48761-2	48761-10	48761-14	48761-18	48761-22
Your Reference	----------	TP2	TP8	TP11	TP14	TP17
Depth	----------	0.3-0.4	0.3-0.4	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		23/11/2010	23/11/2010	23/11/2010	23/11/2010	23/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
Date analysed	-	27/11/2010	27/11/2010	27/11/2010	27/11/2010	27/11/2010
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 TCLMX	%	95	97	95	92	94

Organochlorine Pesticides in soil				
Our Reference:	UNITS	48761-27	48761-36	48761-43
Your Reference	----------	TP21	TP28	TP33
Depth	----------	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		23/11/2010	23/11/2010	23/11/2010
Type of sample		Soil	Soil	Soil
Date extracted	-	26/11/2010	26/11/2010	26/11/2010
Date analysed	-	27/11/2010	27/11/2010	27/11/2010
HCB	mg/kg	<0.1	<0.1	<0.1
alpha-BHC	mg/kg	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1
Surrogate TCLMX	%	91	103	102

Organophosphorus Pesticides						
Our Reference:	UNITS	48761-2	48761-10	48761-14	48761-18	48761-22
Your Reference	----------	TP2	TP8	TP11	TP14	TP17
Depth	----------	0.3-0.4	0.3-0.4	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		23/11/2010	23/11/2010	23/11/2010	23/11/2010	23/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
Date analysed	-	27/11/2010	27/11/2010	27/11/2010	27/11/2010	27/11/2010
Diazinon	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
Chlorpyriphos-methyl	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
Chlorpyriphos	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
Bromophos-ethyl	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
Surrogate TCLMX	%	95	97	95	92	94

Organophosphorus Pesticides				
Our Reference:	UNITS	48761-27	48761-36	48761-43
Your Reference	----------	TP21	TP28	TP33
Depth	----------	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		23/11/2010	23/11/2010	23/11/2010
Type of sample		Soil	Soil	Soil
Date extracted	-	26/11/2010	26/11/2010	26/11/2010
Date analysed	-	27/11/2010	27/11/2010	27/11/2010
Diazinon	mg/kg	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1
Surrogate TCLMX	%	91	103	102

PCBs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- ----------	48761-2 TP2 0.3-0.4 23/11/2010 Soil	48761-10 TP8 0.3-0.4 23/11/2010 Soil	48761-14 TP11 0.1-0.2 23/11/2010 Soil	48761-18 TP14 0.1-0.2 23/11/2010 Soil	48761-22 TP17 0.1-0.2 23/11/2010 Soil
Date extracted	-	26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
Date analysed	-	27/11/2010	27/11/2010	27/11/2010	27/11/2010	27/11/2010
Arochlor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1221*	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	95	97	95	92	94

PCBs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- ----------	48761-27 TP21 0.1-0.2 23/11/2010 Soil	48761-36 TP28 0.1-0.2 23/11/2010 Soil	48761-43 TP33 0.1-0.2 23/11/2010 Soil
Date extracted	-	26/11/2010	26/11/2010	26/11/2010
Date analysed	-	27/11/2010	27/11/2010	27/11/2010
Arochlor 1016	mg/kg	<0.1	<0.1	<0.1
Arochlor 1221*	mg/kg	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	<0.1	<0.1	<0.1
Surrogate TCLMX	%	91	103	102

Acid Extractable metals in soil						
Our Reference:	UNITS	48761-2	48761-10	48761-14	48761-18	48761-22
Your Reference	----------	TP2	TP8	TP11	TP14	TP17
Depth	----------	0.3-0.4	0.3-0.4	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		23/11/2010	23/11/2010	23/11/2010	23/11/2010	23/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date digested	-	26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
Date analysed	-	26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
Arsenic	mg/kg	10	15	8	8	9
Cadmium	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	mg/kg	29	35	32	20	25
Copper	mg/kg	24	11	7	20	19
Lead	mg/kg	43	39	35	61	65
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	8	3	12	8	5
Zinc	mg/kg	45	30	24	68	57

Acid Extractable metals in soil						
Our Reference:	UNITS	48761-24	48761-27	48761-36	48761-37	48761-43
Your Reference	----------	TP18	TP21	TP28	TP28	TP33
Depth	----------	0.7-0.8	0.1-0.2	0.1-0.2	0.4-0.5	0.1-0.2
Date Sampled		23/11/2010	23/11/2010	23/11/2010	23/11/2010	23/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date digested	-	26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
Date analysed	-	26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
Arsenic	mg/kg	12	10	10	13	5
Cadmium	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	mg/kg	42	27	30	38	14
Copper	mg/kg	4	25	8	4	16
Lead	mg/kg	20	180	42	25	27
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	4	9	3	3	10
Zinc	mg/kg	5	120	23	5	41

Acid Extractable metals in soil			
Our Reference:	UNITS	48761-48	48761-49
Your Reference	----------	QC1	QC2
Depth	----------	-	-
Date Sampled		23/11/2010	23/11/2010
Type of sample		Soil	Soil
Date digested	-	26/11/2010	26/11/2010
Date analysed	-	26/11/2010	26/11/2010
Arsenic	mg/kg	9	11
Cadmium	mg/kg	<0.5	<0.5
Chromium	mg/kg	20	33
Copper	mg/kg	11	5
Lead	mg/kg	47	35
Mercury	mg/kg	<0.1	<0.1
Nickel	mg/kg	4	3
Zinc	mg/kg	150	16

Moisture						
Our Reference:	UNITS	48761-2	48761-10	48761-14	48761-18	48761-22
Your Reference	----------	TP2	TP8	TP11	TP14	TP17
Depth	----------	0.3-0.4	0.3-0.4	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		23/11/2010	23/11/2010	23/11/2010	23/11/2010	23/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
Date analysed	-	29/11/2010	29/11/2010	29/11/2010	29/11/2010	29/11/2010
Moisture	%	23	16	28	19	17

Moisture						
Our Reference:	UNITS	48761-24	48761-27	48761-36	48761-37	48761-43
Your Reference	----------	TP18	TP21	TP28	TP28	TP33
Depth	----------	0.7-0.8	0.1-0.2	0.1-0.2	0.4-0.5	0.1-0.2
Date Sampled		23/11/2010	23/11/2010	23/11/2010	23/11/2010	23/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	26/11/2010	26/11/2010	26/11/2010	26/11/2010	26/11/2010
Date analysed	-	29/11/2010	29/11/2010	29/11/2010	29/11/2010	29/11/2010
Moisture	%	25	19	23	24	14

Moisture			
Our Reference:	UNITS	48761-48	48761-49
Your Reference	----------	QC1	QC2
Depth	----------	-	-
Date Sampled		23/11/2010	23/11/2010
Type of sample		Soil	Soil
Date prepared	-	26/11/2010	26/11/2010
Date analysed	-	29/11/2010	29/11/2010
Moisture	%	17	29

Asbestos ID - soils						
Our Reference:	UNITS	48761-1	48761-2	48761-3	48761-5	48761-6
Your Reference	----------	TP1	TP2	TP3	TP4	TP5
Depth	----------	0.3-0.4	0.3-0.4	0.2-0.3	0.3-0.4	0.2-0.3
Date Sampled		23/11/2010	23/11/2010	23/11/2010	23/11/2010	23/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	30/11/2010	30/11/2010	30/11/2010	30/11/2010	30/11/2010
Sample Description	-	Approx 35g Soil	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Asbestos ID - soils						
Our Reference:	UNITS	48761-7	48761-8	48761-9	48761-10	48761-11
Your Reference	----------	TP6	TP6	TP7	TP8	TP9
Depth	----------	0.2-0.3	0.6-0.7	0.1-0.2	0.3-0.4	0.1-0.2
Date Sampled		23/11/2010	23/11/2010	23/11/2010	23/11/2010	23/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	30/11/2010	30/11/2010	30/11/2010	30/11/2010	30/11/2010
Sample Description	-	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Asbestos ID - soils						
Our Reference:	UNITS	48761-12	48761-13	48761-14	48761-15	48761-16
Your Reference	----------	TP9	TP10	TP11	TP12	TP12
Depth	----------	0.4-0.5	0.3-0.4	0.1-0.2	0.1-0.2	0.4-0.5
Date Sampled		23/11/2010	23/11/2010	23/11/2010	23/11/2010	23/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	30/11/2010	30/11/2010	30/11/2010	30/11/2010	30/11/2010
Sample Description	-	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Asbestos ID - soils						
Our Reference:	UNITS	48761-17	48761-18	48761-19	48761-21	48761-22
Your Reference	----------	TP13	TP14	TP15	TP16	TP17
Depth	----------	0.2-0.3	0.1-0.2	0.3-0.4	0.1-0.2	0.1-0.2
Date Sampled		23/11/2010	23/11/2010	23/11/2010	23/11/2010	23/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	30/11/2010	30/11/2010	30/11/2010	30/11/2010	30/11/2010
Sample Description	-	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil	Approx 30g Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	Chrysotile asbestos detected Amosite asbestos detected
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Asbestos ID - soils						
Our Reference:	UNITS	48761-23	48761-24	48761-25	48761-26	48761-27
Your Reference	----------	TP18	TP18	TP19	TP20	TP21
Depth	----------	0.1-0.2	0.7-0.8	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		23/11/2010	23/11/2010	23/11/2010	23/11/2010	23/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	30/11/2010	30/11/2010	30/11/2010	30/11/2010	30/11/2010
Sample Description	-	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Asbestos ID - soils						
Our Reference:	UNITS	48761-28	48761-29	48761-30	48761-31	48761-32
Your Reference	----------	TP21	TP22	TP23	TP24	TP25
Depth	----------	0.7-0.8	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		23/11/2010	23/11/2010	23/11/2010	23/11/2010	23/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	30/11/2010	30/11/2010	30/11/2010	30/11/2010	30/11/2010
Sample Description	-	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil	Approx 39g Soil	Approx 40g Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Asbestos ID - soils						
Our Reference:	UNITS	48761-34	48761-35	48761-36	48761-37	48761-38
Your Reference	----------	TP26	TP27	TP28	TP28	TP29
Depth	----------	0.1-0.2	0.1-0.2	0.1-0.2	0.4-0.5	0.1-0.2
Date Sampled		23/11/2010	23/11/2010	23/11/2010	23/11/2010	23/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	30/11/2010	30/11/2010	30/11/2010	30/11/2010	30/11/2010
Sample Description	-	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Asbestos ID - soils						
Our Reference:	UNITS	48761-39	48761-40	48761-42	48761-43	48761-44
Your Reference	----------	TP30	TP31	TP32	TP33	TP34
Depth	----------	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		23/11/2010	23/11/2010	23/11/2010	23/11/2010	23/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	30/11/2010	30/11/2010	30/11/2010	30/11/2010	30/11/2010
Sample Description	-	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Asbestos ID - soils						
Our Reference:	UNITS	48761-45	48761-46	48761-47	48761-48	48761-49
Your Reference	----------	TP34	TP35	TP36	QC1	QC2
Depth	----------	1.1-1.2	0.2-0.3	0.1-0.2	-	-
Date Sampled		23/11/2010	23/11/2010	23/11/2010	23/11/2010	23/11/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	30/11/2010	30/11/2010	30/11/2010	30/11/2010	30/11/2010
Sample Description	-	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Method ID	Methodology Summary
GC.16	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.
GC.3	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID.
GC.12 subset	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
GC-5	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
GC.8	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
GC-6	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Metals.20 ICP-AES	Determination of various metals by ICP-AES.
Metals.21 CV-AAS	Determination of Mercury by Cold Vapour AAS.
LAB.8	Moisture content determined by heating at 105 deg C for a minimum of 4 hours.
ASB.1	Asbestos ID - Qualitative identification of asbestos type fibres in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques.

QUALITY CONTROL vTRH & BTEX in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			26/11/2010	48761-37	26/11/2010 || 26/11/2010	LCS-11	26/11/2010
Date analysed	-			01/12/2010	48761-37	01/12/2010 || 01/12/2010	LCS-11	01/12/2010
vTRH C_6 - C_9	mg/kg	25	GC.16	<25	48761-37	<25 || <25	LCS-11	81%
Benzene	mg/kg	0.5	GC.16	<0.5	48761-37	<0.5 || <0.5	LCS-11	77%
Toluene	mg/kg	0.5	GC.16	<0.5	48761-37	<0.5 || <0.5	LCS-11	79%
Ethylbenzene	mg/kg	1	GC.16	<1.0	48761-37	<1.0 || <1.0	LCS-11	83%
m+p-xylene	mg/kg	2	GC.16	<2.0	48761-37	<2.0 || <2.0	LCS-11	84%
o-Xylene	mg/kg	1	GC.16	<1.0	48761-37	<1.0 || <1.0	LCS-11	87%
Surrogate aaa-Trifluorotoluene	%		GC.16	106	48761-37	94 || 97 || RPD: 3	LCS-11	96%

QUALITY CONTROL sTRH in Soil (C10-C36)	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			26/11/2010	48761-37	26/11/2010 || 26/11/2010	LCS-11	26/11/2010
Date analysed	-			26/11/2010	48761-37	26/11/2010 || 26/11/2010	LCS-11	26/11/2010
TRH C_{10} - C_{14}	mg/kg	50	GC.3	<50	48761-37	<50 || <50	LCS-11	86%
TRH C_{15} - C_{28}	mg/kg	100	GC.3	<100	48761-37	<100 || <100	LCS-11	91%
TRH C_{29} - C_{36}	mg/kg	100	GC.3	<100	48761-37	<100 || <100	LCS-11	84%
Surrogate o-Terphenyl	%		GC.3	99	48761-37	100 || 100 || RPD: 0	LCS-11	95%

QUALITY CONTROL PAHs in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			26/11/2010	48761-37	26/11/2010 || 26/11/2010	LCS-11	26/11/2010
Date analysed	-			27/11/2010	48761-37	27/11/2010 || 27/11/2010	LCS-11	27/11/2010
Naphthalene	mg/kg	0.1	GC.12 subset	<0.1	48761-37	<0.1 || <0.1	LCS-11	116%
Acenaphthylene	mg/kg	0.1	GC.12 subset	<0.1	48761-37	<0.1 || <0.1	[NR]	[NR]
Acenaphthene	mg/kg	0.1	GC.12 subset	<0.1	48761-37	<0.1 || <0.1	[NR]	[NR]
Fluorene	mg/kg	0.1	GC.12 subset	<0.1	48761-37	<0.1 || <0.1	LCS-11	96%
Phenanthrene	mg/kg	0.1	GC.12 subset	<0.1	48761-37	<0.1 || <0.1	LCS-11	103%
Anthracene	mg/kg	0.1	GC.12 subset	<0.1	48761-37	<0.1 || <0.1	[NR]	[NR]
Fluoranthene	mg/kg	0.1	GC.12 subset	<0.1	48761-37	<0.1 || <0.1	LCS-11	101%
Pyrene	mg/kg	0.1	GC.12 subset	<0.1	48761-37	<0.1 || <0.1	LCS-11	101%

QUALITY CONTROL PAHs in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Benzo(a)anthracene	mg/kg	0.1	GC.12 subset	<0.1	48761-37	<0.1 || <0.1	[NR]	[NR]
Chrysene	mg/kg	0.1	GC.12 subset	<0.1	48761-37	<0.1 || <0.1	LCS-11	120%
Benzo(b+k)fluoranthene	mg/kg	0.2	GC.12 subset	<0.2	48761-37	<0.2 || <0.2	[NR]	[NR]
Benzo(a)pyrene	mg/kg	0.05	GC.12 subset	<0.05	48761-37	<0.05 || <0.05	LCS-11	87%
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	GC.12 subset	<0.1	48761-37	<0.1 || <0.1	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	0.1	GC.12 subset	<0.1	48761-37	<0.1 || <0.1	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	0.1	GC.12 subset	<0.1	48761-37	<0.1 || <0.1	[NR]	[NR]
Surrogate p-Terphenyl-d_{14}	%		GC.12 subset	139	48761-37	104 || 74 || RPD: 34	LCS-11	106%

QUALITY CONTROL Organochlorine Pesticides in soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			26/11/2010	[NT]	[NT]	LCS-6	26/11/2010
Date analysed	-			27/11/2010	[NT]	[NT]	LCS-6	27/11/2010
HCB	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
alpha-BHC	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-6	97%
gamma-BHC	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
beta-BHC	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-6	91%
Heptachlor	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-6	89%
delta-BHC	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
Aldrin	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-6	87%
Heptachlor Epoxide	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-6	93%
gamma-Chlordane	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
alpha-chlordane	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
Endosulfan I	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
pp-DDE	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-6	94%
Dieldrin	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-6	94%
Endrin	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-6	91%
pp-DDD	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-6	99%
Endosulfan II	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
pp-DDT	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
Endrin Aldehyde	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
Endosulfan Sulphate	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-6	88%
Methoxychlor	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%		GC-5	85	[NT]	[NT]	LCS-6	86%

QUALITY CONTROL Organophosphorus Pesticides	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			26/11/2010	[NT]	[NT]	LCS-6	26/11/2010
Date analysed	-			27/11/2010	[NT]	[NT]	LCS-6	27/11/2010
Diazinon	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	[NR]	[NR]
Dimethoate	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	[NR]	[NR]
Chlorpyriphos-methyl	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	[NR]	[NR]
Ronnel	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	[NR]	[NR]
Chlorpyriphos	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	LCS-6	93%
Fenitrothion	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	LCS-6	100%
Bromophos-ethyl	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	[NR]	[NR]
Ethion	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	LCS-6	90%
Surrogate TCLMX	%		GC.8	85	[NT]	[NT]	LCS-6	87%

QUALITY CONTROL PCBs in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			26/11/2010	[NT]	[NT]	LCS-6	26/11/2010
Date analysed	-			27/11/2010	[NT]	[NT]	LCS-6	27/11/2010
Arochlor 1016	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1221*	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1232	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1242	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1248	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1254	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	LCS-6	119%
Arochlor 1260	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%		GC-6	85	[NT]	[NT]	LCS-6	104%

QUALITY CONTROL Acid Extractable metals in soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date digested	-			26/11/2010	48761-37	26/11/2010 || 26/11/2010	LCS-5	26/11/2010
Date analysed	-			26/11/2010	48761-37	26/11/2010 || 26/11/2010	LCS-5	26/11/2010
Arsenic	mg/kg	4	Metals.20 ICP-AES	<4	48761-37	13 || 14 || RPD: 7	LCS-5	109%
Cadmium	mg/kg	0.5	Metals.20 ICP-AES	<0.5	48761-37	<0.5 || <0.5	LCS-5	109%
Chromium	mg/kg	1	Metals.20 ICP-AES	<1	48761-37	38 || 42 || RPD: 10	LCS-5	111%
Copper	mg/kg	1	Metals.20 ICP-AES	<1	48761-37	4 || 2 || RPD: 67	LCS-5	116%

QUALITY CONTROL Acid Extractable metals in soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Lead	mg/kg	1	Metals.20 ICP-AES	<1	48761-37	25 || 26 || RPD: 4	LCS-5	110%
Mercury	mg/kg	0.1	Metals.21 CV-AAS	<0.1	48761-37	<0.1 || <0.1	LCS-5	101%
Nickel	mg/kg	1	Metals.20 ICP-AES	<1	48761-37	3 || 3 || RPD: 0	LCS-5	113%
Zinc	mg/kg	1	Metals.20 ICP-AES	<1	48761-37	5 || 4 || RPD: 22	LCS-5	109%

QUALITY CONTROL Moisture	UNITS	PQL	METHOD	Blank
Date prepared	-			26/11/2010
Date analysed	-			29/11/2010
Moisture	%	0.1	LAB.8	<0.10

QUALITY CONTROL Asbestos ID - soils	UNITS	PQL	METHOD	Blank
Date analysed	-			[NT]

Report Comments:

Asbestos: A portion of the supplied sample was sub-sampled for asbestos according to Envirolab procedures. We cannot guarantee that this sub-sample is indicative of the entire sample. Envirolab recommends supplying 30-40g of sample in it's own container.

Sample 48761-22; Chrysotile & Amosite found embedded in a fragment of fibre cement (total weight 0.0919g). It is estimated that plaster or fibre cement sheet can contain up to 40% chrysotile & amosite asbestos fibres by weight. This gives up to 0.0368g of chrysotile fibres & amosite, which in 36g of soil gives 1.0g/kg.

Sample 48761-1 & -31, Loose chrysotile fibres found in sample however this was below the reporting limit of 0.1g/kg.

Asbestos ID was analysed by Approved Identifier:	Matt Mansfield
Asbestos ID was authorised by Approved Signatory:	Matt Mansfield
Asbestos counting was analysed by Approved Counter:	@ERROR
Asbestos counting was authorised by Approved Signatory:	@ERROR

INS: Insufficient sample for this test	PQL: Practical Quantitation Limit	NT: Not tested
NA: 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 batched of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.
Matrix Spikes and LCS: Generally 70-130% for inorganics/metals; 60-140% for organics and 10-140% for SVOC and speciated phenols is acceptable.

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
enquiries@envirolabservices.com.au
www.envirolabservices.com.au

SAMPLE RECEIPT ADVICE

Client:

JBS Environmental Pty Ltd
P.O. Box 940
MASCOT NSW 1460

ph: 8338 1013
Fax: 8338 1700

Attention: Sumi Dorairaj / Tim Davis

Sample log in details:

Your reference:	**41131**
Envirolab Reference:	**48761**
Date received:	25/11/10
Date results expected to be reported:	**2/12/10**

Samples received in appropriate condition for analysis:	YES
No. of samples provided	50 Soils, 1 Water
Turnaround time requested:	Standard
Temperature on receipt	Cool
Cooling Method:	Ice Pack

Comments:

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

Contact details:

Please direct any queries to Aileen Hie or Jacinta Hurst
ph: 02 9910 6200 fax: 02 9910 6201
email: ahie@envirolabservices.com.au or jhurst@envirolabservices.com.au

4216

CHAIN OF CUSTODY - Client

ENVIROLAB SERVICES

Client: JBS Environmental	**Client Project Name and Number:** 41131
Project Mgr: Dorairaj	**PO No.:**
Sampler: Davis	**Envirolab Services Quote No. :**
Address: 125 O'Riordan St Mascot	**Date results required:** Or choose: standard / 1 day / 2 day / 3 day
Email: sdorairaj@jbsgroup.com.au tdavis@jbsgroup.com.au	*Note: Inform lab in advance if urgent turnaround is required - surcharge applies*
Phone: 8338 1011 **Fax:** 8338 1700	

Envirolab Services
12 Ashley St, Chatswood, NSW, 2067

Phone: 02 9958 5801
Fax: 02 9958 5803
E-mail: tnotaras@envirolabservices.com.au

Contact: Tania Notaras

Envirolab Sample ID	Client Sample ID	Date sampled	Type of sample	Asbestos	Combo 6a	Combo 3a	HOLD											Provide as much information about the sample as you can
1	TP1/0.3-0.4m	23/11/10	S	✓														
2	TP2/0.3-0.4m			✓	✓													
3	TP3/0.3-0.3m			✓														
4	TP3/1.1-1.2m						✓											
5	TP4/0.3-0.4m			✓														
6	TP5/0.2-0.3m			✓														
7	TP6/0.2-0.3m			✓														
8	TP6/0.6-0.7m			✓														
9	TP7/0.1-0.2m			✓														
10	TP8/0.3-0.4m			✓	✓													
11	TP9/0.1-0.2m			✓														
12	TP9/0.4-0.5m			✓														
13	TP10/0.3-0.4m			✓														
14	TP11/0.1-0.2m			✓	✓													
15	TP12/0.1-0.2m			✓														

Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: 9910 6200

Job No: 48761
Date received: 25/11/10
Time received: 11am
Received by: JMC
Temp: Cool/Ambient
Cooling: Ice/Ice-pack
Security: Intact/Broken/None

Relinquished by (company): JBS	**Received by (company):** ELS	**Samples Received: Cool or Ambient (circle one)**
Print Name: Sumi Dorairaj	**Print Name:** Juliana Lummerte	**Temperature Recieved at:** (if applicable)
Date & Time: 25/11/10	**Date & Time:** 25/11/10	**Transported by: Hand delivered / courier**
Signature:	**Signature:**	**Page No:** 1 of 4

4217

CHAIN OF CUSTODY - Client

ENVIROLAB SERVICES

Client: JBS	**Client Project Name and Number:** 41131
Project Mgr: Docairaj	**PO No.:**
Sampler: Davis	**Envirolab Services Quote No. :**
Address:	**Date results required:**
Email:	**Or choose:** standard / 1 day / 2 day / 3 day
Phone: **Fax:**	*Note: Inform lab in advance if urgent turnaround is required - surcharge applies*

Envirolab Services
12 Ashley St, Chatswood, NSW, 2067

Phone: 02 9958 5801
Fax: 02 9958 5803
E-mail: tnotaras@envirolabservices.com.au

Contact: Tania Notaras

Sample Information				Tests Required												Comments
Envirolab Sample ID	Client Sample ID	Date sampled	Type of sample	Asbestos	Combo 6a	Combo 3a	HOLD									Provide as much information about the sample as you can
16	TP12/0.4-0.5m			✓												
17	TP13/0.2-0.3m			✓												
18	TP14/0.1-0.2m			✓	✓											
19	TP15/0.3-0.4m			✓												
20	TP15/0.9-1.0m						✓									
21	TP16/0.1-0.2m			✓												
22	TP17/0.1-0.2m			✓	✓											
23	TP18/0.1-0.2m			✓												
24	TP18/0.7-0.8m					✓										
25	TP19/0.1-0.2m			✓												
26	TP20/0.1-0.2m			✓												
27	TP21/0.1-0.2m			✓	✓											
28	TP21/0.7-0.8m															
29	TP22/0.1-0.2m			✓												
30	TP23/0.1-0.2m			✓												

Relinquished by (company): JBS	**Received by (company):**	**Samples Received:** Cool or Ambient (circle one)
Print Name: Sumi Docairaj	**Print Name:**	**Temperature Recieved at:** (if applicable)
Date & Time: 25/11/10	**Date & Time:**	**Transported by:** Hand delivered / courier
Signature:	**Signature:**	**Page No:** 2 of 4

4218

CHAIN OF CUSTODY - Client

ENVIROLAB SERVICES

Client: JBS Environmental	**Client Project Name and Number:**	**Envirolab Services** 12 Ashley St, Chatswood, NSW, 2067
Project Mgr:		
Sampler:	**PO No.:**	Phone: 02 9958 5801
Address:	**Envirolab Services Quote No. :**	Fax: 02 9958 5803
	Date results required:	E-mail: tnotaras@envirolabservices.com.au
Email:	**Or choose: standard / 1 day / 2 day / 3 day**	
Phone: **Fax:**	*Note: Inform lab in advance if urgent turnaround is required - surcharge applies*	Contact: Tania Notaras

Sample information				Tests Required													Comments
Envirolab Sample ID	Client Sample ID	Date sampled	Type of sample	HOLD	Asbestos	Combo 3a	Combo 6a										Provide as much information about the sample as you can
31	TP24/0.1-0.2m				✓		✓										
32	TP25/0.1-0.2m				✓												
33	TP25/0.5-0.6m			✓													
34	TP26/0.1-0.2m				✓												
35	TP27/0.1-0.2m				✓												
36	TP28/0.1-0.2m						✓										
37	TP28/0.4-0.5m					✓											
38	TP29/0.1-0.2m				✓												
39	TP30/0.1-0.2m				✓												
40	TP31/0.1-0.2m			✓	✓												
41	TP31/0.6-0.7m			✓													
42	TP32/0.1-0.2m				✓												
43	TP33/0.1-0.2m				✓		✓										
44	TP34/0.1-0.2m				✓												
45	TP34/1.1-1.2m				✓												

Relinquished by (company): JBS	**Received by (company):**	**Samples Received: Cool or Ambient (circle one)**
Print Name: Sumi Dorairaj	**Print Name:**	**Temperature Recieved at:** (if applicable)
Date & Time: 25/11/10	**Date & Time:**	**Transported by: Hand delivered / courier**
Signature:	**Signature:**	**Page No:** 3 of 4

4219

CHAIN OF CUSTODY - Client

ENVIROLAB SERVICES

Client: JBS Environmental	**Client Project Name and Number:** 41131
Project Mgr: Dorairaj	**PO No.:**
Sampler: Davis	**Envirolab Services Quote No. :**
Address:	**Date results required:**
Email:	**Or choose:** standard / 1 day / 2 day / 3 day
Phone: **Fax:**	*Note: Inform lab in advance if urgent turnaround is required - surcharge applies*

Envirolab Services
12 Ashley St, Chatswood, NSW, 2067
Phone: 02 9958 5801
Fax: 02 9958 5803
E-mail: tnotaras@envirolabservices.com.au
Contact: Tania Notaras

Envirolab Sample ID	Client Sample ID	Date sampled	Type of sample	HOLD	Asbestos	Combo 6a	Combo 3a											Comments
46	TP35/0.2-0.3m	24/11/16	S		✓													
	TP35/1.2-1.3m	↓	↓	✓														
47	TP36/0.1-0.2m	↓	↓		✓													
48	~~QA1~~ QC1	↓	↓				✓											
–	QC1 QC1A	↓	↓				✓											please send to SGS & pickford
49	~~QA2 QC2~~	↓	↓				✓											
–	QC2 QC2A	↓	↓				✓											please send to SGS "
50	Trip Spike	↓	W															
51	Trip Blank	↓	S															

Relinquished by (company): Simi Dorairaj	**Received by (company):**	**Samples Received:** Cool or Ambient (circle one)
Print Name: JBS	**Print Name:**	**Temperature Recieved at:** (if applicable)
Date & Time: 25/11/16	**Date & Time:**	**Transported by:** Hand delivered / courier
Signature:	**Signature:**	**Page No:** 4 of 4

PICKFORD & RHYDER CONSULTING PTY LTD
ABN 17 105 546 076
Occupational Hygiene Measurements and Solutions.

PO Box 1422 Lane Cove 1595
Rear - 244 Burns Bay Road
Lane Cove NSW Australia
Phone: (02) 9418 9151
Fax: (02) 9418 9150

6 December 2010

S. Doraiaj & T. Davis
JBS Environmental
PO Box 940
MASCOT NSW 1460

Fax: 8338-1700; tdavis@jbsgroup.com.au

CERTIFICATE OF ANALYSIS – ASBESTOS IDENTIFICATION

YOUR REFERENCE/JOB No.: 41131
TYPE OF SAMPLES: Bulk samples - as received from Envirolab Services
SITE LOCATION: Riverwood North Renewal
DATE SAMPLED: 26 & 30 November 2010 **DATE RECEIVED:** 1 December 2010
OUR REFERENCE: 64830/31-ID

TEST METHOD: Soil samples examined by Stereomicroscopy and Polarized Light Microscopy (with Dispersion Staining) in accordance with AS 4964-2004: - 'Method for the qualitative identification of asbestos in bulk samples' as outlined in Laboratory Method ID/1. The Reporting Limit for the results in this Certificate is numerically equal to the lowest detection limit of 0.1 g/kg. Trace asbestos analysis has been conducted on each sample, which is generally designed to detect 'respirable' asbestos fibres (ie less than 3 micrometres in width) distributed throughout the sample.

All sampling and site work have been undertaken by the client - the analytical procedures and results reported on this Certificate have been conducted by Pickford & Rhyder Consulting.

Sample No	*Lab No*	*Sample Information*	*Analysis Result*	*Description*
QC3A	64830	Soil sample as received, sampled 26 November 2010	no asbestos detected	The sample was a brown, clumpy soil with stones and plant matter, of approximate weight 32 g, in which organic fibres were detected. No asbestos fibres were found at the Reporting Limit of 0.1 g/kg.
QC5A	64831	Soil sample as received, sampled 30 November 2010	amosite & chrysotile asbestos detected	The sample was a brown soil with clay clumps, fibrous fragments and stones and plant matter, of approximate weight 31g, in which organic fibres were detected. Amosite and chrysotile asbestos fibres were found above the Reporting Limit of 0.1 g/kg.

Analysed and reported by:

K. Grose, Approved Identifier and Signatory.

NATA
ACCREDITED FOR TECHNICAL COMPETENCE

Accreditation number 2515

PICKFORD + RHYDER

60483036 1 of 6

JBS ENVIRONMENTAL

CHAIN OF CUSTODY

PROJECT NO.: 41131
PROJECT NAME RIVERWOOD NORTH RENEWAL
SEND REPORT TO: T.DAVIS / S.DORARAJ SEND INVOICE TO: A.WORTH
DATE NEEDED BY: STANDARD TURN AROUND
COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:

LABORATORY BATCH NO.
SAMPLERS T.DAVIS
PHONE: 0283381011 EMAIL: tdavis@jbsgroup.com.au, sdoraraj@jbsgroup.com.au
QC LEVEL: NEPM 1999 (✓)

SAMPLE ID	MATRIX	DATE	TIME	TYPE & PRESERVATIVE	pH	Asbestos	Hold	NOTES
QC3A	SOIL	26/11/10	-	BAG		X		
QC4A	↓	30/11/10	-	↓			X	
QC5A	↓	↓	-	↓		X		

RELINQUISHED BY:	METHOD OF SHIPMENT:	RECEIVED BY:	FOR RECEIVING LAB USE ONLY:
NAME: Tim Davis DATE: 30/11/10	CONSIGNMENT NOTE NO.	NAME: K Alamango DATE: 1/12/10 @3.40pm	COOLER SEAL – Yes..... No ..... Intact ..... Broken .....
OF: JBS ei	TRANSPORT CO. CLC 30/11/10	OF: PER	COOLER TEMP ..... deg C
NAME: DATE:	CONSIGNMENT NOTE NO.	NAME: DATE:	COOLER SEAL – Yes..... No ..... Intact ..... Broken .....
OF:	TRANSPORT CO	OF:	COOLER TEMP ..... deg C

Container & Preservative Codes: P = Plastic; J = Soil Jar; B = Glass Bottle; N = Nitric Acid Prsvd.; C = Sodium Hydroxide Prsvd; VC = Hydrochloric Acid Prsvd Vial; VS = Sulfuric Acid Prsvd Vial; S = Sulfuric Acid Prsvd; Z = Zinc Prsvd; E = EDTA Prsvd; ST = Sterile Bottle; O = Other

JBS Environmental Pty Ltd ABN 67 071 842 638
Phone: (02) 8338-1011
Fax: (02) 8338-1700
IMSO Forms013 – Chain of Custody

Suite 2, 595 Gardeners Road MASCOT NSW 2020
PO Box 940 MASCOT NSW 1460
www.jbsgroup.com.au

PICKFORD & RHYDER CONSULTING PTY LTD
ABN 17 105 546 076
Occupational Hygiene Measurements and Solutions.

PO Box 1422 Lane Cove 1595
Rear - 244 Burns Bay Road
Lane Cove NSW Australia
Phone: (02) 9418 9151
Fax: (02) 9418 9150

6 December 2010

Sumi Doraiaj
JBS Environmental
PO Box 940
MASCOT NSW 1460

Fax: 8338-1700

CERTIFICATE OF ANALYSIS – ASBESTOS IDENTIFICATION

YOUR REFERENCE/JOB No.: 41131
TYPE OF SAMPLES: Bulk samples - as received from Envirolab Services
SITE LOCATION: Unknown
DATE SAMPLED: 24 November 2010 **DATE RECEIVED:** 29 November 2010
OUR REFERENCE: 64775/76-ID

TEST METHOD: Soil samples examined by Stereomicroscopy and Polarized Light Microscopy (with Dispersion Staining) in accordance with AS 4964-2004: - 'Method for the qualitative identification of asbestos in bulk samples' as outlined in Laboratory Method ID/1. The Reporting Limit for the results in this Certificate is numerically equal to the lowest detection limit of 0.1 g/kg. Trace asbestos analysis has been conducted on each sample, which is generally designed to detect 'respirable' asbestos fibres (ie less than 3 micrometres in width) distributed throughout the sample.

All sampling and site work have been undertaken by the client - the analytical procedures and results reported on this Certificate have been conducted by Pickford & Rhyder Consulting.

Sample No	*Lab No*	*Sample Information*	*Analysis Result*	*Description*
QC1A	64775	Soil sample as received	no asbestos detected	The sample was a brown soil with clay clumps, stones and plant matter, of approximate weight 36 g, in which organic fibres were detected. No asbestos fibres were found at the Reporting Limit of 0.1 g/kg.
QC2A	64776	Soil sample as received	no asbestos detected	The sample was a brown soil with stones and plant matter, of approximate weight 31 g, in which organic fibres were detected. No asbestos fibres were found at the Reporting Limit of 0.1 g/kg.

Analysed and reported by:

K. Grose,
Approved Identifier and Signatory.

NATA
ACCREDITED FOR TECHNICAL COMPETENCE

Accreditation number 2515

4219

CHAIN OF CUSTODY - Client

ENVIROLAB SERVICES

Client:	JBS Environmental
Project Mgr:	Dorairaj
Sampler:	Davis
Address:	
Email:	
Phone:	Fax:

Client Project Name and Number:	41131
PO No.:	
Envirolab Services Quote No. :	
Date results required:	
Or choose: standard / 1 day / 2 day / 3 day	
Note: Inform lab in advance if urgent turnaround is required - surcharge applies	

Envirolab Services
12 Ashley St, Chatswood, NSW, 2067

Phone: 02 9958 5801
Fax: 02 9958 5803
E-mail: tnotaras@envirolabservices.com.au

Contact: Tania Notaras

Sample information				Tests Required														Comments
Envirolab Sample ID	Client Sample ID	Date sampled	Type of sample	HOLD	Asbestos	Combo 6a	Combo 3a											Provide as much information about the sample as you can
46	TP35/0.2-0.3m	24/11/16	S		✓													
	TP35/1.2-1.3m	↓	↓	✓														
47	TP36/0.1-0.2m	↓	↓		✓													
48	~~QA1~~ QC1	↓	↓				✓											
–	QC1 QC1A	↓	↓				✓											please send to SGS & pickford
49	~~QA2~~ QC2	↓	↓				✓											
–	QC2 QC2A	↓	↓				✓											please send to SGS "
50	Trip Spike	↓	W															
51	Trip Blank	↓	S															

Relinquished by (company):	Somi Dorairaj	Received by (company): PICKFORD
Print Name:	JBS	Print Name: KIM OPENSHAW
Date & Time:	25/11/10	Date & Time: 29/11/10 0750
Signature:		Signature:

Samples Received: Cool or Ambient (circle one)
Temperature Recieved at: (if applicable)
Transported by: Hand delivered / courier

ANALYTICAL REPORT

6 December 2010

JBS Environmental Pty Ltd
PO Box 940
MASCOT
NSW 1460

Attention: **Sumi Dorairaj**

Your Reference: 41131

Our Reference: SE83561 Samples: 2 Soils
Received: 26/11/2010

Preliminary Report Sent: Not Issued

These samples were analysed in accordance with your written instructions.

For and on Behalf of:
SGS ENVIRONMENTAL SERVICES

Sample Receipt:	Angela Mamalicos	AU.SampleReceipt.Sydney@sgs.com
Production Manager:	Huong Crawford	Huong.Crawford@sgs.com

Results Approved and/or Authorised by:

Ly Kim Ha
Organics Signatory

Huong Crawford
Metals Signatory

SGS Australia Pty Ltd
ABN 44 000 964 278
Environmental Services Unit 16/33 Maddox Street Alexandria NSW 2015 Australia
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MBTEX in Soil Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ---------- ----------	SE83561-1 QC1 QC1A Soil 24/11/2010	SE83561-2 QC2 QC2A Soil 24/11/2010
Date Extracted (MBTEX)		1/12/2010	1/12/2010
Date Analysed (MBTEX)		1/12/2010	1/12/2010
Methyl-tert-butyl ether (MtBE)	mg/kg	<0.1	<0.1
Benzene	mg/kg	<0.1	<0.1
Toluene	mg/kg	<0.1	<0.1
Ethylbenzene	mg/kg	<0.1	<0.1
Total Xylenes	mg/kg	<0.3	<0.3
BTEX Surrogate (%)	%	72	80

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TRH in soil with..C6-C9 by P/T Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ---------- ----------	SE83561-1 QC1 QC1A Soil 24/11/2010	SE83561-2 QC2 QC2A Soil 24/11/2010
Date Extracted (TRH C6-C9 PT)		1/12/2010	1/12/2010
Date Analysed (TRH C6-C9 PT)		1/12/2010	1/12/2010
TRH C_6 - C_9 P&T	mg/kg	<20	<20
Date Extracted (TRH C10-C36)		1/12/2010	1/12/2010
Date Analysed (TRH C10-C36)		1/12/2010	1/12/2010
TRH C_{10} - C_{14}	mg/kg	<20	<20
TRH C_{15} - C_{28}	mg/kg	<50	<50
TRH C_{29} - C_{36}	mg/kg	<50	<50

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PAHs in Soil Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ---------- ----------	SE83561-1 QC1 QC1A Soil 24/11/2010	SE83561-2 QC2 QC2A Soil 24/11/2010
Date Extracted		1/12/2010	1/12/2010
Date Analysed		1/12/2010	1/12/2010
Naphthalene	mg/kg	<0.10	<0.10
2-Methylnaphthalene	mg/kg	<0.10	<0.10
1-Methylnaphthalene	mg/kg	<0.10	<0.10
Acenaphthylene	mg/kg	<0.10	<0.10
Acenaphthene	mg/kg	<0.10	<0.10
Fluorene	mg/kg	<0.10	<0.10
Phenanthrene	mg/kg	<0.10	0.10
Anthracene	mg/kg	<0.10	<0.10
Fluoranthene	mg/kg	<0.10	0.21
Pyrene	mg/kg	<0.10	0.18
Benzo[*a*]anthracene	mg/kg	<0.10	<0.10
Chrysene	mg/kg	<0.10	<0.10
Benzo[*b,k*]fluoranthene	mg/kg	<0.20	<0.20
Benzo[*a*]pyrene	mg/kg	<0.10	<0.10
Indeno[*123-cd*]pyrene	mg/kg	<0.10	<0.10
Dibenzo[*ah*]anthracene	mg/kg	<0.10	<0.10
Benzo[*ghi*]perylene	mg/kg	<0.10	<0.10
Total PAHs (sum)	mg/kg	<1.8	<1.99
Nitrobenzene-d5	%	125	126
2-Fluorobiphenyl	%	124	120
p -Terphenyl-*d14*	%	128	130

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Metals in Soil by ICP-OES Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ---------- ----------	SE83561-1 QC1 QC1A Soil 24/11/2010	SE83561-2 QC2 QC2A Soil 24/11/2010
Date Extracted (Metals)		2/12/2010	2/12/2010
Date Analysed (Metals)		2/12/2010	2/12/2010
Arsenic	mg/kg	8	7
Cadmium	mg/kg	0.5	0.4
Chromium	mg/kg	25	13
Copper	mg/kg	6.3	12
Lead	mg/kg	35	38
Nickel	mg/kg	2.0	4.2
Zinc	mg/kg	21	45

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Mercury Cold Vapor/Hg Analyser Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ---------- ----------	SE83561-1 QC1 QC1A Soil 24/11/2010	SE83561-2 QC2 QC2A Soil 24/11/2010
Date Extracted (Mercury)		3/12/2010	3/12/2010
Date Analysed (Mercury)		3/12/2010	3/12/2010
Mercury	mg/kg	<0.05	<0.05

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Moisture Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ---------- ----------	SE83561-1 QC1 QC1A Soil 24/11/2010	SE83561-2 QC2 QC2A Soil 24/11/2010
Date Analysed (moisture)		1/12/2010	1/12/2010
Moisture	%	21	28

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Method ID	Methodology Summary
SEO-018	BTEX / C6-C9 Hydrocarbons - Soil samples are extracted with methanol, purged and concentrated by a purge and trap apparatus, and then analysed using GC/MS technique. Water samples undergo the same analysis without the extraction step. Based on USEPA 5030B and 8260B.
SEO-020	Total Recoverable Hydrocarbons - determined by solvent extraction with dichloromethane / acetone for soils and dichloromethane for waters, followed by instrumentation analysis using GC/FID. Where applicable Solid Phase Extraction Manifold technique is used for aliphatic / aromatic fractionation.
SEO-030	Polynuclear Aromatic Hydrocarbons - determined by solvent extraction with dichloromethane / acetone for soils and dichloromethane for waters, followed by instrumentation analysis using GC/MS SIM mode.
SEM-010	Determination of elements by ICP-OES following appropriate sample preparation / digestion process. Based on USEPA 6010C / APHA 21st Edition, 3120B.
SEM-005	Mercury - determined by Cold-Vapour AAS following appropriate sample preparation or digestion process. Based on APHA 21st Edition, 3112B.
AN002	Preparation of soils, sediments and sludges undergo analysis by either air drying, compositing, subsampling and 1:5 soil water extraction where required. Moisture content is determined by drying the sample at 105 ± 5°C.

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QUALITY CONTROL MBTEX in Soil	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
Date Extracted (MBTEX)				01/12/10	[NT]	[NT]	LCS	01/12/10
Date Analysed (MBTEX)				01/12/10	[NT]	[NT]	LCS	01/12/10
Methyl-tert-butyl ether (MtBE)	mg/kg	0.1	SEO-018	<0.1	[NT]	[NT]	LCS	87%
Benzene	mg/kg	0.1	SEO-018	<0.1	[NT]	[NT]	LCS	79%
Toluene	mg/kg	0.1	SEO-018	<0.1	[NT]	[NT]	LCS	80%
Ethylbenzene	mg/kg	0.1	SEO-018	<0.1	[NT]	[NT]	LCS	81%
Total Xylenes	mg/kg	0.3	SEO-018	<0.3	[NT]	[NT]	LCS	88%
BTEX Surrogate (%)	%	0	SEO-018	95	[NT]	[NT]	LCS	87%

QUALITY CONTROL TRH in soil with..C6-C9 by P/T	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
Date Extracted (TRH C6-C9 PT)				01/12/10	[NT]	[NT]	LCS	01/12/10
Date Analysed (TRH C6-C9 PT)				01/12/10	[NT]	[NT]	LCS	01/12/10
TRH C_6 - C_9 P&T	mg/kg	20	SEO-018	<20	[NT]	[NT]	LCS	103%
Date Extracted (TRH C10-C36)				01/12/10	[NT]	[NT]	LCS	01/12/10
Date Analysed (TRH C10-C36)				01/12/10	[NT]	[NT]	LCS	01/12/10
TRH C_{10} - C_{14}	mg/kg	20	SEO-020	<20	[NT]	[NT]	LCS	124%
TRH C_{15} - C_{28}	mg/kg	50	SEO-020	<50	[NT]	[NT]	LCS	123%
TRH C_{29} - C_{36}	mg/kg	50	SEO-020	<50	[NT]	[NT]	LCS	105%

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QUALITY CONTROL PAHs in Soil	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
Date Extracted				01/12/10	[NT]	[NT]	LCS	01/12/10
Date Analysed				01/12/10	[NT]	[NT]	LCS	01/12/10
Naphthalene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	LCS	101%
2-Methylnaphthalene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	[NR]	[NR]
1-Methylnaphthalene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	[NR]	[NR]
Acenaphthylene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	LCS	92%
Acenaphthene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	LCS	99%
Fluorene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	[NR]	[NR]
Phenanthrene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	LCS	96%
Anthracene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	LCS	98%
Fluoranthene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	LCS	97%
Pyrene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	LCS	99%
Benzo[*a*]anthracene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	[NR]	[NR]
Chrysene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	[NR]	[NR]
Benzo[*b,k*]fluoranthene	mg/kg	0.2	SEO-030	<0.20	[NT]	[NT]	[NR]	[NR]
Benzo[*a*]pyrene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	LCS	82%
Indeno[*123-cd*]pyrene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	[NR]	[NR]
Dibenzo[*ah*]anthracene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	[NR]	[NR]
Benzo[*ghi*]perylene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	[NR]	[NR]
Total PAHs (sum)	mg/kg	1.8	SEO-030	<1.8	[NT]	[NT]	[NR]	[NR]
Nitrobenzene-d5	%	0	SEO-030	127	[NT]	[NT]	LCS	129%
2-Fluorobiphenyl	%	0	SEO-030	127	[NT]	[NT]	LCS	121%
p -Terphenyl-*d*14	%	0	SEO-030	115	[NT]	[NT]	LCS	116%

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QUALITY CONTROL Metals in Soil by ICP-OES	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
Date Extracted (Metals)				02/12/10	[NT]	[NT]	LCS	02/12/10
Date Analysed (Metals)				02/12/10	[NT]	[NT]	LCS	02/12/10
Arsenic	mg/kg	3	SEM-010	<3	[NT]	[NT]	LCS	97%
Cadmium	mg/kg	0.3	SEM-010	<0.3	[NT]	[NT]	LCS	97%
Chromium	mg/kg	0.3	SEM-010	<0.3	[NT]	[NT]	LCS	98%
Copper	mg/kg	0.5	SEM-010	<0.5	[NT]	[NT]	LCS	98%
Lead	mg/kg	1	SEM-010	<1	[NT]	[NT]	LCS	96%
Nickel	mg/kg	0.5	SEM-010	<0.5	[NT]	[NT]	LCS	96%
Zinc	mg/kg	0.5	SEM-010	<0.5	[NT]	[NT]	LCS	99%

QUALITY CONTROL Mercury Cold Vapor/Hg Analyser	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
Date Extracted (Mercury)				3/12/2010	[NT]	[NT]	LCS	97%
Date Analysed (Mercury)				3/12/2010	[NT]	[NT]	LCS	3/12/2010
Mercury	mg/kg	0.05	SEM-005	<0.05	[NT]	[NT]	LCS	104%

QUALITY CONTROL Moisture	UNITS	LOR	METHOD	Blank
Date Analysed (moisture)				[NT]
Moisture	%	1	AN002	<1

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Result Codes

[INS] : Insufficient Sample for this test
[NR] : Not Requested
[NT] : Not tested
[LOR] : Limit of reporting
[RPD] : Relative Percentage Difference
* : Not part of NATA Accreditation
[N/A] : Not Applicable

Report Comments

Samples analysed as received. Solid samples expressed on a dry weight basis.
Date Organics extraction commenced:
NATA Corporate Accreditation No. 2562, Site No 4354
Note: Test results are not corrected for recovery (excluding Air-toxics and Dioxins/Furans*)
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Quality Control Protocol

Method Blank: An analyte free matrix to which all reagents are added in the same volume or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. A method blank is prepared every 20 samples.
Duplicate: A separate portion of a sample being analysed that is treated the same as the other samples in the batch. One duplicate is processed at least every 10 samples.
Surrogate Spike: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are added to samples before extraction to monitor extraction efficiency and percent recovery in each sample.
Internal Standard: Added to all samples requiring analysis for organics (where relevant) or metals by ICP after the extraction/digestion process; the compounds/elements serve to give a standard of retention time and/or response, which is invariant from run-to-run with the instruments.
Laboratory Control Sample: A known matrix spiked with compound(s) representative of the target analytes. It is used to document laboratory performance. When the results of the matrix spike analysis indicates a potential problem due to the sample matrix itself, the LCS results are used to verify that the laboratory can perform the analysis in a clean matrix.
Matrix Spike: An aliquot of sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Quality Acceptance Criteria

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf

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SAMPLE RECEIPT ADVICE (SRA)

30 November 2010

Client Details			Laboratory Details		
Requested By	:	**Sumi Dorairaj**			
Client	:	JBS Environmental Pty Ltd	Laboratory	:	SGS Environmental Services
Contact	:	Sumi Dorairaj	Manager	:	Edward Ibrahim
Address	:	PO Box 940 MASCOT NSW 1460	Address	:	Unit 16, 33 Maddox Street Alexandria NSW 2015
Email	:	sdorairaj@jbsgroup.com.au	Email	:	au.samplereceipt.sydney@sgs.com
Telephone	:	02 8338 1013	Telephone	:	61 2 8594 0400
Facsimile	:	02 8338 1700	Facsimile	:	61 2 8594 0499
Project	:	41131	Report No	:	**SE83561**
Order Number	:		No. of Samples	:	2
Samples	:	2 Soils	Due Date	:	3/12/2010

Date Instructions Received	:	29/11/2010
Sample Receipt Date	:	26/11/2010

Samples received in good order	:	YES	Samples received in correct containers	:	YES
Samples received without headspace	:	YES	Sufficient quantity supplied	:	YES
Upon receipt sample temperature	:	Cool	Cooling Method	:	Ice Pack
Sample containers provided by	:	Other Lab	Samples clearly Labelled	:	YES
Turnaround time requested	:	Standard	Completed documentation received	:	YES

Samples will be held for 1 month for water samples and 3 months for soil samples from date of receipt of samples, unless otherwise instructed.

Comments

Instructions received 29/11/2010@5.09PM.

The signed chain of custody will be returned to you with the original report.

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SAMPLE RECEIPT ADVICE (SRA) - continued

Client : JBS Environmental Pty Ltd
Project : 41131

Report No : SE83561

Summary of Samples and Requested Analysis

The table below represents SGS Environmental Service's understanding and interpretation of the customer supplied sample request.
Please indicate ASAP if your request differs from these details.
Testing shall commence immediately as per this table, unless the customer intervenes with a correction prior to testing.
Note that a small X in the table below indicates some testing has not been requested in the package.

Sample No.	Description	Metals Prep, soil 8 HM	MBTEX in Soil	TRH in soil with..C6-C9 by P/T	PAHs in Soil	Metals in Soil by ICP-OES	Mercury Cold Vapor/Hg Analyser	Moisture
1	QC1 QC1A	X	X	X	X	X	X	X
2	QC2 QC2A	X	X	X	X	X	X	X

Sample No.	Description
1	QC1 QC1A
2	QC2 QC2A

4219

CHAIN OF CUSTODY - Client

ENVIROLAB SERVICES

Client: JBS Environmental	**Client Project Name and Number:** 41131	**Envirolab Services** 12 Ashley St, Chatswood, NSW, 2067	
Project Mgr: Dorairaj			
Sampler: Davis	**PO No.:**	**Phone:** 02 9958 5801	
Address:	**Envirolab Services Quote No. :**	**Fax:** 02 9958 5803	
	Date results required:	**E-mail:** tnotaras@envirolabservices.com.au	
Email:	**Or choose:** standard / 1 day / 2 day / 3 day		
Phone: **Fax:**	*Note: Inform lab in advance if urgent turnaround is required - surcharge applies*	**Contact:** Tania Notaras	

Sample information				Tests Required														Comments
Envirolab Sample ID	Client Sample ID	Date sampled	Type of sample	HOLD	Asbestos	Combo 6a	Combo 3a											Provide as much information about the sample as you can
46	TP35/0.2-0.3m	24/11/16	S		✓													
	TP35/1.2-1.3m	↓	↓	✓														
47	TP36/0.1-0.2m	↓	↓		✓													
48	~~QA1~~ QC1						✓											
1 –	QC1 QC1A						✓											please send to SGS & packing
49	~~QA2~~ QC2						✓											
2 –	QC2 QC2A	↓	↓				✓											please send to SGS
50	Trip Spike	↓	W															
51	Trip Blank	↓	S															

SGS
Received by: KK
Time: 3:30PM
Satisfactory: Yes
Ice/Cooler Packs: Yes
Temperature on Receipt:
Storage Location: 5559
SGS ref no.: SE083561

Relinquished by (company): Soni Dorairaj	**Received by (company):** SGS	**Samples Received:** (Cool) or Ambient (circle one)
Print Name: JBS	**Print Name:** Kavita KAMA	**Temperature Recieved at:** 5°C (if applicable)
Date & Time: 25/11/16	**Date & Time:** 26/11/16 @ 3:30PM	**Transported by:** Hand delivered / courier
Signature:	**Signature:** Kavita	**Page No:** 4 of 4

AU.SampleReceipt.Sydney (Sydney)

From: Sumi Dorairaj [SDorairaj@jbsgroup.com.au]
Sent: Monday, 29 November 2010 5:09 PM
To: AU.SampleReceipt.Sydney (Sydney)
Cc: Tim Davis
Subject: RE: 41131 - Combo 3a - Specify testing parameters, SE83561

Hi Angela,

Thanks for the reminder – we are after TPH, BTEX, PAH, 8 HM (As, Cd, Cr, Cu, Pb, Ni, Hg, Zn) for these samples.

Regards,
Sumi Dorairaj
Senior Environmental Consultant
JBS Environmental Pty Ltd
(ph) 02 8338 1011 (m) 0427 782 127

From: AU.SampleReceipt.Sydney (Sydney) [mailto:AU.SampleReceipt.Sydney@sgs.com]
Sent: Monday, 29 November 2010 5:03 PM
To: Sumi Dorairaj
Cc: Tim Davis
Subject: FW: 41131 - Combo 3a - Specify testing parameters, SE83561

Hi Sumi / Tim,
Unfortunately analysis progression has been halted for this job. We are currently awaiting specifications to "Combo 3a". Please advise as soon as possible testing parameters associated to this package type. Thank you

Kind Regards

Angela Mamalicos
Environmental Services
Sample Administration Manager

Phone: +61 (0)2 8594 0400

From: AU.SampleReceipt.Sydney (Sydney)
Sent: Friday, 26 November 2010 4:42 PM
To: 'sdorairaj@jbsgroup.com.au'
Cc: 'tdavis@jbsgroup.com.au'
Subject: 41131 - Combo 3a - Specify testing parameters, SE83561

Hi Sumi / Tim,

Regarding samples delivered at SGS today, forwarded by Envirolabs, SGS will require the testing scheme associated to Combo 3a.
Unfortunately SGS does not have a package called Combo 3a.

At present job has been halted awaiting feedback.

Kind Regards

ANALYTICAL REPORT

8 December 2010

JBS Environmental Pty Ltd
PO Box 940
MASCOT
NSW 1460

Attention: **Tim Davis**

Your Reference: 41131 - Riverwood North Renewal

Our Reference: SE83681 Samples: 3 Soils
Received: 1/12/2010

Preliminary Report Sent: Not Issued

These samples were analysed in accordance with your written instructions.

For and on Behalf of:
SGS ENVIRONMENTAL SERVICES

Sample Receipt:	Angela Mamalicos	AU.SampleReceipt.Sydney@sgs.com
Production Manager:	Huong Crawford	Huong.Crawford@sgs.com

Results Approved and/or Authorised by:

Ly Kim Ha
Organics Signatory

Huong Crawford
Metals Signatory

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MBTEX in Soil Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ---------- ----------	SE83681-1 QC3A Soil 26/11/2010	SE83681-3 QC5A Soil 30/11/2010
Date Extracted (MBTEX)		6/12/2010	6/12/2010
Date Analysed (MBTEX)		6/12/2010	6/12/2010
Methyl-tert-butyl ether (MtBE)	mg/kg	<0.1	<0.1
Benzene	mg/kg	<0.1	<0.1
Toluene	mg/kg	<0.1	<0.1
Ethylbenzene	mg/kg	<0.1	<0.1
Total Xylenes	mg/kg	<0.3	<0.3
BTEX Surrogate (%)	%	102	99

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TRH in soil with C6-C9 by P/T Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ---------- ----------	SE83681-1 QC3A Soil 26/11/2010	SE83681-3 QC5A Soil 30/11/2010
Date Extracted (TRH C6-C9 PT)		6/12/2010	6/12/2010
Date Analysed (TRH C6-C9 PT)		6/12/2010	6/12/2010
TRH C_6 - C_9 P&T	mg/kg	<20	<20
Date Extracted (TRH C10-C36)		6/12/2010	6/12/2010
Date Analysed (TRH C10-C36)		6/12/2010	6/12/2010
TRH C_{10} - C_{14}	mg/kg	<20	<20
TRH C_{15} - C_{28}	mg/kg	<50	<50
TRH C_{29} - C_{36}	mg/kg	<50	<50

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PAHs in Soil Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ---------- ----------	SE83681-1 QC3A Soil 26/11/2010	SE83681-3 QC5A Soil 30/11/2010
Date Extracted		6/12/2010	6/12/2010
Date Analysed		6/12/2010	6/12/2010
Naphthalene	mg/kg	<0.10	<0.10
2-Methylnaphthalene	mg/kg	<0.10	<0.10
1-Methylnaphthalene	mg/kg	<0.10	<0.10
Acenaphthylene	mg/kg	<0.10	<0.10
Acenaphthene	mg/kg	<0.10	<0.10
Fluorene	mg/kg	<0.10	<0.10
Phenanthrene	mg/kg	0.47	<0.10
Anthracene	mg/kg	<0.10	<0.10
Fluoranthene	mg/kg	0.97	0.18
Pyrene	mg/kg	0.96	0.17
Benzo[*a*]anthracene	mg/kg	0.29	<0.10
Chrysene	mg/kg	0.30	<0.10
Benzo[*b,k*]fluoranthene	mg/kg	0.62	<0.20
Benzo[*a*]pyrene	mg/kg	0.42	<0.10
Indeno[*123-cd*]pyrene	mg/kg	0.40	<0.10
Dibenzo[*ah*]anthracene	mg/kg	<0.10	<0.10
Benzo[*ghi*]perylene	mg/kg	0.40	<0.10
Total PAHs (sum)	mg/kg	<5.63	<1.95
Nitrobenzene-d5	%	116	112
2-Fluorobiphenyl	%	100	96
p -Terphenyl-*d14*	%	102	94

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OC Pesticides in Soil Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ---------- ----------	SE83681-1 QC3A Soil 26/11/2010	SE83681-3 QC5A Soil 30/11/2010
Date Extracted		3/12/2010	3/12/2010
Date Analysed		3/12/2010	3/12/2010
HCB	mg/kg	<0.1	<0.1
alpha-BHC	mg/kg	<0.1	<0.1
gamma-BHC (Lindane)	mg/kg	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1
o,p-DDE	mg/kg	<0.1	<0.1
alpha-Endosulfan	mg/kg	<0.1	<0.1
trans-Chlordane *(gamma)*	mg/kg	<0.1	<0.1
cis-Chlordane *(alpha)*	mg/kg	<0.1	<0.1
trans-Nonachlor	mg/kg	<0.1	<0.1
p,p-DDE	mg/kg	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1
o,p-DDD	mg/kg	<0.1	<0.1
o,p-DDT	mg/kg	<0.1	<0.1
beta-Endosulfan	mg/kg	<0.1	<0.1
p,p-DDD	mg/kg	<0.1	<0.1
p,p-DDT	mg/kg	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1
Endrin Ketone	mg/kg	<0.1	<0.1
2,4,5,6-Tetrachloro-m-xylene *(Surrogate*	%	124	125

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OP Pesticides in Soil by GCMS Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ---------- ----------	SE83681-1 QC3A Soil 26/11/2010	SE83681-3 QC5A Soil 30/11/2010
Date Extracted		6/12/2010	6/12/2010
Date Analysed		6/12/2010	6/12/2010
Dichlorvos	mg/kg	<1	<1
Dimethoate	mg/kg	<1	<1
Diazinon	mg/kg	<0.5	<0.5
Fenitrothion	mg/kg	<0.2	<0.2
Malathion	mg/kg	<0.20	<0.20
Chlorpyrifos-ethyl	mg/kg	<0.2	<0.2
Parathion-ethyl	mg/kg	<0.2	<0.2
Bromofos-ethyl	mg/kg	<0.2	<0.2
Methidathion	mg/kg	<0.5	<0.5
Ethion	mg/kg	<0.2	<0.2
Azinphos-methyl	mg/kg	<0.20	<0.20
2-fluorobiphenyl (Surr)	%	100	96
d14-p-Terphenyl (Surr)	%	102	94

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PCBs in Soil Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ---------- ----------	SE83681-1 QC3A Soil 26/11/2010	SE83681-3 QC5A Soil 30/11/2010
Date Extracted		3/12/2010	3/12/2010
Date Analysed		3/12/2010	3/12/2010
Arochlor 1016	mg/kg	<0.1	<0.1
Arochlor 1221	mg/kg	<0.1	<0.1
Arochlor 1232	mg/kg	<0.1	<0.1
Arochlor 1242	mg/kg	<0.1	<0.1
Arochlor 1248	mg/kg	<0.1	<0.1
Arochlor 1254	mg/kg	<0.1	<0.1
Arochlor 1260	mg/kg	<0.1	<0.1
Arochlor 1262	mg/kg	<0.1	<0.1
Arochlor 1268	mg/kg	<0.1	<0.1
Total Positive PCB	mg/kg	<0.90	<0.90
PCB_Surrogate 1	%	124	125

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Metals in Soil by ICP-OES Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ---------- ----------	SE83681-1 QC3A Soil 26/11/2010	SE83681-3 QC5A Soil 30/11/2010
Date Extracted (Metals)		6/12/2010	6/12/2010
Date Analysed (Metals)		6/12/2010	6/12/2010
Arsenic	mg/kg	7	11
Cadmium	mg/kg	0.5	0.8
Chromium	mg/kg	21	30
Copper	mg/kg	17	18
Lead	mg/kg	72	90
Nickel	mg/kg	4.2	4.5
Zinc	mg/kg	78	85

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Mercury Cold Vapor/Hg Analyser Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ---------- ----------	SE83681-1 QC3A Soil 26/11/2010	SE83681-3 QC5A Soil 30/11/2010
Date Extracted (Mercury)		6/12/2010	6/12/2010
Date Analysed (Mercury)		6/12/2010	6/12/2010
Mercury	mg/kg	0.07	0.07

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Moisture Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ---------- ----------	SE83681-1 QC3A Soil 26/11/2010	SE83681-3 QC5A Soil 30/11/2010
Date Analysed (moisture)		6/12/2010	6/12/2010
Moisture	%	16	21

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Method ID	Methodology Summary
SEO-018	BTEX / C6-C9 Hydrocarbons - Soil samples are extracted with methanol, purged and concentrated by a purge and trap apparatus, and then analysed using GC/MS technique. Water samples undergo the same analysis without the extraction step. Based on USEPA 5030B and 8260B.
SEO-020	Total Recoverable Hydrocarbons - determined by solvent extraction with dichloromethane / acetone for soils and dichloromethane for waters, followed by instrumentation analysis using GC/FID. Where applicable Solid Phase Extraction Manifold technique is used for aliphatic / aromatic fractionation.
SEO-030	Polynuclear Aromatic Hydrocarbons - determined by solvent extraction with dichloromethane / acetone for soils and dichloromethane for waters, followed by instrumentation analysis using GC/MS SIM mode.
SEO-005	OC/OP/PCB - Determination of a suite of Organchlorine Pesticides, Chlorinated Organo-phosphorus Pesticides and Polychlorinated Biphenyls (PCB's) by liquid-liquid extraction using dichloromethane for waters, or mechanical extraction using acetone / hexane for soils, followed by instrumentation analysis using GC/ECD. Based on USEPA 8081/8082.
AN420	Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates, and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD/FID technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
SEM-010	Determination of elements by ICP-OES following appropriate sample preparation / digestion process. Based on USEPA 6010C / APHA 21st Edition, 3120B.
SEM-005	Mercury - determined by Cold-Vapour AAS following appropriate sample preparation or digestion process. Based on APHA 21st Edition, 3112B.
AN002	Preparation of soils, sediments and sludges undergo analysis by either air drying, compositing, subsampling and 1:5 soil water extraction where required. Moisture content is determined by drying the sample at 105 ± 5°C.

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QUALITY CONTROL MBTEX in Soil	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
Date Extracted (MBTEX)				06/12/10	[NT]	[NT]	LCS	06/12/10
Date Analysed (MBTEX)				06/12/10	[NT]	[NT]	LCS	06/12/10
Methyl-tert-butyl ether (MtBE)	mg/kg	0.1	SEO-018	<0.1	[NT]	[NT]	LCS	106%
Benzene	mg/kg	0.1	SEO-018	<0.1	[NT]	[NT]	LCS	97%
Toluene	mg/kg	0.1	SEO-018	<0.1	[NT]	[NT]	LCS	98%
Ethylbenzene	mg/kg	0.1	SEO-018	<0.1	[NT]	[NT]	LCS	100%
Total Xylenes	mg/kg	0.3	SEO-018	<0.3	[NT]	[NT]	LCS	103%
BTEX Surrogate (%)	%	0	SEO-018	106	[NT]	[NT]	LCS	96%

QUALITY CONTROL TRH in soil with C6-C9 by P/T	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
Date Extracted (TRH C6-C9 PT)				06/12/10	SE83681-1	6/12/2010 || 6/12/2010	LCS	06/12/10
Date Analysed (TRH C6-C9 PT)				06/12/10	SE83681-1	6/12/2010 || 6/12/2010	LCS	06/12/10
TRH C_6 - C_9 P&T	mg/kg	20	SEO-018	<20	SE83681-1	<20 || [N/T]	LCS	102%
Date Extracted (TRH C10-C36)				06/12/10	SE83681-1	6/12/2010 || 6/12/2010	LCS	06/12/10
Date Analysed (TRH C10-C36)				06/12/10	SE83681-1	6/12/2010 || 6/12/2010	LCS	06/12/10
TRH C_{10} - C_{14}	mg/kg	20	SEO-020	<20	SE83681-1	<20 || <20	LCS	113%
TRH C_{15} - C_{28}	mg/kg	50	SEO-020	<50	SE83681-1	<50 || <50	LCS	116%
TRH C_{29} - C_{36}	mg/kg	50	SEO-020	<50	SE83681-1	<50 || <50	LCS	106%

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QUALITY CONTROL PAHs in Soil	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
Date Extracted				06/12/10	SE83681-1	6/12/2010 || 6/12/2010	LCS	06/12/10
Date Analysed				06/12/10	SE83681-1	6/12/2010 || 6/12/2010	LCS	06/12/10
Naphthalene	mg/kg	0.1	SEO-030	<0.10	SE83681-1	<0.10 || <0.10	LCS	93%
2-Methylnaphthalene	mg/kg	0.1	SEO-030	<0.10	SE83681-1	<0.10 || <0.10	[NR]	[NR]
1-Methylnaphthalene	mg/kg	0.1	SEO-030	<0.10	SE83681-1	<0.10 || <0.10	[NR]	[NR]
Acenaphthylene	mg/kg	0.1	SEO-030	<0.10	SE83681-1	<0.10 || <0.10	LCS	100%
Acenaphthene	mg/kg	0.1	SEO-030	<0.10	SE83681-1	<0.10 || <0.10	LCS	112%
Fluorene	mg/kg	0.1	SEO-030	<0.10	SE83681-1	<0.10 || <0.10	[NR]	[NR]
Phenanthrene	mg/kg	0.1	SEO-030	<0.10	SE83681-1	0.47 || 0.38 || RPD: 21	LCS	102%
Anthracene	mg/kg	0.1	SEO-030	<0.10	SE83681-1	<0.10 || <0.10	LCS	128%
Fluoranthene	mg/kg	0.1	SEO-030	<0.10	SE83681-1	0.97 || 0.83 || RPD: 16	LCS	113%
Pyrene	mg/kg	0.1	SEO-030	<0.10	SE83681-1	0.96 || 0.83 || RPD: 15	LCS	118%
Benzo[*a*]anthracene	mg/kg	0.1	SEO-030	<0.10	SE83681-1	0.29 || 0.25 || RPD: 15	[NR]	[NR]
Chrysene	mg/kg	0.1	SEO-030	<0.10	SE83681-1	0.30 || 0.26 || RPD: 14	[NR]	[NR]
Benzo[*b,k*]fluoranthene	mg/kg	0.2	SEO-030	<0.20	SE83681-1	0.62 || 0.58 || RPD: 7	[NR]	[NR]
Benzo[*a*]pyrene	mg/kg	0.1	SEO-030	<0.10	SE83681-1	0.42 || 0.38 || RPD: 10	LCS	115%
Indeno[*123-cd*]pyrene	mg/kg	0.1	SEO-030	<0.10	SE83681-1	0.40 || 0.38 || RPD: 5	[NR]	[NR]
Dibenzo[*ah*]anthracene	mg/kg	0.1	SEO-030	<0.10	SE83681-1	<0.10 || <0.10	[NR]	[NR]
Benzo[*ghi*]perylene	mg/kg	0.1	SEO-030	<0.10	SE83681-1	0.40 || 0.37 || RPD: 8	[NR]	[NR]
Total PAHs (sum)	mg/kg	1.8	SEO-030	<1.8	SE83681-1	<5.63 || <5.06	[NR]	[NR]
Nitrobenzene-d5	%	0	SEO-030	114	SE83681-1	116 || 118 || RPD: 2	LCS	112%
2-Fluorobiphenyl	%	0	SEO-030	92	SE83681-1	100 || 100 || RPD: 0	LCS	94%
p -Terphenyl-*d*14	%	0	SEO-030	84	SE83681-1	102 || 98 || RPD: 4	LCS	82%

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QUALITY CONTROL OC Pesticides in Soil	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
Date Extracted				3/12/2010	SE83681-3	3/12/2010 || 3/12/2010	LCS	3/12/2010
Date Analysed				3/12/2010	SE83681-3	3/12/2010 || 3/12/2010	LCS	3/12/2010
HCB	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
alpha-BHC	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
gamma-BHC (Lindane)	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
Heptachlor	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	LCS	124%
Aldrin	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	LCS	101%
beta-BHC	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
delta-BHC	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	LCS	93%
Heptachlor Epoxide	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
o,p-DDE	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
alpha-Endosulfan	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
trans-Chlordane *(gamma)*	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
cis-Chlordane *(alpha)*	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
trans-Nonachlor	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
p,p-DDE	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
Dieldrin	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	LCS	81%
Endrin	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	LCS	88%
o,p-DDD	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
o,p-DDT	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
beta-Endosulfan	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
p,p-DDD	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
p,p-DDT	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	LCS	81%
Endosulfan Sulphate	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
Endrin Aldehyde	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
Methoxychlor	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
Endrin Ketone	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
2,4,5,6-Tetrachloro-m-xylene *(Surrogate*	%	0	SEO-005	98	SE83681-3	125 || 128 || RPD: 2	LCS	76%

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QUALITY CONTROL OP Pesticides in Soil by GCMS	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
Date Extracted				06/12/10	SE83681-1	6/12/2010 || 6/12/2010	LCS	06/12/10
Date Analysed				06/12/10	SE83681-1	6/12/2010 || 6/12/2010	LCS	06/12/10
Dichlorvos	mg/kg	1	AN420	<1	SE83681-1	<1 || <1	LCS	101%
Dimethoate	mg/kg	1	AN420	<1	SE83681-1	<1 || <1	[NR]	[NR]
Diazinon	mg/kg	0.5	AN420	<0.5	SE83681-1	<0.5 || <0.5	LCS	104%
Fenitrothion	mg/kg	0.2	AN420	<0.2	SE83681-1	<0.2 || <0.2	[NR]	[NR]
Malathion	mg/kg	0.2	AN420	<0.20	SE83681-1	<0.20 || <0.20	[NR]	[NR]
Chlorpyrifos-ethyl	mg/kg	0.2	AN420	<0.2	SE83681-1	<0.2 || <0.2	LCS	122%
Parathion-ethyl	mg/kg	0.2	AN420	<0.2	SE83681-1	<0.2 || <0.2	[NR]	[NR]
Bromofos-ethyl	mg/kg	0.2	AN420	<0.2	SE83681-1	<0.2 || <0.2	[NR]	[NR]
Methidathion	mg/kg	0.5	AN420	<0.5	SE83681-1	<0.5 || <0.5	[NR]	[NR]
Ethion	mg/kg	0.2	AN420	<0.2	SE83681-1	<0.2 || <0.2	LCS	127%
Azinphos-methyl	mg/kg	0.2	AN420	<0.20	SE83681-1	<0.20 || <0.20	[NR]	[NR]
2-fluorobiphenyl (Surr)	%	0	AN420	92	SE83681-1	100 || 100 || RPD: 0	LCS	94%
d14-p-Terphenyl (Surr)	%	0	AN420	84	SE83681-1	102 || 98 || RPD: 4	LCS	78%

QUALITY CONTROL PCBs in Soil	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
Date Extracted				3/12/2010	SE83681-3	3/12/2010 || 3/12/2010	LCS	3/12/2010
Date Analysed				3/12/2010	SE83681-3	3/12/2010 || 3/12/2010	LCS	3/12/2010
Arochlor 1016	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
Arochlor 1221	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
Arochlor 1232	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
Arochlor 1242	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
Arochlor 1248	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
Arochlor 1254	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
Arochlor 1260	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	LCS	69%
Arochlor 1262	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
Arochlor 1268	mg/kg	0.1	SEO-005	<0.1	SE83681-3	<0.1 || <0.1	[NR]	[NR]
Total Positive PCB	mg/kg	0.9	SEO-005	<0.90	SE83681-3	<0.90 || <0.90	[NR]	[NR]
PCB_Surrogate 1	%	0	SEO-005	98	SE83681-3	125 || 128 || RPD: 2	LCS	72%

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QUALITY CONTROL Metals in Soil by ICP-OES	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
Date Extracted (Metals)				6/12/2010	[NT]	[NT]	LCS	6/12/2010
Date Analysed (Metals)				6/12/2010	[NT]	[NT]	LCS	6/12/2010
Arsenic	mg/kg	3	SEM-010	<3	[NT]	[NT]	LCS	110%
Cadmium	mg/kg	0.3	SEM-010	<0.3	[NT]	[NT]	LCS	115%
Chromium	mg/kg	0.3	SEM-010	<0.3	[NT]	[NT]	LCS	106%
Copper	mg/kg	0.5	SEM-010	<0.5	[NT]	[NT]	LCS	107%
Lead	mg/kg	1	SEM-010	<1	[NT]	[NT]	LCS	112%
Nickel	mg/kg	0.5	SEM-010	<0.5	[NT]	[NT]	LCS	109%
Zinc	mg/kg	0.5	SEM-010	<0.5	[NT]	[NT]	LCS	108%

QUALITY CONTROL Mercury Cold Vapor/Hg Analyser	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
Date Extracted (Mercury)				6/12/2010	[NT]	[NT]	LCS	6/12/2010
Date Analysed (Mercury)				6/12/2010	[NT]	[NT]	LCS	6/12/2010
Mercury	mg/kg	0.05	SEM-005	<0.05	[NT]	[NT]	LCS	114%

QUALITY CONTROL Hold sample-**NO test** required	UNITS	LOR	METHOD	Blank
Sample on HOLD		[NT]		[NT]

QUALITY CONTROL Moisture	UNITS	LOR	METHOD	Blank
Date Analysed (moisture)				[NT]
Moisture	%	1	AN002	<1

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Result Codes

[INS] : Insufficient Sample for this test
[NR] : Not Requested
[NT] : Not tested
[LOR] : Limit of reporting
[RPD] : Relative Percentage Difference
* : Not part of NATA Accreditation
[N/A] : Not Applicable

Report Comments

Samples analysed as received. Solid samples expressed on a dry weight basis.
Date Organics extraction commenced:
NATA Corporate Accreditation No. 2562, Site No 4354
Note: Test results are not corrected for recovery (excluding Air-toxics and Dioxins/Furans*)
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Quality Control Protocol

Method Blank: An analyte free matrix to which all reagents are added in the same volume or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. A method blank is prepared every 20 samples.
Duplicate: A separate portion of a sample being analysed that is treated the same as the other samples in the batch. One duplicate is processed at least every 10 samples.
Surrogate Spike: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are added to samples before extraction to monitor extraction efficiency and percent recovery in each sample.
Internal Standard: Added to all samples requiring analysis for organics (where relevant) or metals by ICP after the extraction/digestion process; the compounds/elements serve to give a standard of retention time and/or response, which is invariant from run-to-run with the instruments.
Laboratory Control Sample: A known matrix spiked with compound(s) representative of the target analytes. It is used to document laboratory performance. When the results of the matrix spike analysis indicates a potential problem due to the sample matrix itself, the LCS results are used to verify that the laboratory can perform the analysis in a clean matrix.
Matrix Spike: An aliquot of sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Quality Acceptance Criteria

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf

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SAMPLE RECEIPT ADVICE (SRA)

2 December 2010

Client Details			Laboratory Details		
Requested By	:	**Tim Davis**			
Client	:	JBS Environmental Pty Ltd	Laboratory	:	SGS Environmental Services
Contact	:	Tim Davis	Manager	:	Edward Ibrahim
Address	:	PO Box 940 MASCOT NSW 1460	Address	:	Unit 16, 33 Maddox Street Alexandria NSW 2015
Email	:	tdavis@jbsgroup.com.au	Email	:	au.samplereceipt.sydney@sgs.com
Telephone	:	02 8338 1013	Telephone	:	61 2 8594 0400
Facsimile	:	02 8338 1700	Facsimile	:	61 2 8594 0499
Project	:	41131 - Riverwood North Renewal	Report No	:	**SE83681**
Order Number	:		No. of Samples	:	3
Samples	:	3 Soils	Due Date	:	8/12/2010

Date Instructions Received	:	1/12/2010
Sample Receipt Date	:	1/12/2010

Samples received in good order	:	YES	Samples received in correct containers	:	YES
Samples received without headspace	:	YES	Sufficient quantity supplied	:	YES
Upon receipt sample temperature	:	Cool	Cooling Method	:	Ice
Sample containers provided by	:	Other Lab	Samples clearly Labelled	:	YES
Turnaround time requested	:	Standard	Completed documentation received	:	YES

Samples will be held for 1 month for water samples and 3 months for soil samples from date of receipt of samples, unless otherwise instructed.

Comments

The signed chain of custody will be returned to you with the original report.

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Member of the SGS Group (SGS SA)

SAMPLE RECEIPT ADVICE (SRA) - continued

Client : JBS Environmental Pty Ltd
Project : 41131 - Riverwood North Renewal

Report No : SE83681

Summary of Samples and Requested Analysis

The table below represents SGS Environmental Service's understanding and interpretation of the customer supplied sample request.

Please indicate ASAP if your request differs from these details.

Testing shall commence immediately as per this table, unless the customer intervenes with a correction prior to testing.

Note that a small X in the table below indicates some testing has not been requested in the package.

Sample No.	Description	Metals Prep, soil 8 HM	MBTEX in Soil	TRH in soil with C6-C9 by P/T	PAHs in Soil	OC Pesticides in Soil	OP Pesticides in Soil by GCMS	PCBs in Soil	Metals in Soil by ICP-OES	Mercury Cold Vapor/Hg Analyser	Hold sample-NO test required	Moisture
1	QC3A	X	X	X	X	X	X	X	X	X		X
2	QC4A										X	
3	QC5A	X	X	X	X	X	X	X	X	X		X

Sample No.	Description
1	QC3A
2	QC4A
3	QC5A

SGS

JBS ENVIRONMENTAL

CHAIN OF CUSTODY

PROJECT NO.: 41131
PROJECT NAME RIVERWOOD NORTH RENEWAL
SEND REPORT TO: T.DAVIS / S.DORARAJ SEND INVOICE TO: A.WORTH
DATE NEEDED BY: STANDARD TURN AROUND
COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:

LABORATORY BATCH NO.
SAMPLERS T.DAVIS
PHONE: 02 83381011 EMAIL: tdavis@jbsgroup.com.au
QC LEVEL: NEPM 1999 (✓) sdoraraj@jbsgroup.com.au

	SAMPLE ID	MATRIX	DATE	TIME	TYPE & PRESERVATIVE	pH	TPH/BTEX	PAHs	OC/OP/PCB	8 HM	Hold	NOTES
1	QC3A	SOIL	26/11/10	-	JAR + ICE		X	X	X	X		
2	QC4A	↓	30/11/10	-	↓						X	
3	QC5A	↓	↓	-	↓		X	X	X	X		

SGS
Received 1/12/10
Time 330
Samples intact 8
Cooler Pack
Temperature on Receipt 4
Storage Location SQ95
SGS Ref No SE83681

RELINQUISHED BY:	METHOD OF SHIPMENT:	RECEIVED BY:	FOR RECEIVING LAB USE ONLY:
NAME: Tim Davis DATE:	CONSIGNMENT NOTE NO.	NAME: DP DATE:	COOLER SEAL – Yes ✓ No ..... Intact ..... Broken .....
OF: JBS 30/11/10	TRANSPORT CO. clc 30/11/10	OF: SGS 1/12/10	COOLER TEMP 5 deg C
NAME: DATE:	CONSIGNMENT NOTE NO.	NAME: DATE:	COOLER SEAL – Yes..... No ..... Intact ..... Broken .....
OF:	TRANSPORT CO	OF:	COOLER TEMP ..... deg C

Container & Preservative Codes: P = Plastic; J = Soil Jar; B = Glass Bottle; N = Nitric Acid Prsvd.; C = Sodium Hydroxide Prsvd; VC = Hydrochloric Acid Prsvd Vial; VS = Sulfuric Acid Prsvd Vial; S = Sulfuric Acid Prsvd; Z = Zinc Prsvd; E = EDTA Prsvd; ST = Sterile Bottle; O = Other

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Document Status

Rev No.	Author	Reviewer	Approved for Issue		
		Name	Name	Signature	Date
A	Sumi Dorairaj	Charlie Furr	Charlie Furr		10/12/10
0	Sumi Dorairaj	Charlie Furr	Charlie Furr		27/01/11

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