Southern Testing
Environmental & Geotechnical

TEST HOLE LOG

National Grid Reference		TQ 601 577	
Job No	J9015	Date	11/10/2006
Logged by	LJB	Engineer	LJB

Site : Borough Green Sand Pits, H&H Celcon, Ightham

Client : H&H Celcon

Excavation Method : JCB

Hole No TP1

Water strikes: None
Water level: None
Pit sides: Stable

Depth m/mm	Sample Type or Test Type & Value	Depth (Thickness)	Key	Soil Description
300 400	D ⊥ 150	(1.0)	MADE GROUND	Medium-high strength mid-orange brown fine sandy clay MADE GROUND with much brick, concrete, ceramic fragments, flint and chalk gravel
1.0	D	1.0 (500)	MADE GROUND	Grey/black stained and odorous hardcore MADE GROUND with blacktop and strong hydrocarbon odour - possibly diesel
1.5	D ▽ 26	1.5 1.6	MADE GROUND	Medium dense pale grey fine sand MADE GROUND
2.5	D	(1.6)	MADE GROUND	Grey/black stained and odorous hardcore MADE GROUND with blacktop and slight hydrocarbon odour
3.2	D	3.2		

Hole No TP2

Water strikes: Seeps from 2.5m
Water level: 3.2m after 5 mins
Pit sides: Slightly unstable

Depth m/mm	Sample Type or Test Type & Value	Depth (Thickness)	Key	Soil Description
600	D	(2.4)	MADE GROUND	Compacted mid-dark brown fine sandy clay MADE GROUND with much brick, concrete, chalk and patches of grey/black staining and odours. Crushed metal drums, metal wire and odours from 1.0m
1.5	D	2.4		
2.0	D	(1.0)	MADE GROUND	Loosely compacted grey/black sodden gravelly clay MADE GROUND. Slight hydrocarbon odours
2.5	D	3.4		

Hole No TP3

Water strikes: None
Water level: None
Pit sides: Unstable

Depth m/mm	Sample Type or Test Type & Value	Depth (Thickness)	Key	Soil Description
400	D	(1.1)	MADE GROUND	Compacted mid brown sandy clay MADE GROUND with brick footings, concrete, whole bricks, flint gravel, plastic and metal piping. Much polythene sheeting at 1.0m
1.2	D	1.1		
1.5	▽ 8 ▼ 5	(1.8)	MADE GROUND	Loose yellow/pale grey silty fine-medium sand MADE GROUND with occasional medium-coarse flint gravels
3.0	D	2.9 3.0	CONCRETE	Large concrete obstruction
		3.2	MADE GROUND	Grey brown silty sandy MADE GROUND with concrete, brick, black staining and slight odours

Hole No TP4

Water strikes: None
Water level: None
Pit sides: Unstable

Depth m/mm	Sample Type or Test Type & Value	Depth (Thickness)	Key	Soil Description
400	D	(2.8)	MADE GROUND	Compacted mid brown silty fine sandy clay MADE GROUND with brick, blacktop, flint gravels and roots. Occasional plastic sheeting. Large concrete obstruction at 2.4m
1.5	D	2.8		
2.0	⊥ 140	(900)	MADE GROUND	Compacted green/yellow silty clayey sand MADE GROUND with fragments of chalk and occasional iron stained patches. Becoming clayey from 3.4m
2.9	D	3.7		
3.4	D			

▽: Perth Penetration Test, 'N' value; ▼: Standard Penetration Test, 'N' values; ⊥: Unconfined Compression Strength by hand penetrometer, kN/m2;
V: Shear Vane test, kN/m2; X: CBR by Mexe cone penetrometer, %; D: Disturbed sample; U: Undisturbed sample; B: Bulk sample; W: Water sample

Southern Testing
Environmental & Geotechnical

TEST HOLE LOG

National Grid Reference		TQ 601 577	
Job No	J9015	Date	11/10/2006
Logged by	LJB	Engineer	LJB

Site : Borough Green Sand Pits, H&H Celcon, Ightham

Client : H&H Celcon

Excavation Method : JCB

Hole No TP5

Water strikes: Slight seep at 1.9m
Water level: None
Pit sides: Collapsed

Depth m/mm	Sample Type or Test Type & Value	Depth (Thickness)	Key	Soil Description
600	D ⊥ 90	(1.1)	MADE GROUND	Medium strength mid brown slightly sandy silty clay MADE GROUND with brick and roots
1.5	D	(800)	MADE GROUND	Mid-dark brown and black stained patches silty clayey MADE GROUND with large lumps of reinforced concrete, brick polythene, and metal sheeting
2.0	D	(1.1)	MADE GROUND	Black, sodden, stained and odorous (hydrocarbon) MADE GROUND with metal, concrete and pipework. From 2.5 moderate hydrocarbon odours
2.8	D	3.0		

Hole No TP6

Water strikes: Seep at 2m
Water level: None
Pit sides: Unstable

Depth m/mm	Sample Type or Test Type & Value	Depth (Thickness)	Key	Soil Description
600	D	(1.8)	MADE GROUND	Compacted orange brown with pale grey sandy patches, clayey MADE GROUND with brick, rounded flint gravel, yellow and grey aircrete blocks, chalk fragments and slight hydrocarbon odour from 1.5m
1.5	D	1.8		
2.0	D	(0.2)	MADE GROUND	Medium strength orange/yellow grey sandy clay MADE GROUND with patches of black staining, brick and metal
2.2	⊥ 150	(2.0)	MADE GROUND	Loosely compacted sodden dark grey stained and slightly odorous sandy clay MADE GROUND with whole bricks and concrete
3.6	D	4.0		

Hole No TP7

Water strikes: None
Water level: None
Pit sides: Unstable

Depth m/mm	Sample Type or Test Type & Value	Depth (Thickness)	Key	Soil Description
600	D	(800)	MADE GROUND	Compacted mid brown silty sandy clayey MADE GROUN with flint gravel, chalk, concrete and tiles
1.5	D	800	MADE GROUND	Mid-dark brown silty sandy MADE GROUND with occasional blue grey patches, large concrete fragments, wooden poles, metal wire and brick
2.5	D	(2.9)		
		3.7		

Hole No TP8

Water strikes: None
Water level: None
Pit sides: Collapsed

Depth m/mm	Sample Type or Test Type & Value	Depth (Thickness)	Key	Soil Description
500	D	(1.0)	MADE GROUND	Compacted mid brown silty very sandy clay MADE GROUND with frequent concrete and brick, coal and flint gravels
1.0	⊥ 150	1.0		
1.5	D	(2.0)	MADE GROUND	Medium strength orange brown mottled grey silty sandy clay MADE GROUND with occasional brick, concrete, with much pipework, large concrete fragments, steel RSJ and slight hydrocarbon odours from 2.0m
2.5	D	3.0		
3.1	D	(700)	MADE GROUND	Medium strength orange brown slightly clayey very sandy MADE GROUND with occasional flint and brick.
		3.7		

'V': Perth Penetration Test, 'N' value; ▼: Standard Penetration Test, 'N' values; ⊥: Unconfined Compression Strength by hand penetrometer, kN/m2;
V: Shear Vane test, kN/m2; X: CBR by Mexe cone penetrometer, %; D: Disturbed sample; U: Undisturbed sample; B: Bulk sample; W: Water sample

Southern Testing
Environmental & Geotechnical

TEST HOLE LOG

National Grid Reference		TQ 601 577	
Job No	J9015	Date	11/10/2006
Logged by	LJB	Engineer	LJB

Site : Borough Green Sand Pits, H&H Celcon, Ightham

Client : H&H Celcon

Excavation Method : JCB

Hole No TP9

Water strikes: None
Water level: None
Pit sides: Unstable

Depth m/mm	Sample Type or Test Type & Value	Depth (Thickness)	Key	Soil Description
500	D	(1.2)	MADE GROUND	Compacted orange brown fine sandy silty clay MADE GROUND with occasional flint gravels, polyethene and brick
1.3	D	1.2	MADE GROUND	Compacted dark grey silty clay MADE GROUND with brick, chalk, wire and slight organic/ weathered hydrocarbon odours
1.5	D	(500)	MADE GROUND	Compacted off white hard chalk MADE GROUND with matrix material comprising grey brown silty clay and brick. Large lumps of reinforced concrete
2.0	D	1.7	MADE GROUND	Compacted dark grey silty clay MADE GROUND with brick, chalk, wire and slight organic/ weathered hydrocarbon odours
2.9	D	(500)		
		2.2		
		(700)		
		2.9		

Hole No TP10

Water strikes: None
Water level: None
Pit sides: Unstable

Depth m/mm	Sample Type or Test Type & Value	Depth (Thickness)	Key	Soil Description
		(500)	MADE GROUND	Compacted mid-orange brown silty fine sandy clay MADE GROUND with much brick and grey aircrete blocks
		500	MADE GROUND	Loosely compacted grey crushed and whole aircrete blocks MADE GROUND
		(2.0)		
		2.5		

Hole No TP11

Water strikes: None
Water level: None
Pit sides: Stable

Depth m/mm	Sample Type or Test Type & Value	Depth (Thickness)	Key	Soil Description
600	D	(900)	CLAY	Medium-high strength mid-orange brown fine sandy CLAY with frequent fine-coarse angular-subangular flint gravel
1.0	D 17	900	SAND	Medium dense yellow/orange fine SAND. Clayey patches from 1.6m. Becoming dense with weakly cemented patches from 2.0m
1.8	36	(1.9)		
2.0	D	2.8		

Hole No

Water strikes:
Water level:
Pit sides:

Depth m/mm	Sample Type or Test Type & Value	Depth (Thickness)	Key	Soil Description

'N': Perth Penetration Test, 'N' value; ▼: Standard Penetration Test, 'N' values; ⊥: Unconfined Compression Strength by hand penetrometer, kN/m2; V: Shear Vane test, kN/m2; X: CBR by Mexe cone penetrometer, %; D: Disturbed sample; U: Undisturbed sample; B: Bulk sample; W: Water sample

Southern Testing
Environmental & Geotechnical

Job No: J9015 Hole No: 1

National Grid Reference		TQ 601 577	
Start date	13/10/2008	End date	30/12/1899
Ground level	72.84	Backfill date	30/12/1899
Logged by	LJB	Engineer	LJB
Final depth	15.00	Page	1 of 1

Site : Borough Green Sand Pits,, H&H Celcon, Ightham

Client : H&H Celcon

Drilling Method : Shell and Auger (150mm)

Piezometer	Testing Depth	Testing (Results / Blows)	Samples Depth	Samples Type	Strata Thickness	Strata Level	Strata Legend	Strata Depth	Strata Description	Strata Description
			0.20	D					MADE GROUND	Medium strength sandy clay MADE GROUND with brick, chalk fragments and roots
			0.30	D	1.70					
			1.00	D						
	1.50	SPT(c) (4)	1.50	D		71.14		1.70	MADE GROUND	Medium strength green grey sandy clay MADE GROUND with brick, block fragment, stained patches and clinker, and occasional fine gravels.
			1.70	D	0.90					
			2.60	D	0.20	70.24		2.60	MADE GROUND	Grey aircrete block MADE GROUND
	3.00	SPT	2.80	D		70.04		2.80		
			3.00	D						
			3.00	B					SAND	Very dense fine grey slightly silty SAND. Weakly cemented in patches
	4.50	SPT	4.50	D						
			4.50	B						
	6.00	SPT	6.00	D						
			6.00	B						
	7.50	SPT	7.50	D	9.40					
			7.50	B						
			9.00	B						
			10.50	B						
			12.00	B		60.64		12.20	SAND	Very dense fine brown slight silty SAND
			13.50	B	2.80					
			15.00	B		57.84		15.00		End of Borehole

Hole Diameters			Water Strikes						Chiselling Time			General Remarks
Depth (m)	Hole (mm)	Casing (mm)	Date	Water (m)	Casing (m)	Time (mins)	Rose to (m)	Sealed (m)	From (m)	To (m)	Time (hrs)	
15.00	150	150	12/01/00	12.20	12.00	20						

Southern Testing
Environmental & Geotechnical

Job No: **J9015** Hole No: **2**

National Grid Reference	TQ 601 577		
Start date	30/12/1899	End date	30/12/1899
Ground level	78.60	Backfill date	30/12/1899
Logged by	LJB	Engineer	LJB
Final depth	12.00	Page	1 of 1

Site : Borough Green Sand Pits,, H&H Celcon, Ightham

Client : H&H Celcon

Drilling Method : Shell and Auger (150mm)

Testing / Samples

Testing Depth	SPT/CPT(N value) / U(blows)	Sample Depth	Type
		0.30	D
		0.50	D
		1.00	D
1.50	SPT(c)	1.50	D
		2.50	D
3.00	SPT(c) (12)	3.00	D
4.50	SPT(c) (21)	4.50	D
6.00	SPT(c) (20)	6.00	D
7.50	SPT(c) (25)		
		7.80	D
		10.00	D
		11.20	D

Strata

Thickness	Level	Depth	Strata	Strata Descriptions
1.20	77.40	1.20	MADE GROUND	Low strength orange brown and black stained in patches, very sandy clay MADE GROUND with fine gravel, concrete and clinker
0.40	77.00	1.60	MADE GROUND	Hard large concrete pieces with sandy clay matrix MADE GROUND
6.20	70.80	7.80	MADE GROUND	Hard large concrete and aircrete block pieces with sandy clay matrix MADE GROUND Blue grey and moderate oily odour Blue grey and slight oily odour
3.40	67.40	11.20	MADE GROUND	Dark grey/blue grey and brown sandy clayey MADE GROUND with brick, metal and wood fragments Slight organic odours
0.80	66.60	12.00	SAND	Dense grey silty fine SAND with clayey patches
				End of Borehole

Hole Diameters			Water Strikes						Chiselling Time			General Remarks
Depth (m)	Hole (mm)	Casing (mm)	Date	Water (m)	Casing (m)	Time (mins)	Rose to (m)	Sealed (m)	From (m)	To (m)	Time (hrs)	
12.00	150	150	30/12/99									

Southern Testing
Environmental & Geotechnical

Job No: **J9015** Hole No: **3**

National Grid Reference		TQ 601 577	
Start date	30/12/1899	End date	30/12/1899
Ground level	80.50	Backfill date	30/12/1899
Logged by	LJB	Engineer	LJB
Final depth	15.00	Page	1 of 1

Site : Borough Green Sand Pits,, H&H Celcon, Ightham

Client : **H&H Celcon**

Drilling Method : Shell and Auger (150mm)

Piezometer	Testing Depth	Testing SPT(c) (N value) Ubbold	Samples Depth	Samples Type	Strata Thickness	Strata Level	Strata Legend	Strata Depth	Strata Descriptions	
			0.50	D					MADE GROUND	Medium strength mid brown sandy clay MADE GROUND with brick, gravel, wood and concrete
			1.00	D						
	1.50	SPT(c) (22)	1.50	D	2.60					
			2.50	D		77.90		2.60		
	3.00	SPT(c) (11)	3.00	D	0.30	77.60		2.90	MADE GROUND	High strength brown grey clay MADE GROUND with much concrete.
					0.50	77.10		3.40		
			4.00	D					MADE GROUND	Medium strength dark brown clay MADE GROUND with aircrete blocks, concrete, chalk, brick and blackened patches.
	4.50	SPT(c) (11)			2.40				MADE GROUND	Grey sandy clay MADE GROUND with concrete, brick and plastic
						74.70		5.80		
	6.00	SPT (7)	6.00	D	0.90				MADE GROUND	Loose yellow grey sandy clay MADE GROUND with slight solventy odour.
			6.00	D		73.80		6.70		
			7.00	B					MADE GROUND	Dark blue/grey gravelly sandy clay MADE GROUND with lumps of concrete
			8.00	D	3.10					Slight organic odours
			9.00	D						Slight organic odours
						70.70		9.80		
			10.00	D					MADE GROUND	Dark blue/grey sandy clay MADE GROUND with occasional fine flint gravel and sandy patches
			10.00	W						
			11.00	D	2.60					
			12.00	D						
			12.40	B		68.10		12.40	SAND	Dense yellow brown fine-medium SAND
					0.80					
			13.50	B		67.30		13.20	SAND	Dense pale grey fine-medium SAND with occasional sandstone gravel
					1.80					
			15.00	B		65.50		15.00		End of Borehole

Hole Diameters			Water Strikes						Chiselling Time			General Remarks
Depth (m)	Hole (mm)	Casing (mm)	Date	Water (m)	Casing (m)	Time (mins)	Rose to (m)	Sealed (m)	From (m)	To (m)	Time (hrs)	
7.50	200	200	30/12/99									
15.00	150	150										

Southern Testing
Environmental & Geotechnical

Job No: J9015 Hole No: 5

National Grid Reference		TQ 601 577	
Start date	30/12/1899	End date	30/12/1899
Ground level	85.00	Backfill date	30/12/1899
Logged by	LJB	Engineer	LJB
Final depth	10.00	Page	1 of 1

Site : Borough Green Sand Pits,, H&H Celcon, Ightham

Client : H&H Celcon

Drilling Method : Shell and Auger (150mm)

Piezometer	Testing Depth	Testing SPT/CPT/Cone/Vane	Samples Depth	Samples Type	Strata Thickness	Strata Level	Strata Legend	Strata Depth	Strata Descriptions	
			0.50	D					MADE GROUND	Low-medium strength mid brown sandy clay MADE GROUND with frequent flint concrete and brick fragments.
			1.00	D						
			2.00	D	3.70					
			3.00	D						Blue stained from 3m - no odours
			4.00	D		81.30		3.70	MADE GROUND	Mid brown sandy clay MADE GROUND with frequent flint and brick fragments.
			5.00	D						Slightly stained blue grey
			6.00	D						Strong hydrocarbon odours and black staining from 5-7m
			7.00	D	6.30					
			8.00	D						
			9.00	D						
			10.00	D		75.00		10.00		End of Borehole

Hole Diameters			Water Strikes						Chiselling Time			General Remarks
Depth (m)	Hole (mm)	Casing (mm)	Date	Water (m)	Casing (m)	Time (mins)	Rose to (m)	Sealed (m)	From (m)	To (m)	Time (hrs)	
4.50	200	200	30/12/99	6.90	6.00	20		7.20				
10.00	150	150										

Southern Testing
Environmental & Geotechnical

Job No: J9015 Hole No: 6

Site : Borough Green Sand Pits,, H&H Celcon, Ightham

Client : H&H Celcon

Drilling Method : Shell and Auger (150mm)

National Grid Reference		TQ 601 577	
Start date	26.10.06	End date	26.10.06
Ground level	78.10	Backfill date	26.10.06
Logged by	LJB	Engineer	LJB
Final depth	10.00	Page	1 of 1

Piezometer	Testing Depth	Testing SPT(C or Field) (Value)	Samples Depth	Samples Type	Strata Thickness	Strata Level	Strata Legend	Strata Depth	Strata Descriptions	
			1.00	D	1.60				MADE GROUND	High strength mid brown sandy clay and gravel MADE GROUND with much brick, concrete and plastic, with occasional clinker fragments
			2.00	D		76.50		1.60	MADE GROUND	Low strength mid brown blue/grey and occasional green grey patches, sandy clay MADE GROUND with brick, clinker and chalk. Slight hydrocarbon odours
			3.00	D	2.90					
			4.00	D						
			5.00	D		73.60		4.50		Less staining and odour
			6.00	D					MADE GROUND	Medium strength orange brown and dark blue green stained sandy clay MADE GROUND with sandstone gravel, conrete and occasional chalk fragments
			7.00	D	4.30					Stained and slight hydrocarbon odours at 6m
			8.00	D						
			9.00	B	0.70	69.30		8.80	SAND /GRAVEL	Dense brown fine sand with fine-coarse flint gravel
			10.00	B	0.50	68.60		9.50	SAND	Dense orange brown fine SAND
						68.10		10.00		End of Borehole

Hole Diameters			Water Strikes						Chiselling Time			General Remarks
Depth (m)	Hole (mm)	Casing (mm)	Date	Water (m)	Casing (m)	Time (mins)	Rose to (m)	Sealed (m)	From (m)	To (m)	Time (hrs)	
8.00	200	200	26.10.06	DRY		20						
10.00	150	150										

Southern Testing
Environmental & Geotechnical

Job No: J9015 Hole No: 7

National Grid Reference		TQ 601 577	
Start date	25.10.06	End date	25.10.06
Ground level	79.10	Backfill date	25.10.06
Logged by	LJB	Engineer	LJB
Final depth	10.00	Page	1 of 1

Site : Borough Green Sand Pits,, H&H Celcon, Ightham

Client : H&H Celcon

Drilling Method : Shell and Auger (150mm)

Piezometer	Testing Depth	Testing SPT/CPT/Field (Nmkg)	Samples Depth	Samples Type	Strata Thickness	Strata Level	Strata Legend	Strata Depth	Strata Descriptions	
			1.00	D	3.00				MADE GROUND	Medium strength mid-dark brown silty clay MADE GROUND with chalk fragments, brick and patches of dark staining
			2.00	D						Mixture of orange brown plastic clay and mid brown silty topsoily MADE GROUN
			3.00	D		76.10		3.00	MADE GROUND	Medium strength dark brown/black sandy clayey gravelly MADE GROUND with clinker, brick, concretesandstone and metal pieces. Slight oily/hydrocarbon odour
			4.00	D	3.40					Pale brown sandy clayey MADE GROUND
			5.00	D						
			6.00	D	0.30	72.70		6.40		Pale brown sandy clayey MADE GROUND with frequent chalk fragments
			7.00	D		72.40		6.70	MADE GROUND	Dense fine grey sand MADE GROUND with wire, metal and frequent brick and concrete. Strong hydrocarbon odour and staining.
			8.00	D	3.30				SAND /GRAVEL	Dense grey fine SAND with occasional fine sandstone gravel
			9.00	B						
			10.00	B		69.10		10.00		End of Borehole

Hole Diameters			Water Strikes						Chiselling Time			General Remarks
Depth (m)	Hole (mm)	Casing (mm)	Date	Water (m)	Casing (m)	Time (mins)	Rose to (m)	Sealed (m)	From (m)	To (m)	Time (hrs)	
7.50	200	200	25.10.06	DRY		20						
10.00	150	150										

Southern Testing
Environmental & Geotechnical

Job No: J9015 Hole No: 8

National Grid Reference		TQ 601 577	
Start date	24.10.06	End date	24.10.06
Ground level	82.49	Backfill date	24.10.06
Logged by	LJB	Engineer	LJB
Final depth	22.00	Page	1 of 1

Site : Borough Green Sand Pits,, H&H Celcon, Ightham

Client : H&H Celcon

Drilling Method : Shell and Auger (150mm)

Piezometer	Testing: Depth	Testing: Results	Samples: Depth	Samples: Type	Strata: Thickness	Strata: Level	Strata: Legend	Strata: Depth	Strata Descriptions	
			1.00	D	3.10				MADE GROUND	Low strength mid brown silty clay MADE GROUND with much brick, concrete and crushed aircrete blocks
			2.00	D						
			3.00	D		79.39		3.10	MADE GROUND	Low strength mid brown /blue grey stained medium -coarse sandy, clayey MADE GROUND with fine flint gravel and slight hydrocarbon odours at 3m
			4.00	D	1.60					
			5.00	D		77.79		4.70	MADE GROUND	Medium strength orange brown medium-coarse sandy clay MADE GROUND with flint gravel and occasional patches of black staining
			6.00	D						
			7.00	D	5.10					
			8.00	D						
			9.00	D						
			10.00	D		72.69		9.80	MADE GROUND	Medium strength orange brown medium-coarse sandy clay MADE GROUND with patches of black staining and much clinker
			11.00	D	1.10	71.59		10.90	CLAY /GRAVEL	High strength orange brown silty clay MADE GROUND (reworked)
			12.00	D	1.70					
			13.00	D		69.89		12.60	SAND	Dense pale grey fine SAND with occasional cemented sand patches
			14.50	B						
			16.00	B	5.70					
			17.50	B						
			19.50	B		64.19		18.30	SAND	Very dense fine pale brown SAND
			20.50	B	3.70					
			22.00	B		60.49		22.00		End of Borehole

Hole Diameters			Water Strikes						Chiselling Time			General Remarks
Depth (m)	Hole (mm)	Casing (mm)	Date	Water (m)	Casing (m)	Time (mins)	Rose to (m)	Sealed (m)	From (m)	To (m)	Time (hrs)	
12.00	200	200	24.10.06	19.00	19.00	20						
22.00	150	150										

Southern Testing
Environmental & Geotechnical

Job No: J9015 Hole No: 9

National Grid Reference		TQ 601 577	
Start date	30/12/1899	End date	30/12/1899
Ground level	79.30	Backfill date	30/12/1899
Logged by	LJB	Engineer	LJB
Final depth	4.50	Page	1 of 1

Site : Borough Green Sand Pits,, H&H Celcon, Ightham

Client : H&H Celcon

Drilling Method : Shell and Auger (150mm)

Piezometer	Testing Depth	Testing SPT(C) (Value)	Samples Depth	Samples Type	Strata Thickness	Strata Level	Strata Legend	Strata Depth	Strata Descriptions	
			0.30	D	0.70	78.60		0.70	CLAY	High strength orange brown very silty fine sandy CLAY with occasional fine-medium subangular flint gravel. Becoming increasingly sandy by 0.5m
			0.50	D					SAND	Medium dense orange brown/yellow brown fine SAND with occasional fine sandstone gravel
			1.00	B	3.80					
			3.00	B						
			4.50	B		74.80		4.50		End of Borehole

Hole Diameters			Water Strikes						Chiselling Time			General Remarks
Depth (m)	Hole (mm)	Casing (mm)	Date	Water (m)	Casing (m)	Time (mins)	Rose to (m)	Sealed (m)	From (m)	To (m)	Time (hrs)	
4.50	200	200	30/12/99	DRY		20						

Southern Testing
Environmental & Geotechnical

Job No: J9015 Hole No: 10

National Grid Reference		TQ 601 577	
Start date	30/12/1899	End date	30/12/1899
Ground level	85.60	Backfill date	30/12/1899
Logged by	LJB	Engineer	LJB
Final depth	2.60	Page	1 of 1

Site : Borough Green Sand Pits,, H&H Celcon, Ightham

Client : H&H Celcon

Drilling Method : Shell and Auger (150mm)

Piezometer	Testing: Depth	Testing: Results (In-situ / Lab)	Samples: Depth	Samples: Type	Strata: Thickness	Strata: Level	Strata: Legend	Strata: Depth	Strata: Strata Descriptions	
					2.40				MADE GROUND	High strength mid-dark brown silty clay MADE GROUND with flint gravel, roots, brick, concrete and clinker
					0.20	83.20		2.40		
						83.00		2.60	SAND	Medium dense mid brown fine-medium SAND
										End of Borehole

Hole Diameters		
Depth (m)	Hole (mm)	Casing (mm)
2.60	200	200

Water Strikes					
Date	Water (m)	Casing (m)	Time (mins)	Rose to (m)	Sealed (m)
30/12/99					

Chiselling Time		
From (m)	To (m)	Time (hrs)

General Remarks

Southern Testing
Environmental & Geotechnical

Job No: J9015 Hole No: 11

National Grid Reference		TQ 601 677	
Start date	30/12/1899	End date	30/12/1899
Ground level	88.35	Backfill date	30/12/1899
Logged by	LJB	Engineer	LJB
Final depth	10.00	Page	1 of 1

Site : **Borough Green Sand Pits,, H&H Celcon, Ightham**

Client : **H&H Celcon**

Drilling Method : Shell and Auger (150mm)

Piezometer	Testing Depth	Testing Samples (Water) (Gas)	Samples Depth	Samples Type	Strata Thickness	Strata Level	Strata Legend	Strata Depth	Strata Descriptions	
			1.00	D					MADE GROUND	Medium strength mid-dark brown sandy silty clay MADE GROUND with frequent fine flint gravel, brick, concrete and grey patches
			2.00	D						
			3.00	D	6.00					
			4.00	D						Clinker fragments and black stained patches. No odours.
			5.00	D						
			6.00	D		82.35		6.00	MADE GROUND	Grey aircrete block MADE GROUND with clay matrix in patches
			7.00	D						
			8.00	D	4.00					
			9.00	D						
			10.00	D		78.35		10.00		End of Borehole

Hole Diameters			Water Strikes						Chiselling Time			General Remarks
Depth (m)	Hole (mm)	Casing (mm)	Date	Water (m)	Casing (m)	Time (mins)	Rose to (m)	Sealed (m)	From (m)	To (m)	Time (hrs)	
4.50	200	200	30/12/99	DRY		20						
10.00	150	150										

Southern Testing
Environmental & Geotechnical

Job No: J9015 Hole No: 12

National Grid Reference		TQ 601 577	
Start date	30/12/1899	End date	30/12/1899
Ground level		Backfill date	30/12/1899
Logged by	LJB	Engineer	LJB
Final depth	10.00	Page	1 of 1

Site : Borough Green Sand Pits,, H&H Celcon, Ightham

Client : H&H Celcon

Drilling Method : Shell and Auger (150mm)

Piezometer	Testing Depth	Testing (Slotted) (Medium) (Below)	Samples Depth	Samples Type	Strata Thickness	Strata Level	Strata Legend	Strata Depth	Strata Descriptions	
					0.60			0.60	MADE GROUND	Low-medium strength dark brown sandy clay MADE GROUND with large pieces of concrete and brick
					8.70				MADE GROUND	Low-medium strength grey brown/blue grey silty sandy clay MADE GROUND with brick, concrete, polythene and wood
										Clinker fragments 3-4m
										Grey crushed aircrete blocks 5-6m
					0.70			9.30	MADE GROUND	Low strength grey brown/blue grey silty sandy clay MADE GROUND with aircrete blocks, brick and strong hydrocarbon odours
								10.00		End of Borehole

Hole Diameters

Depth (m)	Hole (mm)	Casing (mm)
4.50	200	200
10.00	150	150

Water Strikes

Date	Water (m)	Casing (m)	Time (mins)	Rose to (m)	Sealed (m)
30/12/99	7.10		20		

Chiselling Time

From (m)	To (m)	Time (hrs)

General Remarks

Southern Testing
Southern Testing: Keeble House, Stuart Way, East Grinstead, West Sussex RH19 4QA
ST Consult: Twigden Barns, Brixworth Road, Creaton, Northampton NN6 8NN
ST Consult

Statistical Tests for Contaminated Soils

Table

Site : Borough Green Sand Pits,, H&H Celcon, Ightham
Client : H&H Celcon
Job No : J9015
Sample Group [3] : Natural Soils
Test Suite : STL Key Contaminants Suite
Date : 21/Nov/2006

Contaminant		Test Results and Statistics					Mean Value Test [1]			Max Value Test [2]		
		No. of sample tested	Range	Arithmetic mean	Standard deviation	Upper bound (US_{95}) [8]	Residential With plant uptake	Residential Without plant uptake	Commercial/ Industrial	Max value	Sample Ref. of max value	Outlier check [2]
Arsenic (As) [4]	mg/kg	4	<3 - 7.4	4.2	2.2	6.7	20	20	500	7.4	TP11 @2	N/A
Cadmium (Cd) [4]	mg/kg	4	<0.5	0.50	0.00	0.50	5.3	30	1400	0.5	TP11 @2	N/A
Total Chromium (Cr) [4]	mg/kg	4	<10 - 10	10	0.00	10	/	/	/	10	TP11 @2	N/A
Hexavalent Chromium (CrVI) - [4]	mg/kg	0	-				130	200	5000			
Lead (Pb) [4, 8]	mg/kg	4	<10	10	0.00	10.0	450	450	750	10	TP11 @2	N/A
Mercury (Hg) [4]	mg/kg	4	<0.6	0.60	0.00	0.60	8	15	480	0.6	TP11 @2	N/A
Selenium (Se) [4]	mg/kg	4	<2.5	2.5	0.00	2.5	35	260	8000	2.5	TP11 @2	N/A
Nickel (Ni) [4]	mg/kg	4	<4 - 6.8	4.7	1.4	6.3	50	75	5000	6.8	BH10 @2.60m	N/A
Copper (Cu) [5]	mg/kg	4	<5	5.0	0.00	5.0	200	250	500	5	TP11 @2	N/A
Zinc (Zn) [5]	mg/kg	4	<10 - 19	13	4.2	18	300	1000	1000	19	BH7 @9.00m	N/A
Phenol [4]	mg/kg	4	<0.1	0.10	0.00	0.10	78	21900	21900	0.1	TP11 @2	N/A
Benzo[a]pyrene [7]	mg/kg	4	<0.1 - 0.2	0.13	0.05	0.18	0.3	0.3	2.3	0.2	BH7 @9.00m	N/A
Total of 10 PAHs (Dutch) [6]	mg/kg	4	<1 - 1.71	1.2	0.36	1.6	40	40	40	1.71	BH7 @9.00m	N/A
Total of 16 PAHs (USEPA)	mg/kg	4	<1.6 - 2.29	1.8	0.35	2.2	/	/	/	2.29	BH7 @9.00m	N/A
Total Cyanide (CN)	mg/kg	4	<1	1.0	0.00	1.0	/	/	/	1	TP11 @2	N/A
Free Cyanide * [6]	mg/kg	0					20	20	20			
Complex Cyanides * [6]	mg/kg	0					50	50	50			
Thiocyanate * [6]	mg/kg	0					20	20	20			
Acidity (pH Value)	units	4	6.8 - 8	7.6	0.52		10	10	NL	8	BH1 @6.00m	N/A
Total Organic Carbon	%	4	<0.1	0.10	0.00		/	/	/	0.1	TP11 @2	N/A

Notes:

[1] : Interpretation of test results is based on CLEA publication CLR 7; Colour coding is only valid if read with the key and the related comments

[2] : Pass: pass the outlier test, i.e. the maximum value does NOT classify as an outlier; Failed: fail the outlier test, i.e. the maximum value classifies as an outlier

[3] : Assume minimum organic content of 5% for Topsoil and minimum organic content of 1% for Subsoil.

[4] : Soil Guideline Value (SGV) based on sandy soil as defined in CLR 10. SGVs for As, Cd, Cr^{6+}, Pb, Ni, Se, Hg, and Phenol only. Negligible organic mercury compounds are assumed.

[5] : Screening Value based on *The Soil Code*, Ministry of Agriculture, Fisheries and Food (MAFF), Revised 1998.

[6] : Screening Value based on *Environmental Quality Standards in the Netherlands*, 1999.

[7] : Soil Guideline Value (SGV) derived from CLEA model based on a sandy soil with 1% organic or clay content. Higher values may be applied if an organic/clay content can be demonstrated.

[8] : In the case of Lead (Pb), the geometric mean rather than the arithmetic mean, is used as the basis for the comparison of soil concentration data with the SGV, in accordance with the CLEA recommendations.

Pass the Mean Value Test.
Fail the Mean Value Test.

*: Dependent options, see Section Soil Contamination Analysis; ^ : 1:2 extract; - : Not determined; – : Dependent option; / : No values defined or given; NL : No limit set; N/A : Not applicable.

Southern Testing

Southern Testing: Keeble House, Stuart Way, East Grinstead, West Sussex RH19 4QA
ST Consult: Twigden Barns, Brixworth Road, Creaton, Northampton NN6 8NN

ST Consult

Statistical Tests for Contaminated Soils

Table

Site : Borough Green Sand Pits., H&H Celcon, Ightham
Client : H&H Celcon
Job No : J9015
Sample Group [3] : Made Ground
Test Suite : STL Key Contaminants Suite
Date : 21/Nov/2006

Contaminant		Test Results and Statistics					Mean Value Test [1]					Max Value Test [2]		
		No. of sample tested	Range	Arithmetic mean	Standard deviation	Upper bound (US_{95}) [3]	Residential With plant uptake		Residential Without plant uptake		Commercial/ Industrial	Max value	Sample Ref. of max value	Outlier check [2]
Arsenic (As) [4]	mg/kg	14	6.4 - 33	16	7.6	19	20		20		500	33	TP4 @3.4	Pass
Cadmium (Cd) [4]	mg/kg	14	<0.5 - 1.2	0.70	0.19	0.79	6.4		30		1400	1.2	TP5 @1.5	N/A
Total Chromium (Cr) [4]	mg/kg	14	18 - 150	40	33	55	/		/		/	150	TP4 @3.4	N/A
Hexavalent Chromium (CrVI) * [4]	mg/kg	1	<5	5.0			130		200		5000	5	TP4 @3.4	N/A
Lead (Pb) [4, 8]	mg/kg	14	25 - 300	89	79	95	450		450		750	300	TP2 @2.5	N/A
Mercury (Hg) [4]	mg/kg	14	<0.6 - 1.2	0.65	0.16	0.73	8		15		480	1.2	TP5 @1.5	N/A
Selenium (Se) [4]	mg/kg	14	<2.5	2.5	0.00	2.5	35		260		8000	2.5	TP1 @0.3	N/A
Nickel (Ni) [4]	mg/kg	14	10 - 52	24	10	28	50		75		5000	52	TP4 @3.4	Pass
Copper (Cu) [5]	mg/kg	14	13 - 53	26	12	32	200		250		500	53	TP5 @1.5	N/A
Zinc (Zn) [5]	mg/kg	14	53 - 190	104	41	124	300		1000		1000	190	TP5 @1.5	N/A
Phenol [4]	mg/kg	14	<0.1	0.10	0.00	0.10	78		21900 *		21900	0.1	TP1 @0.3	N/A
Benzo[a]pyrene [7]	mg/kg	14	<0.1 - 8.1	1.0	2.1	2.0	0.3		0.3		2.3	8.1	BH7 @3.00m	Failed
Total of 10 PAHs (Dutch) [6]	mg/kg	14	<1 - 123.3	13	32	28	40		40		40	123.3	BH7 @3.00m	Pass
Total of 16 PAHs (USEPA)	mg/kg	14	<1.6 - 170.51	17	44	38	/		/		/	170.51	BH7 @3.00m	N/A
Total Cyanide (CN)	mg/kg	14	<1	1.0	0.00	1.0	/		/		/	1	TP1 @0.3	N/A
Free Cyanide * [6]	mg/kg	0					20		20		20			
Complex Cyanides * [6]	mg/kg	0					50		50		50			
Thiocyanate * [6]	mg/kg	0					20		20		20			
Acidity (pH Value)	units	14	5.2 - 9.5	7.7	1.1		10		10		NL	9.5	BH3 @4.00m	N/A
Total Organic Carbon	%	14	0.18 - 2.6	0.94	0.67		/		/		/	2.6	TP5 @1.5	N/A

Notes:
[1] : Interpretation of test results is based on CLEA publication CLR 7; Colour coding is only valid if read with the key and the related comments
[2] : Pass: pass the outlier test, i.e. the maximum value does NOT classify as an outlier; Failed: fail the outlier test, i.e. the maximum value classifies as an outlier
[3] : Assume minimum organic content of 5% for Topsoil and minimum organic content of 1% for Subsoil
[4] : Soil Guideline Value (SGV) based on sandy soil as defined in CLR 10. SGVs for As, Cd, Cr^{6+}, Pb, Ni, Se, Hg, and Phenol only. Negligible organic mercury compounds are assumed
[5] : Screening Value based on *The Soil Code*, Ministry of Agriculture, Fisheries and Food (MAFF), Revised 1998
[6] : Screening Value based on *Environmental Quality Standards in the Netherlands*, 1999.
[7] : Soil Guideline Value (SGV) derived from CLEA model based on a sandy soil with 1% organic or clay content. Higher values may be applied if an organic/clay content can be demonstrated.
[8] : In the case of Lead (Pb), the geometric mean rather than the arithmetic mean, is used as the basis for the comparison of soil concentration data with the SGV, in accordance with the CLEA recommendations.
*: Dependent options, see Section Soil Contamination Analysis; ^ : 1:2 extract; - : Not determined; — : Dependent option; / : No values defined or given; NL : No limit set; N/A : Not applicable

Pass the Mean Value Test
Fail the Mean Value Test

Contamination Analysis – J9015

Soil Group:	Natural Soils
Samples Tested:	TP11 @2, BH1 @6.00m, BH7 @9.00m, BH10 @2.60m

Contaminant	Unit	Measured Range	Upper 95th Percentile Bound Value	Commercial/ Industrial Screening Value
Arsenic (As)	mg/kg	<3 - 7.4	6.7	500
Cadmium (Cd)	mg/kg	<0.5	0.50	1400
Total Chromium (Cr)	mg/kg	<10 - 10	10	/
Lead (Pb)	mg/kg	<10	10	750
Mercury (Hg)	mg/kg	<0.6	0.60	480
Selenium (Se)	mg/kg	<2.5	2.5	8000
Nickel (Ni)	mg/kg	<4 - 6.8	6.3	5000
Copper (Cu)	mg/kg	<5	5.0	500
Zinc (Zn)	mg/kg	<10 - 19	18	1000
Total (mono) Phenols	mg/kg	<0.1	0.10	21900
Benzo[a]pyrene	mg/kg	<0.1 - 0.2	0.18	2.3
Total of 10 PAHs (Dutch)	mg/kg	<1 - 1.71	1.6	40
Total of 16 PAHs (USEPA)	mg/kg	<1.6 - 2.29	2.2	/
Total Cyanide (CN)	mg/kg	<1	1.0	/
Acidity	units	6.8 - 8		NL

Soil Group :	Made Ground
Samples Tested :	TP1 @0.3, TP1 @2.5, TP2 @2.5, TP3 @0.4, TP4 @3.4, TP5 @1.5, TP6 @0.6, TP6 @3.6, TP7 @2.5, TP8 @0.5, TP8 @1.5, TP9 @1.3, BH3 @4.00m, BH7 @3.00m

Contaminant	Unit	Measured Range	Upper 95th Percentile Bound Value	Commercial/ Industrial Screening Value
Arsenic (As)	mg/kg	6.4 - 33	19	500
Cadmium (Cd)	mg/kg	<0.5 - 1.2	0.79	1400
Total Chromium (Cr)	mg/kg	19 - 150	55	/
Lead (Pb)	mg/kg	25 - 300	95	750
Mercury (Hg)	mg/kg	<0.6 - 1.2	0.73	480
Selenium (Se)	mg/kg	<2.5	2.5	8000
Nickel (Ni)	mg/kg	10 - 52	28	5000
Copper (Cu)	mg/kg	13 - 53	32	500
Zinc (Zn)	mg/kg	53 - 190	124	1000
Total (mono) Phenols	mg/kg	<0.1	0.10	21900
Benzo[a]pyrene	mg/kg	<0.1 - 8.1	2.0	2.3
Total of 10 PAHs (Dutch)	mg/kg	<1 - 123.3	28	40
Total of 16 PAHs (USEPA)	mg/kg	<1.6 - 170.51	38	/
Total Cyanide (CN)	mg/kg	<1	1.0	/
Acidity	units	5.2 - 9.5		NL

Soil Group :	Made Ground (excluding BH7 @ 3.0m)			
Samples Tested :	TP1 @0.3, TP1 @2.5, TP2 @2.5, TP3 @0.4, TP4 @3.4, TP5 @1.5, TP6 @0.6, TP6 @3.6, TP7 @2.5, TP8 @0.5, TP8 @1.5, TP9 @1.3, BH3 @4.00m			
Contaminant	Unit	Measured Range	Upper 95th Percentile Bound Value	Commercial/ Industrial Screening Value
Arsenic (As)	mg/kg	6.4 - 33	20	500
Cadmium (Cd)	mg/kg	<0.5 - 1.2	0.80	1400
Total Chromium (Cr)	mg/kg	19 - 150	58	/
Lead (Pb)	mg/kg	25 - 300	97	750
Mercury (Hg)	mg/kg	<0.6 - 1.2	0.74	480
Selenium (Se)	mg/kg	<2.5	2.5	8000
Nickel (Ni)	mg/kg	10 - 52	29	5000
Copper (Cu)	mg/kg	13 - 53	33	500
Zinc (Zn)	mg/kg	53 - 190	127	1000
Total (mono) Phenols	mg/kg	<0.1	0.10	21900
Benzo[a]pyrene	mg/kg	<0.1 - 1.4	0.67	2.3
Total of 10 PAHs (Dutch)	mg/kg	<1 - 13.9	6.0	40
Total of 16 PAHs (USEPA)	mg/kg	<1.6 - 18.71	8.2	/
Total Cyanide (CN)	mg/kg	<1	1.0	/
Acidity	units	5.2 - 9.5		NL

Petroleum Hydrocarbons

Made Ground

Description	Volatile Hydrocarbons (C5-C12)	Extractable Hydrocarbons (C12-C35)	Total Petroleum Hydrocarbons (C5-C35)	Extractable Petroleum Hydrocarbons (C10-C40)	Possible Fuel Type
TP1 @ 1.0m	**<0.01**	**1100**	**1100**	**-**	**-**
TP1 @ 2.5m	-	-	-	360	Unresolved – possibly PAHs
TP2 @ 2.0m	-	-	-	300	Unresolved – possibly PAHs
TP3 @ 3.0m	-	-	-	260	Unresolved – possibly PAHs
TP4 @ 1.5m	-	-	-	120	Unresolved
TP5 @ 2.0m	**<0.01**	**840**	**840**	**-**	**-**
TP5 @ 2.8m	**-**	**-**	**-**	**1300**	**Unresolved – possibly PAHs**
TP6 @ 2.0m	**-**	**-**	**-**	**9900**	**Unresolved**
TP7 @ 2.5m	-	-	-	140	Unresolved
TP8 @ 2.5m	<0.01	41	41	-	-
TP9 @ 1.5m	**-**	**-**	**-**	**3700**	**Unresolved – possibly PAHs**
TP9 @ 2.9m	-	-	-	100	Unresolved
BH1 @ 7.5m	-	-	-	29	Unresolved
BH2 @ 1.0m	**-**	**-**	**-**	**630**	**Unresolved – possibly PAHs**
BH2 @ 6.0m	-	-	-	450	Unresolved – possibly PAHs
BH2 @ 7.0m	-	-	-	58	Unresolved
BH3 @ 6.0m	-	-	-	140	Unresolved
BH5 @ 5.0m	-	-	-	55	Unresolved
BH6 @ 2.0m	-	-	-	320	Unresolved – possibly PAHs
BH6 @ 6.0m	-	-	-	25	Unresolved
BH7 @ 6.0m	-	-	-	86	Unresolved – possibly PAHs
BH7 @ 7.0m	-	-	-	280	Unresolved – possibly PAHs
BH11 @ 2.0m	-	-	-	52	Unresolved
BH12 @ 9.0m	**-**	**-**	**-**	**2800**	**Unresolved – possibly PAHs**
BH12 @ 10.0m	**-**	**-**	**-**	**3500**	**Unresolved – possibly PAHs**

Natural Soils

Description	Extractable Petroleum Hydrocarbons (C5-C35)	Possible Fuel Type
TP11 @ 2.0m	8	Unresolved

CERTIFICATE OF ANALYSIS

Received	25 soil samples submitted for analysis on 17/10/2006
On	17/10/2006
Details	Soil
STL Ref	J9015 - Borough Green Sand Pits - Laura Brearley

Sample Ref:		TP1	TP1	TP1	TP2	TP2	TP2	TP3	TP3
Depth unit	m	0.30	1.00	2.50	1.50	2.00	2.50	0.40	3.00
Lab ID		178977	178978	178979	178980	178981	178982	178983	178984
pH Value	units	7.9	-	7.7	-	-	8.9	7.1	-
Asbestos		Absent		Absent		-	Absent	Absent	
Total Arsenic (As)	mg/kg	11	-	14	-	-	11	11	-
Total Cadmium (Cd)	mg/kg	0.7	-	0.6	-	-	0.6	0.7	-
Total Chromium (Cr)	mg/kg	23	-	37	-	-	25	25	-
Hexavalent Chromium (CrVI)	mg/kg	-	-	-	-	-	-	-	-
Total Copper (Cu)	mg/kg	30	-	15	-	-	36	42	-
Total Lead (Pb)	mg/kg	130	-	43	-	-	300	90	-
Total Mercury (Hg)	mg/kg	< 0.6	-	< 0.6	-	-	0.7	< 0.6	-
Total Nickel (Ni)	mg/kg	18	-	24	-	-	15	17	-
Total Selenium (Se)	mg/kg	< 2.5	-	< 2.5	-	-	< 2.5	< 2.5	-
Total Zinc (Zn)	mg/kg	150	-	68	-	-	150	110	-
Phenol	mg/kg	< 0.1	-	< 0.1	-	-	< 0.1	< 0.1	-
Total Cyanide (CN)	mg/kg	< 1	-	< 1	-	-	< 1	< 1	-
Free Cyanide	mg/kg								
Complex Cyanide	mg/kg								
Thiocyanate as SCN	mg/kg								
Total Sulphate (SO_4)	mg/kg	0.85	-	0.07	-	-	0.39	0.17	-
Soluble Sulphate* (SO_4)	g/l	< 10	-	42	-	-	48	< 10	-
Sulphide (S)	mg/kg								
Toluene Extractable Material	%	1.1	-	0.6	-	-	1.4	< 0.1	-
Benzo (a) pyrene	mg/kg	8.56	-	5.63	-	-	13.9	0.15	-
Total of 10 Dutch PAHs	mg/kg	11.66	-	7.63	-	-	18.71	0.29	-
Total of 16 EPA PAHs	mg/kg								
Elemental Sulphur	mg/kg								
Wt. loss on drying	% of wet	13.0	9.9	18.1	17.4	19.3	17.3	17.9	14.2
Retained on 2mm sieve	% of dry	14.0	-	< 0.1	-	-	1.3	28.0	-
EPH/GC	mg/kg	-	-	360	-	300	-	-	260
Organic Matter	%	1.5	-	1.1	-	-	2.0	1.5	-
Organic Carbon	%	0.9	-	0.7	-	-	1.2	0.9	-

-- dependent option

* 1:2 Extract

CERTIFICATE OF ANALYSIS

Received	25 soil samples submitted for analysis on 17/10/2006
On	17/10/2006
Details	Soil
STL Ref	J9015 - Borough Green Sand Pits - Laura Brearley

Sample Ref:		TP4	TP4	TP5	TP5	TP5	TP6	TP6	TP6
Depth unit	m	1.50	3.40	1.50	2.00	2.80	0.60	2.00	3.60
Lab ID		178985	178986	178987	178988	178989	178990	178991	178992
pH Value	units	-	7.8	7.3	-	-	7.0	-	7.6
Asbestos			Absent	Absent			Absent		Absent
Total Arsenic (As)	mg/kg	-	33	20	-	-	18	-	8
Total Cadmium (Cd)	mg/kg	-	0.6	1.2	-	-	0.8	-	0.7
Total Chromium (Cr)	mg/kg	-	150	38	-	-	45	-	43
Hexavalent Chromium (CrVI)	mg/kg	-	< 5	-	-	-	-	-	-
Total Copper (Cu)	mg/kg	-	14	53	-	-	18	-	13
Total Lead (Pb)	mg/kg	-	47	210	-	-	56	-	26
Total Mercury (Hg)	mg/kg	-	< 0.6	1.2	-	-	< 0.6	-	< 0.6
Total Nickel (Ni)	mg/kg	-	52	30	-	-	28	-	23
Total Selenium (Se)	mg/kg	-	< 2.5	< 2.5	-	-	< 2.5	-	< 2.5
Total Zinc (Zn)	mg/kg	-	95	190	-	-	100	-	61
Phenol	mg/kg	-	< 0.1	< 0.1	-	-	< 0.1	-	< 0.1
Total Cyanide (CN)	mg/kg	-	< 1	< 1	-	-	< 1	-	< 1
Free Cyanide	mg/kg								
Complex Cyanide	mg/kg								
Thiocyanate as SCN	mg/kg								
Total Sulphate (SO_4)	mg/kg								
Soluble Sulphate* (SO_4)	g/l								
Sulphide (S)	mg/kg	-	0.28	1.2	-	-	0.17	-	0.13
Toluene Extractable Material	%	-	< 10	200	-	-	< 10	-	10
Benzo (a) pyrene	mg/kg	-	< 0.1	0.47	-	-	< 0.1	-	< 0.1
Total of 10 Dutch PAHs	mg/kg	-	<1	3.89	-	-	0.15	-	0.16
Total of 16 EPA PAHs	mg/kg	-	<1.6	5.54	-	-	0.28	-	0.30
Elemental Sulphur	mg/kg								
Wt. loss on drying	% of wet	11.4	20.1	27.1	17.9	13.6	17.7	37.1	13.9
Retained on 2mm sieve	% of dry	-	5.0	9.3	-	-	< 0.1	-	< 0.1
EPH/GC	mg/kg	120	-	-	-	1300	-	9900	-
Organic Matter	%	-	0.47	4.4	-	-	1.3	-	0.86
Organic Carbon	%	-	0.27	2.6	-	-	0.7	-	0.5

– dependent option

* 1:2 Extract

CERTIFICATE OF ANALYSIS

Received	25 soil samples submitted for analysis on 17/10/2006
On	17/10/2006
Details	Soil
STL Ref	J9015 - Borough Green Sand Pits - Laura Brearley

Sample Ref:		TP7	TP7	TP8	TP8	TP8	TP9	TP9	TP9
Depth unit	m	1.50	2.50	0.50	1.50	2.50	1.30	1.50	2.90
Lab ID		178993	178994	178995	178996	178997	178998	178999	179000
pH Value	units	-	9.3	7.8	5.2	-	7.7	-	-
Asbestos			Absent	Absent	Absent		Absent		
Total Arsenic (As)	mg/kg	-	11	20	28	-	6.4	-	-
Total Cadmium (Cd)	mg/kg	-	< 0.5	0.9	< 0.5	-	< 0.5	-	-
Total Chromium (Cr)	mg/kg	-	29	38	28	-	19	-	-
Hexavalent Chromium (CrVI)	mg/kg	-	-	-	-	-	-	-	-
Total Copper (Cu)	mg/kg	-	14	20	39	-	20	-	-
Total Lead (Pb)	mg/kg	-	28	110	25	-	39	-	-
Total Mercury (Hg)	mg/kg	-	< 0.6	< 0.6	< 0.6	-	< 0.6	-	-
Total Nickel (Ni)	mg/kg	-	25	19	15	-	10	-	-
Total Selenium (Se)	mg/kg	-	< 2.5	< 2.5	< 2.5	-	< 2.5	-	-
Total Zinc (Zn)	mg/kg	-	57	140	53	-	77	-	-
Phenol	mg/kg	-	< 0.1	< 0.1	< 0.1	-	< 0.1	-	-
Total Cyanide (CN)	mg/kg	-	< 1	< 1	< 1	-	< 1	-	-
Free Cyanide	mg/kg								
Complex Cyanide	mg/kg								
Thiocyanate as SCN	mg/kg								
Total Sulphate (SO_4)	mg/kg								
Soluble Sulphate* (SO_4)	g/l	-	0.17	0.04	0.19	-	0.28	-	-
Sulphide (S)	mg/kg	-	16	< 10	< 10	-	26	-	-
Toluene Extractable Material	%								
Benzo (a) pyrene	mg/kg	-	0.18	0.46	< 0.1	-	0.48	-	-
Total of 10 Dutch PAHs	mg/kg	-	2.71	3.37	<1	-	3.82	-	-
Total of 16 EPA PAHs	mg/kg	-	3.53	4.60	<1.6	-	5.07	-	-
Elemental Sulphur	mg/kg								
Wt. loss on drying	% of wet	10.1	17.3	12.0	22.5	15.2	18.1	17.3	12.4
Retained on 2mm sieve	% of dry	-	15.0	< 0.1	< 0.1	-	34.0	-	-
EPH/GC	mg/kg	-	140	-	-	-	-	3700	100
Organic Matter	%	-	0.79	2.4	0.3	-	1.0	-	-
Organic Carbon	%	-	0.5	1.4	0.2	-	0.6	-	-

– dependent option

* 1:2 Extract

CERTIFICATE OF ANALYSIS

Received	25 soil samples submitted for analysis on 17/10/2006
On	17/10/2006
Details	Soil
STL Ref	J9015 - Borough Green Sand Pits - Laura Brearley

Sample Ref:		TP11
Depth unit	m	2.00
Lab ID		179001
pH Value	units	6.8
Asbestos		Absent
Total Arsenic (As)	mg/kg	7.4
Total Cadmium (Cd)	mg/kg	< 0.5
Total Chromium (Cr)	mg/kg	10
Hexavalent Chromium (CrVI)	mg/kg	-
Total Copper (Cu)	mg/kg	< 5
Total Lead (Pb)	mg/kg	< 10
Total Mercury (Hg)	mg/kg	< 0.6
Total Nickel (Ni)	mg/kg	< 4
Total Selenium (Se)	mg/kg	< 2.5
Total Zinc (Zn)	mg/kg	< 10
Phenol	mg/kg	< 0.1
Total Cyanide (CN)	mg/kg	< 1
Free Cyanide	mg/kg	
Complex Cyanide	mg/kg	
Thiocyanate as SCN	mg/kg	
Total Sulphate (SO_4)	mg/kg	
Soluble Sulphate* (SO_4)	g/l	< 0.02
Sulphide (S)	mg/kg	< 10
Toluene Extractable Material	%	
Benzo (a) pyrene	mg/kg	< 0.1
Total of 10 Dutch PAHs	mg/kg	<1
Total of 16 EPA PAHs	mg/kg	<1.6
Elemental Sulphur	mg/kg	
Wt. loss on drying	% of wet	8.5
Retained on 2mm sieve	% of dry	100.0
EPH/GC	mg/kg	8.0
Organic Matter	%	< 0.2
Organic Carbon	%	< 0.1

-- dependent option

* 1:2 Extract

CERTIFICATE OF ANALYSIS

Received	25 soil samples submitted for analysis on 17/10/2006
On	17/10/2006
Details	Soil
STL Ref	JS015 - Borough Green Sand Pits - Laura Brearley

Sample Ref:		TP1	TP1	TP2	TP3	TP4	TP5	TP6	TP6
Depth unit	m	0.30	2.50	2.50	0.40	3.40	1.50	0.60	3.60
Lab ID		178977	178979	178982	178983	178986	178987	178990	178992
Naphthalene	mg/kg	< 0.1	0.2	0.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.2	< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	mg/kg	0.1	0.2	0.3	< 0.1	< 0.1	0.2	< 0.1	< 0.1
Fluorene	mg/kg	< 0.1	0.2	0.4	< 0.1	< 0.1	0.2	< 0.1	< 0.1
Phenanthrene	mg/kg	1.0	1.0	2.6	< 0.1	< 0.1	0.6	< 0.1	< 0.1
Anthracene	mg/kg	0.4	0.3	0.9	< 0.1	< 0.1	0.1	< 0.1	< 0.1
Fluoranthene	mg/kg	1.9	1.3	3.4	0.2	< 0.1	0.9	0.2	0.2
Pyrene	mg/kg	1.7	1.1	2.7	0.1	< 0.1	0.8	0.1	0.1
Benzo (a) anthracene	mg/kg	0.9	0.6	1.3	< 0.1	< 0.1	0.4	< 0.1	< 0.1
Chrysene	mg/kg	1.0	0.6	1.4	< 0.1	< 0.1	0.5	< 0.1	< 0.1
Benzo (b) fluoranthene	mg/kg	1.0	0.5	1.1	< 0.1	< 0.1	0.5	< 0.1	< 0.1
Benzo (k) fluoranthene	mg/kg	0.9	0.5	1.1	< 0.1	< 0.1	0.4	< 0.1	< 0.1
Benzo (a) pyrene	mg/kg	1.1	0.6	1.4	< 0.1	< 0.1	0.5	< 0.1	< 0.1
Indeno (1,2,3-cd) pyrene	mg/kg	0.6	0.3	0.7	< 0.1	< 0.1	0.3	< 0.1	< 0.1
Dibenzo (a,h) anthracene	mg/kg	0.2	< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo (g,h,i) perylene	mg/kg	0.8	0.3	0.8	< 0.1	< 0.1	0.3	< 0.1	< 0.1
Total of 19 Dutch PAHs	mg/kg	8.56	5.63	13.90	0.15	<1	3.89	0.15	0.16
Total 16 EPA PAH	mg/kg	11.66	7.63	18.71	0.29	<1.5	5.54	0.25	0.30

‡ Limits raised due to matrix interference.
ND denotes not detected

CERTIFICATE OF ANALYSIS

Received	25 soil samples submitted for analysis on 17/10/2006
On	17/10/2006
Details	Soil
STL Ref	J9015 - Borough Green Sand Pits - Laura Brearley

Sample Ref:		TP7	TP8	TP8	TP9	TP11
Depth unit	m	2.50	0.50	1.50	1.30	2.00
Lab ID		178994	178995	178996	178998	179001
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	0.6	0.2	< 0.1	0.5	< 0.1
Anthracene	mg/kg	0.2	0.1	< 0.1	0.2	< 0.1
Fluoranthene	mg/kg	0.7	0.8	< 0.1	0.8	< 0.1
Pyrene	mg/kg	0.6	0.7	< 0.1	0.8	< 0.1
Benzo (a) anthracene	mg/kg	0.3	0.4	< 0.1	0.4	< 0.1
Chrysene	mg/kg	0.3	0.5	< 0.1	0.5	< 0.1
Benzo (b) fluoranthene	mg/kg	0.2	0.4	< 0.1	0.5	< 0.1
Benzo (k) fluoranthene	mg/kg	0.3	0.4	< 0.1	0.4	< 0.1
Benzo (a) pyrene	mg/kg	0.2	0.5	< 0.1	0.5	< 0.1
Indeno (1,2,3-cd) pyrene	mg/kg	0.1	0.3	< 0.1	0.3	< 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	< 0.1	0.3	< 0.1
Total of 10 Dutch PAHs	mg/kg	2.71	3.37	<1	3.82	<1
Total 16 EPA PAH	mg/kg	3.53	4.60	<1.6	5.07	<1.6

‡ Limits raised due to matrix interference.
ND denotes not detected

CERTIFICATE OF ANALYSIS

Received	25 soil samples submitted for analysis on 17/10/2006
On	17/10/2006
Details	Soil
STL Ref	J9015 - Borough Green Sand Pits - Laura Brearley

Sample Ref:			TP1	TP2	TP6	TP8	TP9
Depth unit		m	1.00	2.00	3.60	1.50	1.50
Lab ID			178978	178981	178992	178996	178999
		units					
Dichlorodifluoromethane		µg/kg	< 25	< 25	< 25	< 25	< 25
Chloromethane		µg/kg	< 25	< 25	< 25	< 25	< 25
Vinyl Chloride		µg/kg	< 25	< 25	< 25	< 25	< 25
Bromomethane		µg/kg	< 25	< 25	< 25	< 25	< 25
Chloroethane		µg/kg	< 25	< 25	< 25	< 25	< 25
Trichlorofluoromethane		µg/kg	< 25	< 25	< 25	< 25	< 25
1,1-Dichloroethene		µg/kg	< 25	< 25	< 25	< 25	< 25
112-Trichl-122-Trifluoroethane		µg/kg	< 25	< 25	< 25	< 25	< 25
Dichloromethane		µg/kg	< 50	< 50	< 50	< 50	< 50
Carbon Disulfide		µg/kg	< 25	< 25	< 25	< 25	< 25
Trans-1,2 Dichloroethene		µg/kg	< 25	< 25	< 25	< 25	< 25
MTBE		µg/kg	< 25	< 25	< 25	< 25	< 25
1,1 -Dichloroethane		µg/kg	< 25	< 25	< 25	< 25	< 25
Cis-1,2 Dichloroethene		µg/kg	< 25	< 25	< 25	< 25	< 25
Bromochloromethane		µg/kg	< 25	< 25	< 25	< 25	< 25
Chloroform		µg/kg	< 25	< 25	< 25	< 25	< 25
2,2-Dichloropropane		µg/kg	< 25	< 25	< 25	< 25	< 25
1,1,1-Trichloroethane		µg/kg	< 25	< 25	< 25	< 25	< 25
1,2-Dichloroethane		µg/kg	< 25	< 25	< 25	< 25	< 25
1,1-Dichloropropene		µg/kg	< 25	< 25	< 25	< 25	< 25
Benzene		µg/kg	< 25	< 25	< 25	< 25	< 25
Carbon Tetrachloride		µg/kg	< 25	< 25	< 25	< 25	< 25
Dibromomethane		µg/kg	< 25	< 25	< 25	< 25	< 25
1,2-Dichloropropane		µg/kg	< 25	< 25	< 25	< 25	< 25
Trichloroethene		µg/kg	< 25	< 25	< 25	< 25	< 25
Bromodichloromethane		µg/kg	< 25	< 25	< 25	< 25	< 25
Cis-1,3 Dichloropropene		µg/kg	< 25	< 25	< 25	< 25	< 25
Trans-1,3 Dichloropropene		µg/kg	< 25	< 25	< 25	< 25	< 25
1,1,2-Trichloroethane		µg/kg	< 25	< 25	< 25	< 25	< 25
Toluene		µg/kg	< 25	< 25	< 25	< 25	< 25
1,3 -Dichloropropane		µg/kg	< 25	< 25	< 25	< 25	< 25
Dibromochloromethane		µg/kg	< 25	< 25	< 25	< 25	< 25
1,2-Dibromoethane		µg/kg	< 25	< 25	< 25	< 25	< 25
Tetrachloroethene		µg/kg	< 25	< 25	< 25	< 25	< 25
1,1,1,2-Tetrachloroethane		µg/kg	< 25	< 25	< 25	< 25	< 25
Chlorobenzene		µg/kg	< 25	< 25	< 25	< 25	< 25
Ethyl Benzene		µg/kg	< 25	< 25	< 25	< 25	< 25
m,p-Xylenes		µg/kg	< 50	< 50	< 50	< 50	< 50
Bromoform		µg/kg	< 25	< 25	< 25	< 25	< 25
Styrene		µg/kg	< 25	< 25	< 25	< 25	< 25
o-Xylene		µg/kg	< 25	< 25	< 25	< 25	< 25
1,1,2,2 Tetrachloroethane		µg/kg	< 25	< 25	< 25	< 25	< 25
1,2,3-Trichloropropane		µg/kg	< 25	< 25	< 25	< 25	< 25
Isopropylbenzene		µg/kg	< 25	< 25	< 25	< 25	< 25
Bromobenzene		µg/kg	< 25	< 25	< 25	< 25	< 25
n-propylbenzene		µg/kg	< 25	< 25	< 25	< 25	< 25
2-Chlorotoluene		µg/kg	< 25	< 25	< 25	< 25	< 25
4-Chlorotoluene		µg/kg	< 25	< 25	< 25	< 25	< 25
1,3,5 Trimethylbenzene		µg/kg	< 25	< 25	< 25	< 25	< 25
tert-butylbenzene		µg/kg	< 25	< 25	< 25	< 25	< 25
1,2,4 Trimethylbenzene		µg/kg	< 25	< 25	< 25	< 25	< 25
sec-butylbenzene		µg/kg	< 25	< 25	< 25	< 25	< 25
1,3 Dichlorobenzene		µg/kg	< 25	< 25	< 25	< 25	< 25
1,4 Dichlorobenzene		µg/kg	< 25	< 25	< 25	< 25	< 25
4-Isopropyltoluene		µg/kg	< 25	< 25	< 25	< 25	< 25
1,2 Dichlorobenzene		µg/kg	< 25	< 25	< 25	< 25	< 25
n-butylbenzene		µg/kg	< 25	< 25	< 25	< 25	< 25
1,2,4-Trichlorobenzene		µg/kg	< 25	< 25	< 25	< 25	< 25
1,2-Dibromo-3-Chloropropane		µg/kg	< 25	< 25	< 25	< 25	< 25
Hexachlorobutadiene		µg/kg	< 50	< 50	< 50	< 50	< 50
1,2,3-Trichlorobenzene		µg/kg	< 25	< 25	< 25	< 25	< 25

CERTIFICATE OF ANALYSIS

Received	25 soil samples submitted for analysis on 17/10/2006
On	17/10/2006
Details	Soil
STL Ref	J9015 - Borough Green Sand Pits - Laura Brearley

Sample Ref:		TP2	TP3	TP5	TP7	TP8
Depth unit	m	1.50	0.40	2.00	1.50	2.50
Lab ID		178980	178983	178988	178993	178997
	units					
Naphthalene	µg/kg	< 150	< 150	< 150	< 150	< 150
2-Chloronaphthalene	µg/kg	< 150	< 150	< 150	< 150	< 150
Acenaphthylene	µg/kg	280	< 150	< 150	< 150	< 150
Acenaphthene	µg/kg	< 150	< 150	490	< 150	< 150
Fluorene	µg/kg	< 150	< 150	390	< 150	< 150
Phenanthrene	µg/kg	1900	< 150	1800	980	1800
Anthracene	µg/kg	840	< 150	430	430	590
Fluoranthene	µg/kg	7100	< 150	2900	3500	3000
Pyrene	µg/kg	6700	< 150	2700	2800	2400
Benz(a)anthracene	µg/kg	3200	< 150	950	1700	1100
Chrysene	µg/kg	3000	< 150	970	1500	1000
Benzo(b)fluoranthene	µg/kg	2300	< 150	740	1200	780
Benzo(k)fluoranthene	µg/kg	2100	< 150	710	1200	950
Benzo(a)pyrene	µg/kg	2700	< 150	900	1600	1000
Indeno(123-cd)pyrene	µg/kg	1500	< 150	470	830	490
Dibenzo(ah)anthracene	µg/kg	520	< 150	210	350	210
Benzo(g,h,i)perylene	µg/kg	1700	< 150	600	980	590
Phenol	µg/kg	< 150	< 150	< 150	< 150	< 150
2-Chlorophenol	µg/kg	< 150	< 150	< 150	< 150	< 150
2-Methylphenol	µg/kg	< 200	< 200	< 200	< 200	< 200
4-Methylphenol	µg/kg	< 200	< 200	< 200	< 200	< 200
2-Nitrophenol	µg/kg	< 300	< 300	< 300	< 300	< 300
2,4-Dimethylphenol	µg/kg	< 250	< 250	< 250	< 250	< 250
2,4-Dichlorophenol	µg/kg	< 200	< 200	< 200	< 200	< 200
2,6-Dichlorophenol	µg/kg	< 200	< 200	< 200	< 200	< 200
4-Chloro-3-methyl phenol	µg/kg	< 150	< 150	< 150	< 150	< 150
2,4,6-Trichlorophenol	µg/kg	< 150	< 150	< 150	< 150	< 150
2,4,5-Trichlorophenol	µg/kg	< 200	< 200	< 200	< 200	< 200
4-Nitrophenol	µg/kg	< 300	< 300	< 300	< 300	< 300
2,3,4,6-Tetrachlorophenol	µg/kg	< 250	< 250	< 250	< 250	< 250
Pentachlorophenol	µg/kg	< 250	< 250	< 250	< 250	< 250
Dimethyl Phthalate	µg/kg	< 200	< 200	< 200	< 200	< 200
Diethyl Phthalate	µg/kg	< 200	< 200	< 200	< 200	< 200
Di-n-butyl phthalate	µg/kg	< 150	< 150	< 150	< 150	< 150
Butyl benzyl phthalate	µg/kg	< 150	< 150	< 150	< 150	330
Bis(2-chloroethyl)ether	µg/kg	< 150	< 150	< 150	< 150	< 150
Bis(2-chloroisopropyl)ether	µg/kg	< 200	< 200	< 200	< 200	< 200
4-Chlorophenyl phenyl ether	µg/kg	< 150	< 150	< 150	< 150	< 150
Bromo phenyl phenyl ether	µg/kg	< 200	< 200	< 200	< 200	< 200
1,3-Dichlorobenzene	µg/kg	< 200	< 200	< 200	< 200	< 200
1,2-Dichlorobenzene	µg/kg	< 150	< 150	< 150	< 150	< 150
1,4-Dichlorobenzene	µg/kg	< 200	< 200	< 200	< 200	< 200
Nitrobenzene	µg/kg	< 150	< 150	< 150	< 150	< 150
1,2,4-Trichlorobenzene	µg/kg	< 200	< 200	< 200	< 200	< 200
2,6-Dinitrotoluene	µg/kg	< 200	< 200	< 200	< 200	< 200
2,4-Dinitrotoluene	µg/kg	< 200	< 200	< 200	< 200	< 200
Azobenzene	µg/kg	< 200	< 200	< 200	< 200	< 200
Hexachlorobenzene	µg/kg	< 200	< 200	< 200	< 200	< 200
Hexachloroethane	µg/kg	< 150	< 150	< 150	< 150	< 150
n-Nitro-n-propyl-1-propanamine	µg/kg	< 200	< 200	< 200	< 200	< 200
Isophorone	µg/kg	< 200	< 200	< 200	< 200	< 200
Bis(2-chloroethoxy)methane	µg/kg	< 150	< 150	< 150	< 150	< 150
Hexachlorobutadiene	µg/kg	< 150	< 150	< 150	< 150	< 150
Anthraquinone	µg/kg	170	< 150	< 150	< 150	< 150
Aniline	µg/kg	< 150	< 150	210	< 150	< 150
Di-n-octyl phthalate	µg/kg	160	< 100	190	< 100	< 100
Hexachlorocyclopentadiene	µg/kg	< 300	< 300	< 300	< 300	< 300
2-Methylnapthalene	µg/kg	< 250	< 250	< 250	< 250	< 250
2-nitroaniline	µg/kg	< 200	< 200	< 200	< 200	< 200
3-nitroaniline	µg/kg	< 200	< 200	< 200	< 200	< 200
4-Chloroaniline	µg/kg	< 250	< 250	< 250	< 250	< 250
4-nitroaniline	µg/kg	< 150	< 150	< 150	< 150	< 150
Bis (2-ethylhexyl) phthalate	µg/kg	< 300	< 300	< 300	< 300	< 300
Carbazole	µg/kg	< 150	< 150	< 150	< 150	< 150
Dibenzofuran	µg/kg	< 150	< 150	< 150	< 150	< 150

CERTIFICATE OF ANALYSIS

Received	25 soil samples submitted for analysis on 17/10/2006
On	17/10/2006
Details	Soil
STL Ref	J9015 - Borough Green Sand Pits - Laura Brearley

Sample Ref:		TP1	TP5	TP8
Depth unit	m	1.00	2.00	2.50
Lab ID		178978	178988	178997
Aliphatic C5-C6	mg/kg	< 0.01	< 0.01	< 0.01
Aliphatic >C6-C8	mg/kg	< 0.01	< 0.01	< 0.01
Aliphatic >C8-C10	mg/kg	< 0.01	< 0.01	< 0.01
Aliphatic >C10-C12	mg/kg	< 0.01	< 0.01	< 0.01
Aliphatic >C12-C16	mg/kg	40	63	< 5
Aliphatic >C16-C21	mg/kg	50	110	< 5
Aliphatic >C21-C35	mg/kg	370	210	14
Total Aliphatics (C5-C35)	mg/kg	460	390	14
Aromatic C6-C7	mg/kg	< 0.01	< 0.01	< 0.01
Aromatic >C7-C8	mg/kg	< 0.01	< 0.01	< 0.01
Aromatic >C8-C10	mg/kg	< 0.01	< 0.01	< 0.01
Aromatic >C10-C12	mg/kg	< 0.01	< 0.01	< 0.01
Aromatic >C12-C16	mg/kg	39	69	< 5
Aromatic >C16-C21	mg/kg	94	160	< 5
Aromatic >C21-C35	mg/kg	480	230	26
Total Aromatics (C5-C35)	mg/kg	610	450	26
Volatile Hydrocarbons (C5-C12)	mg/kg	< 0.01	< 0.01	< 0.01
Extractable Hydrocarbons (C12-C35)	mg/kg	1100	840	41
"Total" Hydrocarbons (C5-C35)	mg/kg	1100	840	41
MTBE	mg/kg	< 0.010	< 0.010	< 0.010
Benzene	mg/kg	< 0.010	< 0.010	< 0.010
Toluene	mg/kg	< 0.010	< 0.010	< 0.010
Ethylbenzene	mg/kg	< 0.010	< 0.010	< 0.010
m,p-Xylenes	mg/kg	< 0.010	< 0.010	< 0.010
o-Xylene	mg/kg	< 0.010	< 0.010	< 0.010
1,3,5-Trimethylbenzene	mg/kg	< 0.010	< 0.010	< 0.010
1,2,4-Trimethylbenzene	mg/kg	< 0.010	< 0.010	< 0.010

ALcontrol Technichem
EPH Description

Job Number: 06-22120
Client: Southern Testing
Project Code: J9015

Matrix: Soils
Project Name: Borough Green Sand Pits

Laboratory Reference No	Sample Reference	Sample Depth (m)	Date Sampled	EPH Description
178979	TP1	2.5	-	The sample chromatogram exhibits a hump of unresolved complex material eluting from C10 to beyond C40 overlain by a series of n-alkane peaks and a series of peaks consistent with a small amount of PAHs.
178981	TP2	2.0	-	The sample chromatogram exhibits a hump of unresolved complex material eluting from C12 to beyond C40 overlain by a series of peaks consistent with a small amount of PAHs.
178984	TP3	3.0	-	The sample chromatogram exhibits a hump of unresolved complex material eluting from C12 to beyond C40, overlain by a series of peaks consistent with a small amount of PAHs.
178985	TP4	1.5	-	The sample chromatogram exhibits a hump of unresolved complex material eluting from C12 to beyond C40.
178989	TP5	2.8	-	The sample chromatogram exhibits a hump of unresolved complex material eluting from C10 to beyond C40 overlain by a series of n-alkane peaks and a series of peaks consistent with PAHs.
178991	TP6	2.0	-	The sample chromatogram exhibits a hump of unresolved complex material eluting from before C10 to beyond C40 overlain by a series of n-alkane peaks and a series of peaks which require qualitative analysis by GC-MS for further identification.
178994	TP7	2.5	-	The sample chromatogram exhibits a hump of unresolved complex material eluting from C14 to beyond C40.
178999	TP9	1.5	-	The sample chromatogram exhibits two overlapping humps of unresolved complex material eluting from before C10 to beyond C40 overlain by a series of peaks consistent with a small amount of PAHs.

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Laboratory Reference No	Sample Reference	Sample Depth (m)	Date Sampled	EPH Description
179000	TP9	2.9	-	The sample chromatogram exhibits a hump of unresolved complex material eluting from C14 to beyond C40.
179001	TP11	2.0	-	The sample chromatogram exhibits too little GC-FID amenable material to provide qualitative analysis.