11 The Mending Rooms
Sunny Bank Mills
Town St., Farsley, LS28 5UJ
0113 257 5397

Borehole Log

Borehole No. **SB4**

Sheet 1 of 1

Project Name:	Priory Garage, Liverpool	Location Details: / Project No. 0533	Co-ords:
Location:	232 Priory Road, Liverpool, L4 2SL		Level:
Client:	Topflight Trading Limited		Dates: 26/01/2016

Hole Type: WS
Scale: 1:50
Logged By:

Well	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
		0.30	PID	PID=6	0.10 0.30			Made Ground Tarmac.
		0.80	PID	PID=2				Made Ground Crushed brick with ash and coal fragments.
					1.00			Made Ground Reworked clay with ash and brick fragments and occasional fragments of sandstone.
					1.20			SANDSTONE Yellow/brown weathered dry sandstone. End of Borehole at 1.20m

Remarks

11 The Mending Rooms
Sunny Bank Mills
Town St., Farsley, LS28 5UJ
0113 257 5397

Borehole Log

Borehole No.
SB5
Sheet 1 of 1

Project Name:	Priory Garage, Liverpool	Location Details: / Project No. 0533	Co-ords:
Location:	232 Priory Road, Liverpool, L4 2SL		Level:
Client:	Topflight Trading Limited		Dates: 26/01/2016

Hole Type: WS
Scale: 1:50
Logged By:

Well	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
		0.30	PID	PID=1	0.20			Made Ground Concrete
					0.30			Made Ground Crushed concrete fill in a sandy matrix.
		0.80	PID	PID=4	0.50			Made Ground Sandy, ashy fill with fragments of brick, concrete and coal in a clayey matrix.
					0.90			Made Ground Reworked damp organic-rich clay with occasional brick and sandstone fragments.
					1.00			SANDSTONE Yellow/brown, weathered dry sandstone. End of Borehole at 1.00m

1 2 3 4 5 6 7 8 9 10

Remarks

11 The Mending Rooms
Sunny Bank Mills
Town St., Farsley, LS28 5UJ
0113 257 5397

Borehole Log

Borehole No. **SB6**

Sheet 1 of 1

Project Name:	Priory Garage, Liverpool	Location Details: / Project No. 0533	Co-ords:
Location:	232 Priory Road, Liverpool, L4 2SL		Level:
Client:	Topflight Trading Limited		Dates: 26/01/2016

Hole Type: WS
Scale: 1:50
Logged By:

Well	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
		0.30	PID	PID=3	0.20			Made Ground Concrete.
					0.50			Made Ground Ashy fill of sands and gravels in slightly damp clayey matrix with occasional brick, concrete, clinker and sandstone fragments.
		0.80	PID	PID=0				
					1.00			Made Ground Reworked organic-rich clay with occasional brick and sandstone fragments.
		1.30	PID	PID=0	1.30			SANDSTONE Yellow/brown dry weathered sandstone. End of Borehole at 1.30m

Remarks

11 The Mending Rooms
Sunny Bank Mills
Town St., Farsley, LS28 5UJ
0113 257 5397

Borehole Log

Borehole No.
SB7
Sheet 1 of 1

Project Name:	Priory Garage, Liverpool	Project No. 0533	Co-ords:
Location:	232 Priory Road, Liverpool, L4 2SL		Level:
Client:	Topflight Trading Limited		Dates: 26/01/2016

Location Details:

Hole Type
WS

Scale
1:50

Logged By

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.30	PID	PID=1	0.30			Made Ground Concrete.
					0.40			Made Ground Loose gravel fill in slightly clayey matrix.
		0.80	PID	PID=5	0.80			Made Ground Reworked organic-rich clay with occasional brick fragments and slight hydrocarbon odour.
					1.00			SANDSTONE Brown becoming red dry weathered sandstone. No hydrocarbon odour near base. End of Borehole at 1.00m

Remarks

11 The Mending Rooms
Sunny Bank Mills
Town St., Farsley, LS28 5UJ
0113 257 5397

Borehole Log

Location Details:

Borehole No.
SB8
Sheet 1 of 1

Project Name:	Priory Garage, Liverpool	Project No. 0533	Co-ords:	Hole Type WS
Location:	232 Priory Road, Liverpool, L4 2SL		Level:	Scale 1:50
Client:	Topflight Trading Limited		Dates: 26/01/2016	Logged By

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.30	PID	PID=1	0.10			Made Ground Tarmac.
					0.40			Made Ground Ashy fill of sands and gravels. Poor returns.
		0.80	PID	PID=1	0.90			Made Ground Reworked organic-rich clay with occasional brick and sandstone fragments.
		1.30	PID	PID=2				SANDSTONE Yellow/brown dry weathered sandstone.
					1.50			End of Borehole at 1.50m

Remarks

11 The Mending Rooms
Sunny Bank Mills
Town St., Farsley, LS28 5UJ
0113 257 5397

Borehole Log

Borehole No.
SB9
Sheet 1 of 1

Project Name:	Priory Garage, Liverpool	Location Details:	
		Project No. 0533	Co-ords:
Location:	232 Priory Road, Liverpool, L4 2SL		Level:
Client:	Topflight Trading Limited		Dates: 26/01/2016

Hole Type: WS
Scale: 1:50
Logged By:

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.10			Made Ground Tarmac.
					0.50			Made Ground Ashy fill of sands and gravels in organic clayey matrix. Occasional brick, concrete and coal fragments.
					1.00			Made Ground Reworked organic-rich clay with occasional fragments of concrete and sandstone.
					1.20			SANDSTONE Yellow/brown dry weathered sandstone. End of Borehole at 1.20m

Remarks

Appendix D

Laboratory Certificates

Chemtest
The right chemistry to deliver results
Chemtest Ltd.
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.co.uk

UKAS TESTING
2183

Final Report

Report No.:	16-01942-1
Initial Date of Issue:	03-Feb-2016
Client	Geo2 Remediation
Client Address:	Nottingham LS28 5UJ
Contact(s):	Adam Wilson
Project	0533 Priory

Quotation No.:		**Date Received:**	28-Jan-2016
Order No.:		**Date Instructed:**	28-Jan-2016
No. of Samples:	8	**Target Date:**	03-Feb-2016
Turnaround (Wkdays):	5	**Results Due:**	03-Feb-2016
Date Approved:	03-Feb-2016		

Approved By:

Details: Keith Jones, Technical Manager

Chemtest
The right chemistry to deliver results

Results - Soil

Project: 0533 Priory

Client: Geo2 Remediation					**Chemtest Job No.:**	16-01942	16-01942	16-01942	16-01942	16-01942	16-01942	16-01942
Quotation No.:					**Chemtest Sample ID.:**	246105	246106	246107	246108	246109	246110	246111	246112
Order No.:					Client Sample Ref.:	SB1	SB3	SB4	SB5	SB6	SB7	SB8	SB9
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.8	0.3	0.3	0.8	0.3	0.8	1.3	0.3
					Date Sampled:	26-Jan-2016	26-Jan-2016	26-Jan-2016	26-Jan-2016	26-Jan-2016	26-Jan-2016	26-Jan-2016	26-Jan-2016
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
ACM Type	U	2192		N/A			-	-		-			-
Asbestos Identification	U	2192	%	0.001			No Asbestos Detected	No Asbestos Detected		No Asbestos Detected			No Asbestos Detected
Moisture	N	2030	%	0.020	17		8.0	7.5	17	14	21	9.2	19
Arsenic	U	2450	mg/kg	1.0			6.7	16					23
Cadmium	U	2450	mg/kg	0.10			0.14	0.20					0.32
Chromium	U	2450	mg/kg	1.0			14	19					14
Copper	U	2450	mg/kg	0.50			20	36					98
Mercury	U	2450	mg/kg	0.10			< 0.10	< 0.10					0.30
Nickel	U	2450	mg/kg	0.50			14	23					30
Lead	U	2450	mg/kg	0.50			140	98					140
Selenium	U	2450	mg/kg	0.20			< 0.20	< 0.20					< 0.20
Zinc	U	2450	mg/kg	0.50			350	78					210
Total Organic Carbon	U	2625	%	0.20			2.0		2.6			0.40	
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	22		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	88		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	150		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	430		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	280		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	U	2680	mg/kg	5.0	960		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	100		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	1000		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	16
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	3500		22	18	11	38	3.1	1.6	82
Aromatic TPH >C21-C35	N	2680	mg/kg	1.0	8500		27	22	15	80	< 1.0	< 1.0	120
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	390		< 1.0	< 1.0	< 1.0	4.8	< 1.0	< 1.0	9.1
Total Aromatic Hydrocarbons	U	2680	mg/kg	5.0	14000		49	40	27	120	< 5.0	< 5.0	230
Total Petroleum Hydrocarbons	U	2680	mg/kg	10	14000		49	40	27	120	< 10	< 10	230
Dichlorodifluoromethane	U	2760	µg/kg	1.0	< 1.0						< 1.0		
Chloromethane	U	2760	µg/kg	1.0	< 1.0						< 1.0		
Vinyl Chloride	U	2760	µg/kg	1.0	< 1.0						< 1.0		
Bromomethane	U	2760	µg/kg	20	< 20						< 20		
Chloroethane	U	2760	µg/kg	2.0	< 2.0						< 2.0		
Trichlorofluoromethane	U	2760	µg/kg	1.0	< 1.0						< 1.0		
1,1-Dichloroethene	U	2760	µg/kg	1.0	< 1.0						< 1.0		

Chemtest
The right chemistry to deliver results

Results - Soil

Project: 0533 Priory

Client: Geo2 Remediation					**Chemtest Job No.:**	16-01942	16-01942	16-01942	16-01942	16-01942	16-01942	16-01942
Quotation No.:					**Chemtest Sample ID.:**	246105	246106	246107	246108	246109	246110	246111	246112
Order No.:					Client Sample Ref.:	SB1	SB3	SB4	SB5	SB6	SB7	SB8	SB9
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.8	0.3	0.3	0.8	0.3	0.8	1.3	0.3
					Date Sampled:	26-Jan-2016	26-Jan-2016	26-Jan-2016	26-Jan-2016	26-Jan-2016	26-Jan-2016	26-Jan-2016	26-Jan-2016
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
Trans 1,2-Dichloroethene	U	2760	µg/kg	1.0		< 1.0					< 1.0		
1,1-Dichloroethane	U	2760	µg/kg	1.0		< 1.0					< 1.0		
cis 1,2-Dichloroethene	U	2760	µg/kg	1.0		< 1.0					< 1.0		
Bromochloromethane	U	2760	µg/kg	5.0		< 5.0					< 5.0		
Trichloromethane	U	2760	µg/kg	1.0		< 1.0					< 1.0		
1,1,1-Trichloroethane	U	2760	µg/kg	1.0		< 1.0					< 1.0		
Tetrachloromethane	U	2760	µg/kg	1.0		< 1.0					< 1.0		
1,1-Dichloropropene	U	2760	µg/kg	1.0		< 1.0					< 1.0		
Benzene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	U	2760	µg/kg	2.0		< 2.0					< 2.0		
Trichloroethene	N	2760	µg/kg	1.0		< 1.0					< 1.0		
1,2-Dichloropropane	U	2760	µg/kg	1.0		< 1.0					< 1.0		
Dibromomethane	U	2760	µg/kg	1.0		< 1.0					< 1.0		
Bromodichloromethane	U	2760	µg/kg	5.0		< 5.0					< 5.0		
cis-1,3-Dichloropropene	N	2760	µg/kg	10		< 10					< 10		
Toluene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.7	< 1.0	< 1.0
Trans-1,3-Dichloropropene	N	2760	µg/kg	10		< 10					< 10		
1,1,2-Trichloroethane	U	2760	µg/kg	10		< 10					< 10		
Tetrachloroethene	U	2760	µg/kg	1.0		< 1.0					< 1.0		
1,3-Dichloropropane	U	2760	µg/kg	2.0		< 2.0					< 2.0		
Dibromochloromethane	U	2760	µg/kg	10		< 10					< 10		
1,2-Dibromoethane	U	2760	µg/kg	5.0		< 5.0					< 5.0		
Chlorobenzene	U	2760	µg/kg	1.0		< 1.0					< 1.0		
1,1,1,2-Tetrachloroethane	U	2760	µg/kg	2.0		< 2.0					< 2.0		
Ethylbenzene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	U	2760	µg/kg	1.0		1.5	< 1.0	< 1.0	< 1.0	< 1.0	15	< 1.0	1.4
o-Xylene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	6.7	< 1.0	< 1.0
Styrene	U	2760	µg/kg	1.0		< 1.0					< 1.0		
Tribromomethane	U	2760	µg/kg	1.0		< 1.0					< 1.0		
Isopropylbenzene	U	2760	µg/kg	1.0		< 1.0					< 1.0		
Bromobenzene	U	2760	µg/kg	1.0		< 1.0					< 1.0		
1,2,3-Trichloropropane	N	2760	µg/kg	50		< 50					< 50		
N-Propylbenzene	U	2760	µg/kg	1.0		< 1.0					< 1.0		
2-Chlorotoluene	U	2760	µg/kg	1.0		< 1.0					< 1.0		
1,3,5-Trimethylbenzene	U	2760	µg/kg	1.0		< 1.0					< 1.0		
4-Chlorotoluene	U	2760	µg/kg	1.0		< 1.0					< 1.0		
Tert-Butylbenzene	U	2760	µg/kg	1.0		< 1.0					< 1.0		
1,2,4-Trimethylbenzene	U	2760	µg/kg	1.0		< 1.0					< 1.0		
Sec-Butylbenzene	U	2760	µg/kg	1.0		< 1.0					< 1.0		
1,3-Dichlorobenzene	U	2760	µg/kg	1.0		< 1.0					< 1.0		

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Results - Soil

Project: 0533 Priory

Client: Geo2 Remediation					**Chemtest Job No.:**	16-01942	16-01942	16-01942	16-01942	16-01942	16-01942	16-01942	16-01942
Quotation No.:					**Chemtest Sample ID.:**	246105	246106	246107	246108	246109	246110	246111	246112
Order No.:					Client Sample Ref.:	SB1	SB3	SB4	SB5	SB6	SB7	SB8	SB9
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.8	0.3	0.3	0.8	0.3	0.8	1.3	0.3
					Date Sampled:	26-Jan-2016	26-Jan-2016	26-Jan-2016	26-Jan-2016	26-Jan-2016	26-Jan-2016	26-Jan-2016	26-Jan-2016
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
4-Isopropyltoluene	U	2760	µg/kg	1.0		< 1.0					< 1.0		
1,4-Dichlorobenzene	U	2760	µg/kg	1.0		< 1.0					< 1.0		
N-Butylbenzene	U	2760	µg/kg	1.0		< 1.0					< 1.0		
1,2-Dichlorobenzene	U	2760	µg/kg	1.0		< 1.0					< 1.0		
1,2-Dibromo-3-Chloropropane	U	2760	µg/kg	50		< 50					< 50		
1,2,4-Trichlorobenzene	U	2760	µg/kg	1.0		< 1.0					< 1.0		
Hexachlorobutadiene	U	2760	µg/kg	1.0		< 1.0					< 1.0		
1,2,3-Trichlorobenzene	U	2760	µg/kg	2.0		< 2.0					< 2.0		
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
N-Nitrosodimethylamine	N	2790	mg/kg	0.50		< 0.50					< 0.50		
Phenol	N	2790	mg/kg	0.50		< 0.50					< 0.50		
2-Chlorophenol	N	2790	mg/kg	0.50		< 0.50					< 0.50		
Bis-(2-Chloroethyl)Ether	N	2790	mg/kg	0.50		< 0.50					< 0.50		
1,3-Dichlorobenzene	N	2790	mg/kg	0.50		< 0.50					< 0.50		
1,4-Dichlorobenzene	N	2790	mg/kg	0.50		< 0.50					< 0.50		
1,2-Dichlorobenzene	N	2790	mg/kg	0.50		< 0.50					< 0.50		
2-Methylphenol	N	2790	mg/kg	0.50		< 0.50					< 0.50		
Bis(2-Chloroisopropyl)Ether	N	2790	mg/kg	0.50		< 0.50					< 0.50		
Hexachloroethane	N	2790	mg/kg	0.50		< 0.50					< 0.50		
N-Nitrosodi-n-propylamine	N	2790	mg/kg	0.50		< 0.50					< 0.50		
4-Methylphenol	N	2790	mg/kg	0.50		< 0.50					< 0.50		
Nitrobenzene	N	2790	mg/kg	0.50		< 0.50					< 0.50		
Isophorone	N	2790	mg/kg	0.50		< 0.50					< 0.50		
2-Nitrophenol	N	2790	mg/kg	0.50		< 0.50					< 0.50		
2,4-Dimethylphenol	N	2790	mg/kg	0.50		< 0.50					< 0.50		
Bis(2-Chloroethoxy)Methane	N	2790	mg/kg	0.50		< 0.50					< 0.50		
2,4-Dichlorophenol	N	2790	mg/kg	0.50		< 0.50					< 0.50		
1,2,4-Trichlorobenzene	N	2790	mg/kg	0.50		< 0.50					< 0.50		
Naphthalene	N	2790	mg/kg	0.50		26					< 0.50		
4-Chloroaniline	N	2790	mg/kg	0.50		< 0.50					< 0.50		
Hexachlorobutadiene	N	2790	mg/kg	0.50		< 0.50					< 0.50		
4-Chloro-3-Methylphenol	N	2790	mg/kg	0.50		< 0.50					< 0.50		
2-Methylnaphthalene	N	2790	mg/kg	0.50		23					< 0.50		
4-Nitrophenol	N	2790	mg/kg	0.50		< 0.50					< 0.50		
Hexachlorocyclopentadiene	N	2790	mg/kg	0.50		< 0.50					< 0.50		
2,4,6-Trichlorophenol	N	2790	mg/kg	0.50		< 0.50					< 0.50		
2,4,5-Trichlorophenol	N	2790	mg/kg	0.50		< 0.50					< 0.50		
2-Chloronaphthalene	N	2790	mg/kg	0.50		< 0.50					< 0.50		
2-Nitroaniline	N	2790	mg/kg	0.50		< 0.50					< 0.50		
Acenaphthylene	N	2790	mg/kg	0.50		< 0.50					< 0.50		

Chemtest
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Results - Soil

Project: 0533 Priory

Client: Geo2 Remediation					**Chemtest Job No.:**	16-01942	16-01942	16-01942	16-01942	16-01942	16-01942	16-01942	16-01942
Quotation No.:					**Chemtest Sample ID.:**	246105	246106	246107	246108	246109	246110	246111	246112
Order No.:					Client Sample Ref.:	SB1	SB3	SB4	SB5	SB6	SB7	SB8	SB9
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.8	0.3	0.3	0.8	0.3	0.8	1.3	0.3
					Date Sampled:	26-Jan-2016	26-Jan-2016	26-Jan-2016	26-Jan-2016	26-Jan-2016	26-Jan-2016	26-Jan-2016	26-Jan-2016
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
Dimethylphthalate	N	2790	mg/kg	0.50	< 0.50					< 0.50		
2,6-Dinitrotoluene	N	2790	mg/kg	0.50	< 0.50					< 0.50		
Acenaphthene	N	2790	mg/kg	0.50	91					< 0.50		
3-Nitroaniline	N	2790	mg/kg	0.50	< 0.50					< 0.50		
Dibenzofuran	N	2790	mg/kg	0.50	45					< 0.50		
4-Chlorophenylphenylether	N	2790	mg/kg	0.50	< 0.50					< 0.50		
2,4-Dinitrotoluene	N	2790	mg/kg	0.50	< 0.50					< 0.50		
Fluorene	N	2790	mg/kg	0.50	68					< 0.50		
Diethyl Phthalate	N	2790	mg/kg	0.50	< 0.50					< 0.50		
4-Nitroaniline	N	2790	mg/kg	0.50	< 0.50					< 0.50		
2-Methyl-4,6-Dinitrophenol	N	2790	mg/kg	0.50	< 0.50					< 0.50		
Azobenzene	N	2790	mg/kg	0.50	< 0.50					< 0.50		
4-Bromophenylphenyl Ether	N	2790	mg/kg	0.50	< 0.50					< 0.50		
Hexachlorobenzene	N	2790	mg/kg	0.50	< 0.50					< 0.50		
Pentachlorophenol	N	2790	mg/kg	0.50	< 0.50					< 0.50		
Phenanthrene	N	2790	mg/kg	0.50	390					< 0.50		
Anthracene	N	2790	mg/kg	0.50	120					< 0.50		
Carbazole	N	2790	mg/kg	0.50	35					< 0.50		
Di-N-Butyl Phthalate	N	2790	mg/kg	0.50	< 0.50					< 0.50		
Fluoranthene	N	2790	mg/kg	0.50	420					< 0.50		
Pyrene	N	2790	mg/kg	0.50	400					< 0.50		
Butylbenzyl Phthalate	N	2790	mg/kg	0.50	< 0.50					< 0.50		
Benzo[a]anthracene	N	2790	mg/kg	0.50	200					< 0.50		
Chrysene	N	2790	mg/kg	0.50	190					< 0.50		
Bis(2-Ethylhexyl)Phthalate	N	2790	mg/kg	0.50	< 0.50					< 0.50		
Di-N-Octyl Phthalate	N	2790	mg/kg	0.50	< 0.50					< 0.50		
Benzo[b]fluoranthene	N	2790	mg/kg	0.50	230					< 0.50		
Benzo[k]fluoranthene	N	2790	mg/kg	0.50	110					< 0.50		
Benzo[a]pyrene	N	2790	mg/kg	0.50	200					< 0.50		
Indeno(1,2,3-c,d)Pyrene	N	2790	mg/kg	0.50	120					< 0.50		
Dibenz(a,h)Anthracene	N	2790	mg/kg	0.50	50					< 0.50		
Benzo[g,h,i]perylene	N	2790	mg/kg	0.50	140					< 0.50		

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Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis
The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols
For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at our Coventry laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container

Sample Retention and Disposal

All soil samples will be retained for a period of 60 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.co.uk

Appendix E

Risk Assessment Terminology

Definitions and Classifications of Risk Assessment Terminology.

Probability

Probability can be defined as the chance of a particular event occurring in a given period of time.

Descriptions of each of the four qualitative terms to be use in this report to describe the perceived probability of any identified pollutant linkage becoming realised are shown below in Table W.

Term	Description
High Likelihood	There is pollutant linkage and an event would appear very likely in the short-term and almost inevitable over the long-term, or there is evidence at the receptor of harm or pollution.
Likely	There is pollutant linkage and all the elements are present and in the right place which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short-term and likely over the long-term.
Low Likelihood	There is pollutant linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a long period such an event would take place, and is less likely in the shorter term.
Unlikely	There is pollutant linkage but circumstances are such that it is improbable that an event would occur even in the very long-term.

Table W. Description of Probability Classifications

Severity

Severity (consequence) can be defined as the adverse effects (or harm) arising from a defined hazard, which impairs the quality of human health or the environment in the short or longer term.

Descriptions of each of the four qualitative terms to be use in this report to describe the perceived potential severity of any identified pollutant linkage becoming realised are shown overleaf in Table X.

Term	Description
Severe	Highly elevated concentrations **likely** to result in "significant harm" to human health as defined by the EPA 1990, Part 2A, if exposure occurs. Equivalent to EA **Category 1** pollution incident including persistent and/or extensive effects on water quality; leading to closure of a potable abstraction point; major impact on amenity value or major damage to agriculture or commerce. Major damage to aquatic or other ecosystems, which is likely to result in a substantial adverse change in its functioning or harm to a species of special interest that endangers the long-term maintenance of the population. Catastrophic damage to crops, buildings or property.
Medium	Elevated concentrations which could result in "significant harm" to human health as defined by the EPA 1990, Part 2A if exposure occurs. Equivalent to **EA Category 2** pollution incident including significant effect on water quality; notification required to abstractors; reduction in amenity value or significant damage to agriculture or commerce. Significant damage to aquatic or other ecosystems, which may result in a substantial adverse change in its functioning or harm to a species of special interest that may endanger the long-term maintenance of the population. Significant damage to crops, buildings or property.
Mild	Exposure to human health **unlikely** to lead to "significant harm". Equivalent to **EA Category 3** pollution incident including minimal or short lived effect on water quality; marginal effect on amenity value, agriculture or commerce. Minor or short lived damage to aquatic or other ecosystems, which is unlikely to result in a substantial adverse change in its functioning or harm to a species of special interest that would endanger the long-term maintenance of the population. Minor damage to crops, buildings or property.
Minor	No measurable effect on humans. Equivalent to insubstantial pollution incident with no observed effect on water quality or ecosystems. Repairable effects of damage to buildings, structures and services.

Table X. Description of Severity Classifications

Once the severity and probability of a pollutant linkage has been determined the risk can be assessed using the risk matrix shown overleaf on Table Y.

Risk Matrix

By cross referencing the derived severity and probability in Table Y, below the perceived potential risk can be determined.

		Severity			
		Severe	Medium	Mild	Minor
Probability	High likelihood	Very high risk	High risk	Moderate risk	Moderate / low risk
	Likely	High risk	Moderate risk	Moderate / low risk	Low risk
	Low likelihood	Moderate risk	Moderate / low risk	Low risk	Very low risk
	Unlikely	Moderate / low risk	Low risk	Very low risk	Very low risk

Table Y. Risk Assessment Matrix

The risk categories detailed above are defined below in the following Table Z.

Term	Description
Very High Risk	There is a high probability that significant harm could arise to a designated receptor from an identified hazard at the site without appropriate remedial action.
High Risk	Significant Harm is likely to arise to a designated receptor from an identified hazard at the site without appropriate remedial action.
Moderate Risk	It is possible that without appropriate remedial action, harm could arise to a designated receptor but it is relatively unlikely that any such harm would be severe and if any harm were to occur, it is likely that such harm would be relatively mild.
Low Risk	It is possible that significant harm could arise to a designated receptor from an identified hazard but it is likely that at worst this harm if realised would normally be mild.
Very Low Risk	There is a low possibility that harm could arise to a receptor. In the event of such harm being realised, it is not likely to be severe.

Table Z. Definition of Risk

Appendix F

Watching Brief Method Statement

Geo2 Remediation Ltd
11 The Mending Rooms,
Sunny Bank Mills
Town Street, Farsley
Leeds
LS28 5UJ

Phone 0113 257 5397
Email info@geo2.co.uk
Web www.geo2.co.uk

Generic Watching Brief Method Statement

This method statement aims to establish a structure by which site works / development contractors will be able to effectively meet the requirements of a watching brief. A watching brief is frequently proposed as part of planning conditions imposed onto any brownfield site, or a site potentially affected by contaminants. This methodology proposed a strategy which allows the site workers to effectively undertake these works themselves without the need for a full time environmental specialist.

Requirements of a Nominated Competent Person (CP)

The party undertaking the site works will nominate a Competent Person (CP) who will be responsible for providing a watching brief over all excavation, soil handling works associated with construction and for ensuring site workers conform to appropriate PPE requirements at all times. The CP will be on-site during all enabling, and construction works.

The CP will be briefed by Geo^2 on environmental management during or in advance of the groundworks at an on-site meeting to be held prior to the commencement of works. This would typically address the following issues;

- A review of any existing site information with regard to areas of potential contamination both identified and unidentified,
- Types of contamination which may be encountered and also potential for unexpected contamination, and means of identification,
- Potential risks associated with contaminants, with regard to health and safety concerns of construction workers,
- Potential for waste disposal issues,
- Ensuring that the CP is confident and capable of undertaking the practical responsibilities identified,
- Any additional site specific concerns or factors which may prove relevant to works, such as any visual monitoring / inspection requirements (e.g. daily observations of adjacent streams etc).

The CP would be required to maintain records of any issues, as detailed above, which would be encountered during the programme of works. Records should detail the time and date, nature of any incident, or detail of potentially contaminated soils encountered, location of this material,

where possible extent and the actions undertaken to ensure this was appropriately classified. These would be required to be submitted to the client and Geo^2 to ensure that an appropriate validation report could be complied to enable the planning conditions to be lifted. Records should be available onsite at all times for inspection as required.

The CP is also responsible for contacting Geo^2 in the event of encountering situations requiring environmental management. A Geo^2 contact will be ascribed to each site, so suitable site specific advice will be available over the phone as necessary. Site visits can be arranged at short notice to assist with any potentially significant issues.

Unexpected Contamination

Unexpected contamination may comprise impacted sub-soil, or structures such as underground storage tanks (UST), subsurface features, pipes, sumps or chambers with associated contamination observed beneath the site during the redevelopment works.

Where apparently contaminated sub-soils (or waters) are encountered, the permanent nominated CP should be contacted for assessment.

As a guide, apparently contaminated sub-soils or waters may comprise visually impacted and strongly odorous material. Encountered odours could be petrol, diesel, solvents or oil-like. Should materials of this description, or other description following a site specific briefing, be encountered and this material be considered to be unidentified, Geo^2 should be contacted. In such circumstances, the affected area should be isolated and work in the area stopped, pending the Geo^2 consultant visit to sample or assess the soil. The area should remain isolated whilst the samples are analysed at an appropriate laboratory, if considered necessary.

Based on the results and in comparison with adopted screening criteria, Geo^2 will determine whether the identified materials present a significant environmental risk. Should the soil need to be removed in line with the proposed development programme, or as a result of a risk based analysis, validation samples will be collected from the edge of the excavation by a Geo^2 site engineer.

All waste should be appropriately isolated and stored to prevent spreading contamination across the site. Waste should then be classified and disposed of in accordance with the applicable waste management regulations under full duty of care documentation. Potential exists for hazardous waste to be present, and this should also be dealt with in accordance with the relevant legislation.

Should unidentified underground features be encountered, such as tanks or fuel delivery lines, that require removal in line with the proposed development, they should be appropriately decommissioned. Decommissioning should comprise pumping and removal of waste water and any sediment in accordance with the applicable waste management regulations under full duty of care documentation. Water and sediment waste may need to be sampled and analysed to determine whether it needs to be disposed of as hazardous.

Should any structure encountered remain in situ, Geo^2 should be contacted to ensure that any potential impact that may be associated with this feature can be appropriately addressed, if necessary. This process may entail additional sampling works, which would require the identified area to be isolated until Geo^2 site staff are able to attend site.

Following removal of any such structure, the CP should inspect the excavations for apparently impacted materials. Should apparently contaminated material be identified beneath or adjacent to the structure, Geo^2 should be contacted to undertake further sampling and analysis. All results will be included in the Validation Report.

The relevant planning authorities will be notified should any unexpected contamination be identified and any remedial actions that are required as a result of encountered materials will be agreed prior to the work being carried out.

Sampling Procedure

All samples obtained by Geo^2 will be stored in appropriate vessels for the required analysis and stored in controlled conditions prior to submission to an appropriately accredited laboratory. All samples will be obtained in line with standard industry guidance.

Validation Report

This typically forms the final part of any contaminated land planning condition and allows the client or local authority certainty that any contaminated land encountered during works has been appropriately addressed and the condition of remaining soils (and groundwater if applicable) is understood. This may be compiled by Geo^2 (typically in the event of unexpected contamination being encountered) or by the Client (this may take the form of a brief letter, stating the completed nature of the site and a brief description of conditions encountered).

Geo^2 Contact

A Geo^2 contact will be prescribed to the site upon implementation of the watching brief. If there are any other queries Geo^2 can be contacted on the office number at 0113 257 5397