APPENDIX 2

ENVIRONMENTAL SEARCHES



Regency Estate, 72-76 Eversholt Street, LONDON, NW1 1BY

Prepared for:

Mr S Fleming Ground Engineering Ltd Newark Road Peterborough Cambridgeshire PE1 5UF

Report Reference: SCD 28739939 1 1

Report Date: 28-AUG-2009

Customer Reference: SJF/C11881

National Grid Reference: 529590 182860

Site Area: 274 m





If you have any questions on the contents of this Report please contact Landmark Customer Helpdesk which is open from 9:00am - 5:30pm, Monday - Friday, via one of the following channels:

Telephone: 0844 844 9966

Fax: 0844 844 9980

Email: info@landmarkinfo.co.uk Website: www.sitecheck.co.uk





Report Sections and Details	Pag
Summary of Site	
This section comprises source, pathway and receptor information found on site. Other factors which may affect the site are also included.	9
Aerial Photo	1
The aerial photo gives an overall view of the area. The smaller large-scale Ordnance Survey map includes the site boundary and search zone buffer at 250m.	
Location Map	2
The accurate large-scale Ordnance Survey map confirms the boundary of the subject site. The descriptive text may identify other features which could be of relevance but not reported. The smaller aerial photo includes the site boundary.	•
Summary Table	3
This section comprises of a summary table of the information found on site and in its vicinity.	
Current Land Use	7
This section contains a map, which shows current land use features. The following pages detail these features and identify the Reference Number and direction.	
Historical Land Use	10
This section contains a map, which shows historical land use features. The following pages detail these features and identify the Reference Number and direction. A table listing all the maps used to source this information is included.	
Sensitivity	13
This section contains a map, which shows pathway and receptor features. The following pages detail these features and identify the Reference Number and direction. This section also contains a separate Flood Map and flood details	
Other Factors	16
This section contains information on other factors which may affect the site and its vicinity.	
Useful Information	17
This section contains information which may be of use when interpreting the report.	•
Useful Contacts	18
All textual information is linked by the 'Contact Ref' to this quick reference list of contacts. These contacts may be able to supply additional information or answer any subsequent query relating to that record	



Current Land Use Potentially Contaminative Uses	Page No.	Reference Number (Map ID)
Contemporary Trade Directory Entries		
Trident Scaffolding Uk Ltd, 72-76, Eversholt Street, LONDON, NW1 1BY, Scaffolding & Work Platforms, Status; Inactive, Positional Accuracy; Automatically positioned to the address	8	1

Sensitivity Pathways	Page No.	Reference Number (Map ID)
Groundwater Vulnerability		
Geolog cal Classification: Non Aquifer (Negligibly permeable) - Formations which are generally regarded as containing insignificant quantities of groundwater. However, groundwater flow through such rocks, although imperceptible, does take place and needs to be considered in assessing the risk associated with persistent pollutants. Soil Classification: Not classified, Map Scale: 1:108,008, Map Name: Sheet 39 West London, Contact Ref: 2	15	

Other Factors Geological	Page No.	Reference Number (Map ID)
Radon Potential - Radon Affected Areas		
Affected Areas: The property is not in a radon affected area, as less than 1% of homes are above the action level, Source: British Geological Survey, National Geoscience Information Service, Contact Ref: 3	16	
Radon Potential - Radon Protection Measures		
Radon Protection Measures; None, Source; British Geological Survey, National Geoscience Information Service, Contact Ref; 3	16	-
Potential for Landslide Ground Stability Hazards		
Hazard Polential: Very Low, Contact Ref: 3	16	#/
Potential for Shrinking or Swelling Clay Ground Stability Hazards		
Hazani Potential: Moderate, Contact Ref: 3	16	





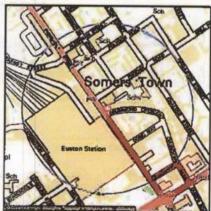
Site Regency Esiale,72-76 Eversholl Street,LONDON,NW1 1BY

Grid Reference 529590, 182860

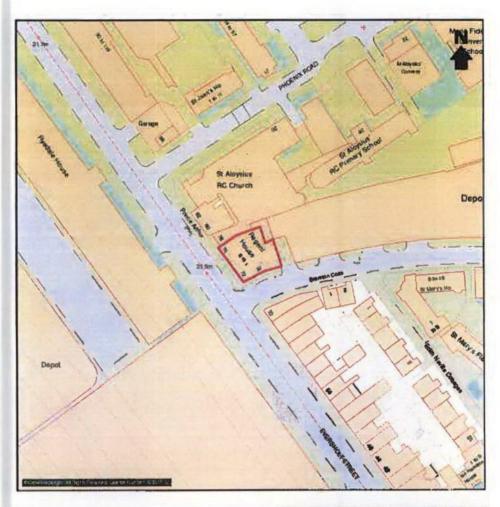
Report Reference SCD_28739939_1_1

Customer Reference SJF/C11881

Size of Site 274 m³







Site
Regency Estate,72-76 Evershoft Street,LONDON,NW1 1BY

Grid Reference 529590, 182860

Report Reference SCD_28739939_1_1

Customer Reference SJF/C11881

Size of Site 274 m²





Current Land Use	On Site	0-250m
Sources	1	17
Waste / Landfill Sites		
BGS Recorded Landfill Siles	0	0
Licensed Waste Management Facilities (Landfill Boundaries)	0	0
Licensed Waste Management Facilities (Locations)	0	0
Local Authority Recorded Landfill Siles	0	0
Registered Landfill Sites	0	0
Registered Waste Transfer Sites	0	0
Registered Waste Treatment or Disposal Sites	0	0
Statutory Authorisations		
ocal Authority Pollution Prevention and Controls	0	3
Contaminated Land Register Entries and Notices	0	0
Registered Radioactive Substances	0	0
Discharge Consents		
Discharge Consenta	0	0
Water Industry Act Referrals	0	0
ndustrial Processes		
ntegrated Politation Controls	0	0
ntegrated Pollution Control Registered Waste Sites	0	0
ntegrated Pollution Prevention And Control	0	0
ocal Authority Integrated Pollution Prevention And Control	0	0
Storage of Hazardous Substances		
Control of Major Accident Hazards Sites (COMAH)	0	0
Explosive Sites	0	0
dotification of Installations Handling Hazardous Substances (NIHHS)	0	0
Planning Hazardous Substance Consents	0	0
Contraventions		
ocal Authority Pollution Prevention and Control Enforcements	0	0
Enforcement and Prohibition Notices	0	0
Planning Hazardous Substance Enforcements	0	0
Prosecutions Retating to Authorised Processes	0	0
Prosecutions Relating to Controlled Waters	0	0
Substantialed Pollution Incident Register	0	0



Current Land Use	On Site	0-250m
Sources	1	17
Potentially Contaminative Uses		
Contemporary Trade Directory Entries	1	14
Fuel Stalion Entries	0	0
Miscellaneous		
BGS Recorded Mineral Siles	0	0

Historical Land Use	On Site	0-250m
Sources	0	14
Potentially Contaminative Uses		
Historical Tanks And Energy Facilities	0	12
Potentially Contaminative Industrial Uses (Past Land Use)	0	2
Potentially Infilled Land		
Former Marshes	0	0
Potentially Infilled Land (Non-Water)	0	0
Potentially Infilled Land (Water)	0	0

Sensitivity	On Site	0-250m
Pathways and Receptors	1	0
Pathways		
Ground water Vulnerability	1	n/a
Drift Deposits	0	n/a
Historical Flood Liabilities	0	0
Extrem Flooding from Rivers or Sea without Defences	0	0
Flooding from Rivers or Sea without Defences	0	0
Areas Benefiting from Flood Defences	0	0
Flood Water Storage Areas	0	0
Flood Defences	0	0

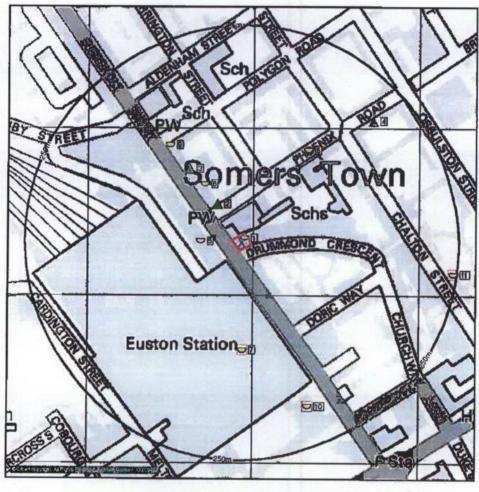


Sensitivity	On Site	0-250m
Pathways and Receptors	1	0
Environmentally Sensitive Receptors		
Areas of Outstanding Natural Beauty	0	0
Environmentally Sensitive Areas	0	0
Local Nature Reserves	0	0
Marine Nature Reserves	0	0
National Nature Reserves	0	0
Nearest Surface Water Feature	0	0
Ramsar Siles	0	0
Sites of Special Scientific Interest	0	0
Source Protection Zones	0	0
Special Areas of Conservation	0	0
Special Protection Areas	0	0
Water Abstractions	0	0
Protected Countryside Areas		
Forest Parks	0	0
National Parks	0	0
National Scenic Areas	0	0



Other Factors	On S	ite 0-250m
Geological	6	2
Brine Compensation Area	0	nla
Coal Mining Affected Areas	0	n/a
Mining Instability	0	0
Natura and Mining Cavities	0	0
Radon Potential - Radon Affected Areas	1	n/a
Radon Potential - Radon Protection Measures	1	n/a
Potential for Collapsible Ground Stability Hazards	0	0
Potent of for Compressible Ground Stability Hazards	1	0
Potent of for Ground Dissolution Stability Hazards	0	0
Potent of for Landslide Ground Stability Hazards	1	1
Potent of for Running Sand Ground Stability Hazards	1	0
Potential for Shrinking or Swelling Clay Ground Stability Hazards	1	1
Shallow Mining Hazards	0	0









Sou				
Wast	/ Landfill Sites	Ref No.	Search Buffer	Direction
Loca	Authority Landfill Coverage			
Name:	undon Borough of Camden, - Has no landfill data to supply, Contact Ref: 4	-	On Site	E

Statutory Authorisations	Ref No.	Search Buffer	Direction
Local Authority Pollution Prevention and Controls			
Avis Rent A Car Ltd, 88 Evershoft Street, London, NW1 1BP, Part B - Fuel and Power Industry Sector, Reference: PPC23, Status: Permitted, Positional Accuracy: Automatically positioned to the address, Contact Ref: 1	2	0-250m	NW
City Centre Dry Cleaners, 118 Eversholt Street, London, Nw1 1bp. Part B - Other Industries, Reference: PPC/DC17, Status: Permitted, Positional Accuracy: Located by supplier to within 10m, Contact Ref: 1	3	0-250m	NW
Stephie: Dry Cleaner, 52 Phoenix Road, London, Nw1 1es, Part B - Other Industries, Reference: PPC/D 36. Status: Permitted, Positional Accuracy: Located by supplier to within 10m, Contact Ref: 1	4	0-250m	NE

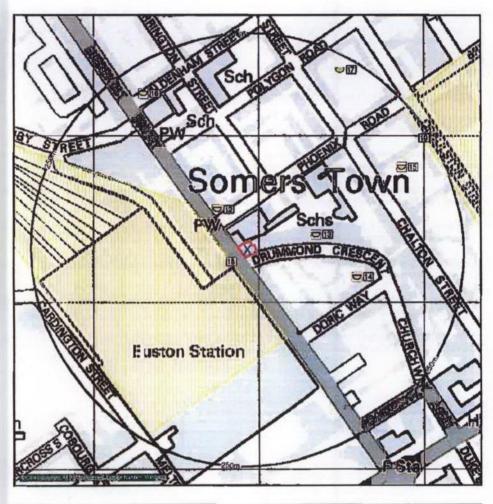
Poter tially Contaminative Uses	Ref No.	Search Buffer	Direction
Contemporary Trade Directory Entries			
Trident Scaffolding Uk Ltd, 72-76, Eversholt Street, LONDON, NW1 1BY, Scaffolding & Work Platforms, Status: Inactive, Positional Accuracy: Automatically positioned to the address	1	On Sile	NE
Euston Alliance, Euston Station Parcel Deck, Barnby Street, London, NW1 2RS, Reilways, Status: Inactive, Positional Accuracy: Manually positioned to the address or location	5	0-250m	W
Portrai & Wedding Photography. 106, Eversholt Street, London, NW1 1BP, Photocopiers, Status: Active, Positional Accuracy: Manually positioned to the address or location	6	0-250m	NW
Supasmips, 6, Euston Station Colonnade, Euston Station, London, NW1 2DY, Photographic Processors, Status: Inactive, Positional Accuracy: Automatically positioned to the address	7	0-250m	s
Virgin Trains, Euston Station, London, NW1 2HS, Railways, Status: Inactive, Positional Accuracy: Automatically positioned to the address	7	0-250m	s
Classic van, Euslon Station, London, NW1 2DU, Dry Cleaners, Status: Active, Positional Accuracy: Automatically positioned to the address	7	0-250m	S
Haywards Cleaners Ltd, Phoenix Rd, London, NW1 1ES, Dry Cleaners, Status: Active, Positional Accuracy: Manually positioned to the road within the address or location	8	0-250m	NE
City Centre Dry Cleaners, 118, Eversholt Street, London, NW1 1BP, Dry Cleaners, Status: Active. Positional Accuracy: Automatically positioned to the address	9	0-250m	NW

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Sources			
Potentially Contaminative Uses	Ref No.	Search Buffer	Direction
Contemporary Trade Directory Entries			
Freightliner Ltd, Third Floor, 1, Eversholt Street, London, NW1 2FL, Freight Forwarders, Status: Inactive. Positional Accuracy: Automatically positioned to the address	10	0-250m	s
T C I Operational Research Ltd, 1, Eversholt Street, London, NW1 2DN, Rallways, Status: Inactive, Positional Accuracy: Manually positioned to the address or location	10	0-250m	S
Freightliner, Third Floor, 1, Eversholt Street, London, NW1 2FL, Freight Forwarders, Status; Inactive, Positional Accuracy: Automatically positioned to the address	10	0-250m	S
Freightliner. Third Floor, 1, Eversholt Street, London, NW1 2FL, Freight Services, Status: Inactive, Positional Accuracy: Automatically positioned to the address	10	0-250m	s
Freightliner, 1, Eversholt Street, London, NW1 2FL, Freight Forwarders, Status: Active, Positional Accuracy: Automatically positioned to the address	10	0-250m	S
Euro Graphics Centre, 42, Chalton Street, London, NW1 1JB, Printers, Status: Active, Positional Accuracy: Automatically positioned to the address	11	0-250m	E
Plumb N Sparx, 42, Chalton Street, London, NW1 1JB, Builders' Merchants, Status: Active, Positional Accuracy: Manually positioned to the address or location	11	0-250m	E





General	Potentially Conteminative Use	Potentially infilled Land
Site Boundary	C Point Feeture	♥ Point Feature
Search Buffer	Area Feature	C) Area Feature
X Bearing Reference Point	φ Line Feature	Eline Feature
☐ Reference Number		



Sources			
Potentially Contaminative Uses	Ref No.	Search Buffer	Direction
Historical Tanks And Energy Facilities			
Potential Tanks, Date of Mapping: 1969 Scale of Mapping: 1:1,250,	12	0-250m	NW
Potential Tanks, Date of Mapping: 1970 Scale of Mapping: 1:2,500,	12	0-250m	NW
Potential Tanks, Date of Mapping: 1953 Scale of Mapping: 1:1,250,	13	0-250m	E
Potential Tanks, Date of Mapping: 1954 - 1970 Scale of Mapping: 1:2,500,	13	0-250m	E
Electrical Sub Station Facilities, Date of Mapping: 1969 Scale of Mapping: 1:1,250,	14	0-250m	E
Electrical Sub Station Facilities, Date of Mapping: 1970 Scale of Mapping: 1:2,500,	14	0-250m	E
Electrical Sub Station Facilities, Date of Mapping: 1954 - 1970 Scale of Mapping: 1:2,500,	15	0-250m	NE
Electrical Sub Station Facilities, Date of Mapping: 1953 - 1969 Scale of Mapping: 1:1,250,	15	0-250m	NE
Date of Mapping: 1954Electrical Sub Station Facilities, Scale of Mapping: 1:2,500,	16	0-250m	NW
Electrical Sub Station Facilities, Date of Mapping: 1953 Scale of Mapping: 1:1,250,	16	0-250m	NW
Electrical Sub Station Facilities, Date of Mapping: 1972 Scale of Mapping: 1:1,250,	16	0-250m	NW
Electrical Sub Station Facilities, Date of Mapping: 1978 Scale of Mapping: 1:1,250,	17	0-250m	NE
Potentially Contaminative Industrial Uses (Past Land Use)			
Railways. Dale of Mapping: 1882 - 1991	18	0-250m	sw
Railways, Date of Mapping: 1938	19	0-250m	NE



Map Details		
The following maps have been analysed for	Historical Tanks and Energy Facilities	
1:1,250	Mapsheet	Published
Ordname Survey Plan	TQ2982NE	1953
Ordnance Survey Plan	TQ2982NE	1969
1:2,500	Mapsheet	Published
Ordnance Survey Plan	TQ2982	1954
Ordnance Survey Plan	TQ2982	1970
The following maps have been analysed for Infilled Land information 1:10,000	Potentially Contaminative Uses and Poten Mapsheet	ntially Published
Ordnance Survey Plan	TQ28SE	1991
1:10,560	Mapsheet	Published
Middlesex	017_00	1882
London	007_NW	1896
Middlesex	017_NW	1896
London	005_00	1920
London	005_00	1938
Ordnance Survey Plan	TQ28SE	1951



Flood Map



General	Area of	Fleodpiela
O Ste Boundary	☐ Arses Benefiting from Flood Defences	Extreme Flooding from Rivers or Sea without Defundes (Zose II)
(2) Search Buffer	☐ Flood Water Storage Areas	Flooding from Rivers or Ses without Defences (Zone 3)
X Bearing Reference Point	- Flood Defenous	
[] Reference Number		



Sensitivity Map



General		Environmentally 84m	Protected Coutryside Areas			
Site Boundary	Area of Or	utstanding Natural Beauty	-	Site of Special Scientific Interest	Forest Park	
	C Environme	entrily Sensitivs Area	13	Special Area of Conservation	Netional Park	
C Search Buffer	Docel Nets	ne Reserve	Ø	Special Protection Area	☐ National Scenic Area	
X Bearing Reference Point	H Marine Hat	turs Rasolve	1	Newcest Surface Water Feeture		
	National N	leture Reserve		Water Abstractions		
3 Reference Number	ZZ Rameer SI	la .				



Pathways and Receptors	Ref No.	Saarah	Direction
Pathways	Rei No.	Buffer	Direction
Groundwater Vulnerability			
Geological Classification: Non Aquifer (Negligibly permeable) - Formations which are generally regarded as containing insignificant quantities of groundwater. However, groundwater flow through such rocks, although imperceptible, does take place and needs to be considered in assessing the risk associated with persistent pollutants. Soil Classification: Not classified, Map Scale: 1:100,000, Map Name: Sheet 39 West London, Contact Ref; 2		On Site	S
Drift Deposits			
None			-
Extreme Flooding from Rivers or Sea without Defences			
None			-
Flooding from Rivers or Sea without Defences			REE!
None			
Areas Benefiting from Flood Defences			
None	*		
Flood Water Storage Areas			
None	-		-
Flood Defences	ALEST.		
None	-		



Other Factors	Search	Directio
Geological	Buffer	Silvetio
Brine Compensation Area		
No l	1	
Coal Mining Affected Areas		
In an a sea which may not be affected by Coal Mirring		-
Radon Potential - Radon Affected Areas		
Affected Areas: The property is not in a radon affected area, as less than 1% of homes are above the action level, Source: British Geological Survey. National Geoscience Information Service, Contact Ref: 3	On Site	E
Radon Potential - Radon Protection Measures		
Radon Protection Measures: None, Source: British Geological Survey, National Geoscience Information Service, Contact Ref: 3	On Sile	E
Potential for Collapsible Ground Stability Hazards		
No Hallard		
Potential for Compressible Ground Stability Hazards		
Hazard Potential: No Hazard, Contact Ref: 3	On Site	E
Potential for Ground Dissolution Stability Hazards		
No Hazard		-
Potential for Landslide Ground Stability Hazards		
Hazard Potential: Very Low, Contact Ref: 3	On Sile	W
Hezard Potential: Low, Contact Ref; 3	0-250m	W
Potential for Running Sand Ground Stability Hazards		
Hazard Potential: No Hazard Contact Ref: 3	On Site	SW
Potential for Shrinking or Swelling Clay Ground Stability Hazards		
Hazard Potential: Moderate Contact Ref: 3	On Site	SE
Hazard Potential: Low Contact Ref: 3	0-250m	SE
Shallow Mining Hazards		

Brought to you by Landmark

No Hazard



Registered Landfill Sites

At present no complete national data set exists for landfill site boundaries, therefore a point grid reference, provided by the data supplier, is used for some landfill sites. In certain cases the point grid references supplied provide only an approximate position and can vary from the site entrance to the centre of the site. Where the exact position of the site is unclear, Landmark construct either a 100 metre "buffer" around the point to warm of the possible presence of landfill. The size of this "buffer" relates to the positional accuracy that can be attributed to the site. The "buffer" is shown on the map as an orange cross-hatched circle and is referred to in the map legend as Potential Landfill Buffer. Where actual boundaries are available, the landfill site area is shown on the map as a red diagonal hatched polygon and referred to in the map legend as Registered Landfill Site.

Local Authority Recorded Landfill Sites

Local Authority landfill data are sourced from individual local authorities that were able to provide information on sites operating prior to the introduction of the Control of Pollution Act (COPA) in 1974. Appropriate authorities are listed under Local Authority Landfill Coverage with an indication of whether or not they were able to make landfill data available. Details of any records identified are disclosed. You should be aware that if the local authority 'Had landfill data but passed it to the relevant environment agency' it does not necessarily mean that local authority landfill data is included in our other Landfill datasets. In addition if no data has been made available, for all or part of the search area, you should be aware that a negative response under 'Local Authority Recorded Landfill Sites' does not necessarily confirm that no local authority landfills exist.

Flooding

The Sitecheck report flood map plots all flood related features revealed within the search area as supplied by the relevant agency.

However, to avoid confusion, the text entry in the body of the report only reveals the detail of the nearest feature in each flood data set.

This is also reflected in the summary table where only a single entry is included to indicate the search buffer of the nearest occurrence.

Mining Instability Data

The Mining Instability data was obtained on Licence from Ove Arup + Partners Limited (for further information, contact mining review@arup.com). No reproduction or further use of such data is to be made without the prior written consent of Ove Arup + Partners Limited. The information and data supplied in the Product are derived from publicly available records and other third party sources and neither Ove Arup + Partners nor Landmark warrant the accuracy or completeness of such information or data.

The Information in this Siteoheck Data Report is derived from a number of statutory and non-statutory sources. While every effort is made to ensure accuracy, Landmark cannot guarantee the accuracy or completeness of such information or data, nor to identify all the factors that may be relevant. If you are a private individual using this report Landmark recommend that you discuss its contents in full with your professional advisor. It is essential to read this report in confunction with the Product User Guide and your attention is drewn to the scope of the report section within this guide.

The Sitecheck Data User guide is available free of charge from our website www.sitecheck.co.uk

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Contact Names and Addresses

1 London Borough of Camden Pollution Projects Team

Seventh Floor Town Hall Extension Argyle Street London WC1H 8EQ Telephone 020 7278 4444 Fax 020 7860 5713

www.camden.gov.uk

2 Environment Agency National Customer Contact Centre (NCCC)

PO Box 544 Templeborough Rotherham S60 1BY Telephone 08708 506 506

enquiries@environment-agency.gov.uk

Please note that the Environment Agency/SEPA have a charging policy in place for enquiries.

3 British Geological Survey Enquiry Service

British Geological Survey Kingsley Dunham Centre Keyworth Nottingham Nottinghamshire NG12 5GG Telephone 0115 936 3143 Fax 0115 936 3276

enquiries@bgs.ac.uk www.bgs.ac.uk

4 London Borough of Camden

Town Hall Judd Street London WC1H 9JE Telephone 020 7974 4444 Fax 020 7974 6866

Telephone 0844 844 9966

Fax 0844 844 9980

info@camden.gov.uk www.camden.gov.uk

Other Contacts

Landmark Information Group Limited

Legal and Financial The Smith Centre Fairmile Henley-on-Thames Oxon RG9 6AB

Thames

info@landmarkinfo.co.uk www.landmarkinfo.co.uk APPENDIX 3

MONITORING RESULTS

Groundwater/Gas Monitoring Record

GROUND ENGINEERING LIMITED

Site:

72-76 Eversholt Street, London NW1

Report Ref:

C11881

Date	Date	Borehole No.		hane v/v)	11 100 100 100 100 100	n Dioxide % v/v)	0x (%	ygen v/v)	Flow Rate (I/hr)	Atmosph. Pressure (mb)	Depth of Well (m bgl)	Depth to Groundwater (m bgl)	Comments
		Peak	Steady	Peak	Steady	Min.	Max.						
02/10/09	WS 1	<0.1	<0.1	<0.1	<01	20.4	20.4	<0.1	1018	7.00	1.70		
06/10/09	WS 1	<0.1	<0.1	<0.1	<0.1	19.9	19.9	<0.1	1005	7.00	1 63		

APPENDIX 4 - CHEMICAL TEST RESULTS



Depot Road Newmarket CB8 OAL Tel: 01638 606070

Ground Engineering Newark Road Peterborough

PE1 5UA

FAO Steve Fleming 15 September 2009

Dear Steve Fleming

Test Report Number

78466

Your Project Reference

72-76 Eversholt Street, London NW1

Please find enclosed the results of analysis for the samples received 7 September 2009.

All soil samples will be retained for a period of one month and all water samples will be retained for 7 days following the date of the test report. Should you require an extended retention period then please detail your requirements in an email to customerservices@cherntest.co.uk. Please be aware that charges may be applicable for extended sample storage.

If you require any further assistance, please do not hesitate to contact the Customer Services team.

Yours sincerely

KTUOVED

Authorised Signatory

o Darrell Hall

p Phil Hellier Exeith Jones

u John Crawford D Malcolm Avis

Laboratory Manager Operations Director

Technical Development Manager

Quality Manager Technical Director





Notes to accompany report:

The sign < means 'less than'
Tests marked 'U' hold UKAS accreditation
Tests marked 'M' hold MCertS (and UKAS) accreditation
Tests marked 'N' do not currently hold UKAS accreditation
Tests marked 'S' were subcontracted to an approved laboratory

n/e means 'not evaluated'
Va means 'insufficient sample

w's means unsullable sample'
Comments or interpretations are beyond the scope of UKAS

The results relate only to the items tested

Test Report 78466 Cover Sheet

Ground Engineering Newark Road Peterborough

LABORATORY TEST REPORT

Chemtest
The right chemistry to deliver results

Report Date 15 September 2009

PE1 5UA

FAO Steve Fleming

Results of analysis of 5 samples received 07 September 2009

72-76 Eversholt Street, London NW1

	Satch No				1500000	A F 224 22	78466	AF20.40	AE30143
ample	est LIMS D				AE29099 TP1	AE29100 TP2	AE29101 TP2	AE29102 TP3	AE29103
ample	Charles and the second				D2	D1	D2	D2	D3
	NO				0.8m	0.6m	0.8m	0,6m	1,3m
epth atrix					SOIL	SOIL	SOIL	SOIL	SOIL
OP+	Determinand-	CAS No.	Units4						
2120	Boron (hot water soluble)	7440428	mg kg-1	U	1.7	0.9	1.1	0.9	
	Sulfate (2:1 water soluble) as SO4	14808798	91-1	M	0.23	0.71	0.15	0.35	
300	Cyanide (free)	57125	mg kg-1	M	< 0.5	< 0.5	< 0.5	< 0.5	
	Cyanide (total)	57125	mg kg-"	M	< 0.5	< 0.5	< 0.5	< 0.5	
325	Sulfide	18496258	mg kg-*	M	3.0	1.9	2.8	1.7	
450	Arsenic	7440382	mg kg-'	M	18	16	11	16	
	Cadmium	7440439	mg kg-	M	0.22	0.16	0.10	0.34	
	Chromium	7440473	mg kg-s	M	45	24	43	38	
	Copper	7440508	mg kg-t	M	60	39	23	45	1
	Mercury	7439976	mg kg-1	M	3.0	6.1	0.13	0.95	
	Nickel	7440020	mg kg-1	M	34	22	42	36	
	Lead	7439921	mg kg-1	M	640	250	51	180	
	Selenium	7782492	mg kg-	M	0.34	<0.2	0.28	0.54	:
	Zinc	7440666	rng kg-1	M	260	64	58	120	
490	Chromium (hexavalent)	18540299	mg kg-1	N	< 0.5	< 0.5	< 0.5	< 0.5	
625	Organic matter		%	M	1.6	1.2	1.7	2.9	
2670	Total Petroleum Hydrocarbons		mg kg-1	M					< 10
2700	Naphthalene	91203	mg kg-	М	< 0.1	< 0.1	< 0.1	< 0.1	,
	Acenaphthylene	208968	mg kg-1	M	< 0.1	< 0.1	< 0.1	< 0.1	
	Acenaphthene	83329	mg kg-1	M	0.17	< 0.1	< 0.1	0.21	
	Fluorene	86737	mg kg-1	М	< 0.1	< 0.1	< 0.1	< 0.1	
	Phenanthrene	85018	mg kg-1	M	0.26	0.22	0.31	0.65	
	Anthracene	120127	mg kg-1	М	< 0.1	< 0.1	< 0,1	< 0.1	
	Fluoranthene	206440	mg kg-1	M	0.18	< 0.1	< 0.1	0.38	
	Pyrene	129000	mg kg-1	М	0.13	< 0.1	< 0.1	0.24	
	Benzo[a]anihracene	56553	mg kg-1	М	0.18	< 0.1	< 0.1	< 0.1	
	Chrysene	218019	mg kg-'	M	< 0.1	< 0.1	< 0.1	< 0.1	
	Benzo[b]fluoranthene	205992	mg kg-1	М	< 0.1	< 0.1	< 0.1	< 0.1	
	Benzo[k]fluoranthene	207089	mg kg-1	M	< 0.1	< 0.1	< 0.1	< 0.1	
	Benzo[a]pyrene	50328	mg kg-1	М	< 0.1	< 0.1	< 0.1	< 0.1	
	Dibenzo[a,h]anthracene	53703	mg kg-1	М	< 0.1	< 0.1	< 0.1	< 0.1	

All lesis undertaken between 07-Sep-2009 and 14-Sep-2009

This report should be interpreted in conjunction with the notes on the accompanying cover page

Column page 1

Report page 1 of 2

Report sample ID range

AE29099 to AE29103

^{*} Accreditation status

Ground Engineering Newark Road Peterborough

LABORATORY TEST REPORT



Report Date 15 September 2009

PE1 5UA

FAO Steve Fleming

Results of analysis of 5 samples received 07 September 2009

72-76 Eversholt Street, London NW1

								78466		
					AE29099	4.7	AE29100	AE29101	AE29102	AE29103
					TP1	1	TP2	TP2	TP3	TP1
					D2		D1	D2	D2	D3
					0.8m	-	0,6m	0.8m	0.6m	1.3m
					SOIL		SOIL	SOIL	SOIL	SOIL
2700	Indeno(1,2,3-cd)pyrene	193395	mg kg-1	M	< 0.1		< 0.1	< 0.1	< 0.1	
	Benzo[g.h.i]perylene	191242	mg kg-1	M	< 0.1		< 0.1	< 0.1	< 0.1	
	Total (of 16) PAHs		mg kg-1	M	< 2		<2	<2	< 2	
2920	Phenois (lotal)		mg kg-1	N	<0.3		<0.3	<0,3	<0.3	
2010	pH		-	M	8.8		11.4	8.3	10.9	

APPENDIX 5

CLASSIFICATION OF AGGRESSIVE CHEMICAL
ENVIRONMENT FOR BURIED CONCRETE

TA BLE C2 - AGGRESSIVE CHEMICAL ENVIRONMENT FOR CONCRETE

(ACEC) CLASSIFICATION FOR BROWNFIELD LOCATIONS^a

Sulfate and magnesium					Groundwater			ACEC
Design Sulfate Class for location	2:1 water/soil extract ^b		Groundwater		Total potential sulfate c	Static water	Mobile water	Class fo
	2 (SO ₄ mg/I)	3 (Mg mg/l)	4 (\$0 ₄ mg/I)	5 (Mg mg/l)	6 (SO ₄ %)	7 (pH) ^d	8 (pH) ^d	9
DS-1	< 500		< 400		< 0.24	≥2.5		AC-1s
							> 6.5 d	AC-1
							5.5-6.5	AC-2z
							4.5-5.5	AC-3z
							2.5-4.5	AC-4z
DS-2	500-1500		400-1400		0.24-0.6	> 5.5		AC-1s
							> 6.5	AC-2
						2.5-5.5		AC-2s
							5.5-6.5	AC-3z
							4.5-5.5	AC-4z
							2.5-5.5	AC-5z
DS-3	1600-3000		1500-3000		0.7-1.2	> 5.5		AC-2s
							> 6.5	AC-3
						2.5-5.5		AC-3s
							5.5-6.5	AC-4
							2.5-5.5	AC-5
DS-4	3100-6000	≤1200	3100-6000	≤1000	1.3-2.4	> 5.5		AC-3s
							> 6.5	AC-4
						2.5-5.5		AC-4s
							2.5-6.5	AC-5
DS-4m	3100-6000	> 1200 *	3100-6000	> 1000°	1.3-2.4	> 5.5		AC-3s
	*						> 6.5	AC-4m
						2.5-5.5		AC-4ms
							2.5-6.5	AC-5m
DS-5	> 6000	≤1200	> 6000	≤1000		> 5.5		AC-4s
						2.5-5.5	≥2.5	AC-5
DS-5m	> 6000	> 1200 e	> 6000	>1000°		> 5.5		AC-4ms
						2.5-5.5	≥2.5	AC-5m

Notes

a Brownfield local ons are those sites, or parts of sites, that might contain chemical residues produced by or associated with industrial production (Section C5.1.3).

b The limits of De In Sulfate Classes based on 2:1 water/soil extracts have been lowered from previous Digests (Box C7).

 Applies only to locations where concrete will be exposed to sulfate ions (SO₄), which may result from the oxidation of sulfides such as pyrite, following ground disturbance (Appendix A1 and Box C8).

d An additional account is taken of hydrochloric and nitric acids by adjustment to sulfate content (Section C5.1.3).

The first on water soluble magnesium does not apply to brackish groundwater (chloride content between 12 000 mg/l and 17 000 mg/l). This allows 'm' to be omitted from the relevan ACEC classification. Seawater (chloride content about 18 000 mg/l) and stronger brines are not covered by this table.

Explanation of sullix symbols to ACEC Class

Suffix 's' indicates that the water has been classified as static.

- Concrete place: in ACEC Classes that include the suffix 'z' have primarily to resist acid conditions and may be made with any of the cements in Table D2 on page 42.
- Suffix 'm' relates to the higher levels of magnesium in Design Sulfate Classes 4 and 5.

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