Quick Undrained Triaxial Compression Test

Borehole Number: Sample Number: Depth (m): 4 1 1.20 Description:

Firm orange brown fine sandy CLAY

Single Stage Specimen

	omgre orage openion
Specimen details	Single Specimen
Specimen condition:	Undisturbed
Length (mm):	176.2
Diameter (mm):	101.1
Moisture Content (%):	28
Bulk Density (Mg/m³):	1.97
Dry Density (Mg/m³):	1.54
Test details	
Latex membrane thickness (mm):	0.3
Membrane correction (kPa):	0.7
Axial displacement rate (%/min):	2.3
Cell pressure (kPa):	25
Strain at failure (%):	10.2
Maximum Deviator Stress (kPa):	152
Shear Stress Cu (kPa):	76
Mode of failure:	

1 5 5

Checked and Approved

Initials:

*SB*Date: 16/04/2013

Project Number:

Project Name:

GEO / 19502

OAK HILL AVENUE
Project Number: J13073





Orientation and position of sample

Quick Undrained Triaxial Compression Test

Borehole Number: Sample Number:

Depth (m):

2 3.00 Description:

Medium dense orange brown clayey fine SAND

Single Stage Specimen

Specimen details	Single Specimen
Specimen condition:	Undisturbed
Length (mm):	167.4
Diameter (mm):	105.1
Moisture Content (%):	19
Bulk Density (Mg/m³):	1.93
Dry Density (Mg/m³):	1.62
Test details	
Latex membrane thickness (mm):	0.3
Membrane correction (kPa):	1.1
Axial displacement rate (%/min):	2.4
Cell pressure (kPa):	60
Strain at failure (%):	20.3
Maximum Deviator Stress (kPa):	131
Shear Stress Cu (kPa):	66
Mode of failure:	

Orientation and position of sample



Checked and Approved

Initials:

88 Date: 16/04/2013 Project Number:

Project Name:

GEO / 19502

OAK HILL AVENUE Project Number: J13073





Quick Undrained Triaxial Compression Test

Borehole Number: Sample Number:

Depth (m):

4 3 5.00 Description:

Firm orange brown fine sandy CLAY

Single Stage Specimen

Specimen details	Single Specimen
Specimen condition:	Undisturbed
Length (mm):	202.0
Diameter (mm):	102.1
Moisture Content (%):	28
Bulk Density (Mg/m³):	2.27
Dry Density (Mg/m³):	1.78
Test details	,
Latex membrane thickness (mm):	0.3
Membrane correction (kPa):	1.1
Axial displacement rate (%/min):	2.0
Cell pressure (kPa):	100
Strain at failure (%):	18.8
Maximum Deviator Stress (kPa):	104
Shear Stress Cu (kPa):	52
Mode of failure:	

Checked and Approved

Initials:

SB Date: _{16/04/2013} Project Number:

Project Name:

GEO / 19502

OAK HILL AVENUE

Project Number: J13073





Quick Undrained Triaxial Compression Test

Borehole Number: Sample Number:

Description:

Stiff grey silty CLAY

Depth (m):

7.50

Single Stage Specimen

Specimen details	Single Specimen
Specimen condition:	Undisturbed
Length (mm):	160.1
Diameter (mm):	102.4
Moisture Content (%):	24
Bulk Density (Mg/m³):	2.06
Dry Density (Mg/m³):	1.65
Test details	
Latex membrane thickness (mm):	0.3
Membrane correction (kPa):	1.1
Axial displacement rate (%/min):	2.5
Cell pressure (kPa):	150
Strain at failure (%):	20.0
Maximum Deviator Stress (kPa):	251
Shear Stress Cu (kPa):	126
Mode of failure:	



Checked and Approved

Initials:

Date: 16/04/2013

88

Project Number:

Project Name:

GEO / 19502

OAK HILL AVENUE

Project Number: J13073



GEOLABS

Quick Undrained Triaxial Compression Test

Borehole Number: Sample Number: Depth (m):

5 10.50 Description:

Stiff dark brown fine sandy CLAY

Single Stage Specimen

	gg.
Specimen details	Single Specimen
Specimen condition:	Undisturbed
Length (mm):	202.4
Diameter (mm):	102.5
Moisture Content (%):	26
Bulk Density (Mg/m³):	2.06
Dry Density (Mg/m³):	1.64
Test details	
Latex membrane thickness (mm):	0.3
Membrane correction (kPa):	0.6
Axial displacement rate (%/min):	2.0
Cell pressure (kPa):	. 210
Strain at failure (%):	8.4
Maximum Deviator Stress (kPa):	285
Shear Stress Cu (kPa):	142
Mode of failure:	



Checked and Approved

Initials:

88 Date: 16/04/2013 Project Number:

Project Name:

GEO / 19502

OAK HILL AVENUE Project Number: J13073





BS1377 : Part 7 : Clause 8 : 1990 Quick Undrained Triaxial Compression Test

Borehole Number: Sample Number: Depth (m): 4 6 12.00 Description:

Stiff dark grey CLAY

Single Stage Specimen

Specimen details	Single Specimen
Specimen condition:	Undisturbed
Length (mm):	203.5
Diameter (mm):	103.1
Moisture Content (%):	24
Bulk Density (Mg/m³):	2.03
Dry Density (Mg/m³):	1.64
Test details	
Latex membrane thickness (mm):	0.3
Membrane correction (kPa):	1.1
Axial displacement rate (%/min):	2.0
Cell pressure (kPa):	240
Strain at failure (%):	19.7
Maximum Deviator Stress (kPa):	262
Shear Stress Cu (kPa):	131
Mode of failure:	

Checked and Approved

Initials:

*SB*Date: 16/04/2013

Project Number:

Project Name:

GEO / 19502

OAK HILL AVENUE
Project Number: J13073





Quick Undrained Triaxial Compression Test

Borehole Number: Sample Number: 4 7

Description:

Very stiff fissured dark brown silty CLAY

Depth (m):

13.50

Single Stage Specimen

	ggp
Specimen details	Single Specimen
Specimen condition:	Undisturbed
Length (mm):	204.9
Diameter (mm):	105.3
Moisture Content (%):	22
Bulk Density (Mg/m³):	1.95
Dry Density (Mg/m³):	1.60
Test details	
Latex membrane thickness (mm):	0.3
Membrane correction (kPa):	0.7
Axial displacement rate (%/min):	2.0
Cell pressure (kPa):	270
Strain at failure (%):	10.2
Maximum Deviator Stress (kPa):	413
Shear Stress Cu (kPa):	206
Mode of failure:	

Checked and Approved

Initials:

*SB*Date: 16/04/2013

Project Number:

Project Name:

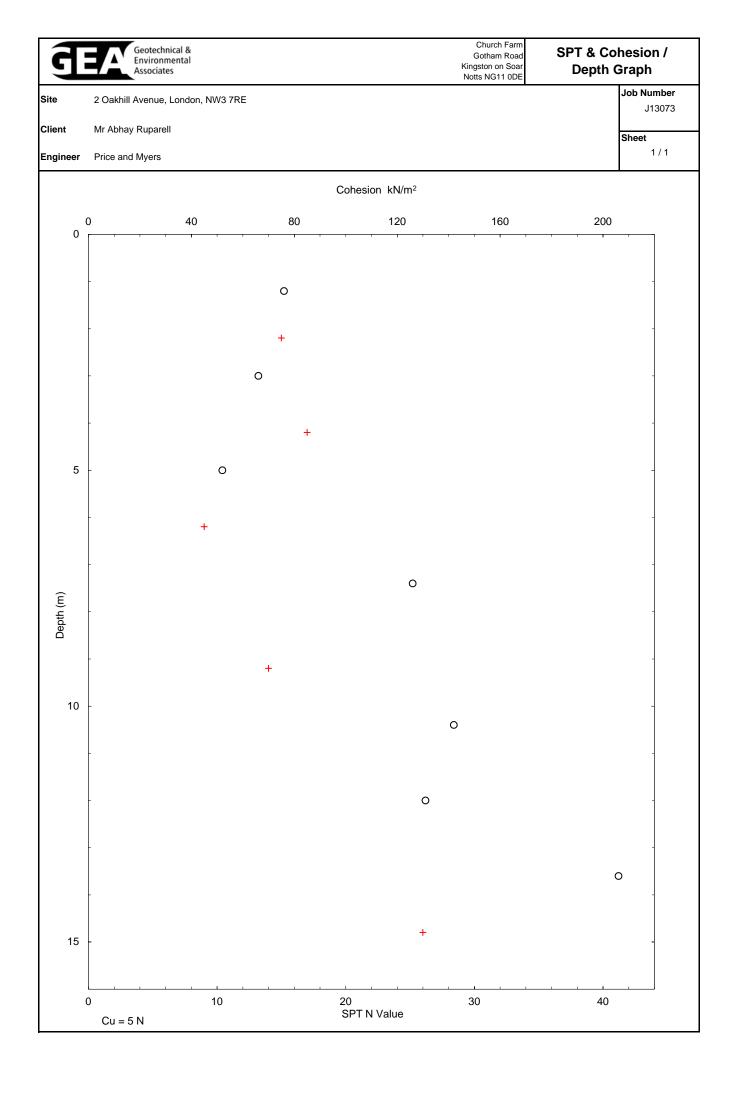
GEO / 19502

OAK HILL AVENUE

Project Number: J13073







GEA Tyttenhanger House Coursers Road St Albans Herts AL4 0PG

FAO Matthew Elcock

LABORATORY TEST REPORT

Chemtest
The right chemistry to deliver results

Report Date 12 April 2013

Results of analysis of 3 samples received 4 April 2013

J13073 - 2 Oak Hill Avenue, London

Login E	Batch No					227108	
Chemte	est LIMS ID				Al51121	AI51122	Al51123
Sample	ID				BH1	BH2	ВН3
Sample	No						
Samplii	ng Date				25/3/2013	25/3/2013	25/3/2013
Depth					0.30m	0.20m	0.50m
Matrix					SOIL	SOIL	SOIL
SOP↓	Determinand↓	CAS No↓ Ur	nits↓ *				
2030	Moisture		%	n/a	33.3	41.6	46.2
	Stones content (>50mm)		%	n/a	<0.02	<0.02	<0.02
2040	Soil colour			М	black	brown	brown
	Soil texture			M	clay	clay	clay
	Other material			М	roots	stones	stones
2010	рН			М	6.6	7.9	7.3
2300	Cyanide (total)	57125	mg kg-1	М	<0.5	<0.5	<0.5
2325	Sulfide (Easily Liberatable)	18496258	mg kg-1	М	1.3	0.91	1.4
2625	Total Organic Carbon		%	М	6.9	2.3	4.8
2220	Chloride (extractable)	16887006	g l-¹	М	0.010	<0.010	<0.010
2430	Sulfate (total) as SO4		mg kg-1	M	1600	1200	1000
2450	Arsenic	7440382	mg kg-1	М	37	29	19
	Cadmium	7440439	mg kg-1	M	0.30	0.16	0.33
	Chromium	7440473	mg kg-1	M	<5.0	8.3	<5.0
	Copper	7440508	mg kg-1	M	48	48	55
	Mercury	7439976	mg kg-1	М	0.48	0.48	1.3
	Nickel	7440020	mg kg-1	M	5.3	<5.0	<5.0
	Lead	7439921	mg kg-1	М	300	680	500
	Selenium	7782492	mg kg-1	M	<0.20	<0.20	<0.20
	Zinc	7440666	mg kg-1	М	160	210	130
2670	TPH >C5-C6		mg kg-1	U	< 0.1 ¹	< 0.1 ¹	< 0.1 ¹
	TPH >C6-C7		mg kg-1	U	< 0.1 ¹	< 0.1 ¹	< 0.1 ¹
	TPH >C7-C8		mg kg-1	M	< 0.1 ¹	< 0.1 ¹	< 0.1 ¹
	TPH >C8-C10		mg kg-1	M	0.27 ¹	0.38 1	0.95 ¹

¹The stability time for this analyte has been exceeded - these results may be compromised. The accreditation for these results remains unaffected.

All tests undertaken between 04/04/2013 and 11/04/2013

^{*} Accreditation status

GEA
Tyttenhanger House
Coursers Road
St Albans Herts
AL4 0PG

FAO Matthew Elcock

LABORATORY TEST REPORT

Chemtest
The right chemistry to deliver results

Report Date 12 April 2013

Results of analysis of 3 samples received 4 April 2013

J13073 - 2 Oak Hill Avenue, London

						227108	
					Al51121	Al51122	Al51123
					BH1	BH2	ВН3
					25/3/2013	25/3/2013	25/3/2013
					0.30m	0.20m	0.50m
					SOIL	SOIL	SOIL
2670	TPH >C10-C12		mg kg-1	М	2.2 ¹	1.1 1	1.6 ¹
	TPH >C12-C16		mg kg-1	М	5.1 ¹	3.8 ¹	3.0 ¹
	TPH >C16-C21		mg kg-1	М	4.6 ¹	12 ¹	6.9 ¹
	TPH >C21-C35		mg kg-1	М	6.0 ¹	39 ¹	63 ¹
	Total Petroleum Hydrocarbons		mg kg-1	U	18 ¹	57 ¹	76 ¹
2700	Naphthalene	91203	mg kg-1	М	0.52	< 0.1	0.48
	Acenaphthylene	208968	mg kg-1	М	0.23	< 0.1	0.19
	Acenaphthene	83329	mg kg-1	М	0.41	< 0.1	0.36
	Fluorene	86737	mg kg-1	М	0.17	0.19	0.18
	Phenanthrene	85018	mg kg-1	М	0.85	0.71	1.6
	Anthracene	120127	mg kg-1	М	0.22	0.24	0.4
	Fluoranthene	206440	mg kg-1	М	1.3	1.3	3.3
	Pyrene	129000	mg kg-1	М	1.3	1	2.6
	Benzo[a]anthracene	56553	mg kg-1	М	0.67	0.73	1.7
	Chrysene	218019	mg kg-1	М	0.89	0.76	2.1
	Benzo[b]fluoranthene	205992	mg kg-1	М	1.1	0.93	2.4
	Benzo[k]fluoranthene	207089	mg kg-1	М	0.62	0.43	1.5
	Benzo[a]pyrene	50328	mg kg-1	М	0.86	0.74	2.2
	Dibenzo[a,h]anthracene	53703	mg kg-1	М	< 0.1	< 0.1	0.4
	Indeno[1,2,3-cd]pyrene	193395	mg kg-1	М	< 0.1	0.48	1.8
	Benzo[g,h,i]perylene	191242	mg kg-1	М	< 0.1	0.46	0.95
	Total (of 16) PAHs		mg kg-1	М	9.1	8	22
2920	Phenols (total)		mg kg-1	N	<0.3	<0.3	<0.3

All tests undertaken between 04/04/2013 and 11/04/2013

¹The stability time for this analyte has been exceeded - these results may be compromised. The accreditation for these results remains unaffected.

^{*} Accreditation status



Engineer

Tyttenhanger House Coursers Road St Albans AL4 0PG

Generic Risk-Based Soil Guideline Values

ite 2 Oakhill Avenue, London, NW3 7RE

Job Number J13073

Client Mr Abhay Ruparell

Sheet 1 / 1

Proposed End Use Residential with plant uptake

Soil pH 7

Price and Myers

Soil Organic Matter content % 6.0

Contaminant	Guideline Value mg/kg	Data Source					
Metals							
Arsenic	32	SGV					
Cadmium	10	SGV					
Chromium (III)	3000	LQM/CIEH					
Chromium (VI)	4.3	LQM/CIEH					
Copper	2,330	LQM/CIEH					
Lead	450	withdrawn SGV					
Elemental Mercury	1	SGV					
Inorganic Mercury	170	SGV					
Nickel	130	LQM/CIEH					
Selenium	350	SGV					
Zinc	3,750	LQM/CIEH					
Нус	drocarbons						
Benzene	0.33	SGV					
Toluene	610	SGV					
Ethyl Benzene	350	SGV					
Xylene	230	SGV					
Aliphatic C5-C6	110	LQM/CIEH					
Aliphatic C6-C8	370	LQM/CIEH					
Aliphatic C8-C10	110	LQM/CIEH					
Aliphatic C10-C12	540	LQM/CIEH					
Aliphatic C12-C16	3000	LQM/CIEH					
Aliphatic C16-C35	76,000	LQM/CIEH					
Aromatic C6-C7	See Benzene	LQM/CIEH					
Aromatic C7-C8	See Toluene	LQM/CIEH					
Aromatic C8-C10	151	LQM/CIEH					
Aromatic C10-C12	346	LQM/CIEH					
Aromatic C12-C16	593	LQM/CIEH					
Aromatic C16-C21	770	LQM/CIEH					
Aromatic C21-C35	1230	LQM/CIEH					
PRO (C ₅ –C ₁₀)	1351	Calc					
DRO (C ₁₂ –C ₂₈)	80,363	Calc					
Lube Oil (C ₂₈ –C ₄₄)	77,230	Calc					
ТРН	500	Trigger for speciated testing					

Contaminant	Guideline Value mg/kg	Data Source				
Anions						
Soluble Sulphate	0.5 g/l	Structures				
Sulphide	50	Structures				
Chloride	400	Structures				
	Others					
Organic Carbon (%)	6	Methanogenic potential				
Total Cyanide	140	WRAS				
Total Mono Phenols	420	SGV				
	PAH	1.014/01511				
Naphthalene	8.70	LQM/CIEH				
Acenaphthylene	850	LQM/CIEH				
Acenaphthene	1,000	LQM/CIEH				
Fluorene	780	LQM/CIEH				
Phenanthrene	380	LQM/CIEH				
Anthracene	9,200	LQM/CIEH				
Fluoranthene	670	LQM/CIEH				
Pyrene	1,600	LQM/CIEH				
Benzo(a) Anthracene	5.9	LQM/CIEH				
Chrysene	9	LQM/CIEH				
Benzo(b) Fluoranthene	7.0	LQM/CIEH				
Benzo(k) Fluoranthene	10.0	LQM/CIEH				
Benzo(a) pyrene	1.00	LQM/CIEH				
Indeno(1 2 3 cd) Pyrene	4.2	LQM/CIEH				
Dibenzo(a h) Anthracene	0.90	LQM/CIEH				
Benzo (g h i) Perylene	47	LQM/CIEH				
Total PAH	6.7	B(a)P / 0.15				
Chlorina	ted Solveni	ts				
1,1,1 trichloroethane (TCA)	28	LQM/CIEH				
tetrachloroethane (PCA)	4.8	LQM/CIEH				
tetrachloroethene (PCE)	4.8	LQM/CIEH				
trichloroethene (TCE)	0.49	LQM/CIEH				
1,2-dichloroethane (DCA)	0.014	LQM/CIEH				
vinyl chloride (Chloroethene)	0.00099	LQM/CIEH				
tetrachloromethane (Carbon tetra	0.089	LQM/CIEH				
trichloromethane (Chloroform)	2.7	LQM/CIEH				

Notes

Concentrations measured below the above values may be considered to represent 'uncontaminated conditions' which do not pose a risk to human health. Concentrations measured in excess of these values indicate a potential risk, and thus require further, site specific risk assessment.

SGV - Soil Guideline Value, derived from the CLEA model and published by Environment Agency 2009

withdrawn SGV - Former SGV, derived from the CLEA 2000 model and published by DEFRA pending confirmation of new approach to modeling lead LQM/CIEH - Generic Assessment Criteria for Human Health Risk Assessment 2nd edition (2009)derived using CLEA 1.04 model 2009

Calc - sum of nearest available carbon range specified including BTEX for PRO fraction

B(a)P / 0.15 - GEA experince indicates that Benzo(a) pyrene (one of the most common and most carcenogenic of the PAHs) rarely exceeds 15% of the total PAH concentration, hence this Total PAH threshold is regarded as being conservative



Envirocheck® Report:

Datasheet

Order Details:

Order Number:

44858907_1_1

Customer Reference:

E12441

National Grid Reference:

525730, 185770

Slice:

Α

Site Area (Ha):

0.11

Search Buffer (m):

1000

Site Details:

2 Oakhill Avenue LONDON NW3 7RE

Client Details:

Mr S Branch GEA Ltd Tyttenhanger House Coursers Road St Albans Herts AL4 0PG



Order Number: 44858907_1_1





Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	5
Hazardous Substances	-
Geological	6
Industrial Land Use	13
Sensitive Land Use	-
Data Currency	14
Data Suppliers	20
Useful Contacts	21

Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination. For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.

In the attached datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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Report Version v47.0





Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1			1	2
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls	pg 1			3	15
Local Authority Pollution Prevention and Control Enforcements	pg 4				1
Nearest Surface Water Feature	pg 4				Yes
Pollution Incidents to Controlled Waters					
Prosecutions Relating to Authorised Processes					
Prosecutions Relating to Controlled Waters					
Registered Radioactive Substances					
River Quality					
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register					
Water Abstractions	pg 4				(*1)
Water Industry Act Referrals					
Groundwater Vulnerability	pg 4	Yes	n/a	n/a	n/a
Bedrock Aquifer Designations	pg 4	Yes	n/a	n/a	n/a
Superficial Aquifer Designations			n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences				n/a	n/a
Flooding from Rivers or Sea without Defences				n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites	pg 5				1
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Recorded Landfill Sites					
Registered Landfill Sites					
Registered Waste Transfer Sites	pg 5				1
Registered Waste Treatment or Disposal Sites					



Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					
Geological					
BGS 1:625,000 Solid Geology	pg 6	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 6	Yes	Yes	Yes	Yes
BGS Recorded Mineral Sites					
BGS Urban Soil Chemistry	pg 8		Yes	Yes	Yes
BGS Urban Soil Chemistry Averages	pg 11	Yes			
Brine Compensation Area			n/a	n/a	n/a
Coal Mining Affected Areas			n/a	n/a	n/a
Mining Instability			n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 11	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards				n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 11	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 11	Yes	Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 11	Yes		n/a	n/a
Radon Potential - Radon Affected Areas			n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a
Industrial Land Use					
Contemporary Trade Directory Entries	pg 13		1	n/a	n/a
Fuel Station Entries	pg 13				4



Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones					
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					



Order Number: 44858907_1_1

Agency & Hydrological

Page 4 of 21

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
15	Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status:	lution Prevention and Controls Hampstead Express Dry Cleaning 279a Finchley Road, London, Nw3 6lt London Borough of Camden, Pollution Projects Team PPC/DC6 12th January 2007 Local Authority Pollution Prevention and Control PG6/46 Dry cleaning Permitted Located by supplier to within 10m	A9SW (SE)	944	2	526178 184902
16	Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status:	lution Prevention and Controls Castle Service Station 713 Finchley Road, LONDON, NW11 8DH London Borough of Barnet, Environmental Health Department PPC31 13th January 1999 Local Authority Pollution Prevention and Control PG1/14 Petrol filling station Authorisation revokedRevoked Manually positioned to the address or location	A17NW (NW)	948	3	525037 186471
17	Location: Type: Reference: Date Issued: Enforcement Date: Details:	Iution Prevention and Control Enforcements 394 Finchley Road, Hampstead, London, Nw2 2hr Air Pollution Control Enforcement Notice PPCDC031 7th November 2008 Not Supplied Not Supplied Located by supplier to within 10m	A17SE (NW)	765	3	525083 186245
	Nearest Surface Wa	nter Feature	A18NE (N)	739	-	525889 186528
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	London Borough Of Camden 28/39/39/0219 1 Swiss Cottage Open Space- Borehole Environment Agency, Thames Region Municipal Grounds: Spray Irrigation - Direct Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Swiss Cottage Open Space, Winchester Road, London. 01 January 31 December 1st April 2008 Not Supplied Located by supplier to within 10m	A5SW (SE)	1802	1	526800 184280
	Groundwater Vulne Soil Classification: Map Sheet: Scale:	rability Soils of High Leaching Potential (U) - Soil information for restored mineral workings and urban areas is based on fewer observations than elsewhere. A worst case vulnerability classification (H) assumed, until proved otherwise Sheet 39 West London 1:100,000	A13SE (W)	0	1	525726 185774
	Drift Deposits None					
	Bedrock Aquifer De Aquifer Desination:	signations Secondary Aquifer - A	A13SE (W)	0	4	525726 185774
	Superficial Aquifer No Data Available	Designations				
	Extreme Flooding for None	rom Rivers or Sea without Defences				
	Flooding from Rive	rs or Sea without Defences				
	Areas Benefiting fro	om Flood Defences				
	Flood Water Storag None	e Areas				
	Flood Defences None					





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Historical Landfill S	ites				
18	Licence Holder: Location: Name: Operator Location: Boundary Accuracy: Provider Reference: First Input Date: Last Input Date: Specified Waste Type: EA Waste Ref: Regis Ref: WRC Ref: BGS Ref: Other Ref:		A8SE (S)	972	1	526029 184811
	Local Authority Lan	dfill Coverage				
	Name:	London Borough of Camden - Has no landfill data to supply		0	7	525726 185774
	Local Authority Lan	dfill Coverage				
	Name:	London Borough of Barnet - Has supplied landfill data		546	8	525473 186298
	Registered Waste T	ransfer Sites				
19	Authority: Site Category: Max Input Rate: Waste Source Restrictions: Licence Status: Dated: Preceded By Licence: Superseded By Licence:	L.B. of Camden DL137 152 West End Lane, CAMDEN, London, NW6 Old Town Hall, Haverstock Hill, CAMDEN, London, NW3 4QP Environment Agency - Thames Region, North East Area Transfer Very Small (Less than 10,000 tonnes per year) No known restriction on source of waste Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled 1st August 1983 Not Given Not Given Manually positioned to the road within the address or location Not Supplied Asbestos Elect.Capacitors Cont'G Pcb Fluid Biodegradable/Putrescible Waste Clinical Wastes Special Wastes Special Wastes	A8SW (S)	974	1	525530 184790





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid	d Geology				
	Description:	Barton, Bracklesham and Bagshot Beds	A13SE (W)	0	4	525726 185774
	BGS Estimated Soil Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service London no data	A13SE (W)	0	5	525726 185774
	Cadmium Concentration: Chromium Concentration: Lead Concentration: Nickel	no data no data no data no data				
	Concentration:					
	BGS Estimated Soil Source: Soil Sample Type: Arsenic Concentration: Cadmium Concentration: Chromium Concentration: Lead Concentration: Nickel	British Geological Survey, National Geoscience Information Service London no data no data	A13NW (NW)	58	5	525655 185829
	Concentration:					
	BGS Estimated Soil Source: Soil Sample Type: Arsenic Concentration: Cadmium Concentration: Chromium Concentration: Lead Concentration:	British Geological Survey, National Geoscience Information Service London no data no data no data	A13NE (NE)	92	5	525818 185818
	Nickel Concentration: BGS Estimated Soil	no data Chemistry				
	Source: Soil Sample Type: Arsenic Concentration: Cadmium Concentration: Chromium Concentration: Lead Concentration: Nickel	British Geological Survey, National Geoscience Information Service London no data no data	A13NE (N)	191	5	525726 186000
	Concentration:					
	BGS Estimated Soil Source: Soil Sample Type: Arsenic Concentration: Cadmium Concentration: Chromium Concentration: Lead Concentration: Nickel Concentration:	British Geological Survey, National Geoscience Information Service London no data no data	A13SE (E)	251	5	526000 185774
	BGS Estimated Soil Source: Soil Sample Type: Arsenic Concentration: Cadmium Concentration: Chromium	Chemistry British Geological Survey, National Geoscience Information Service London no data no data	A13SE (E)	254	5	526000 185710
	Concentration: Lead Concentration: Nickel Concentration:					





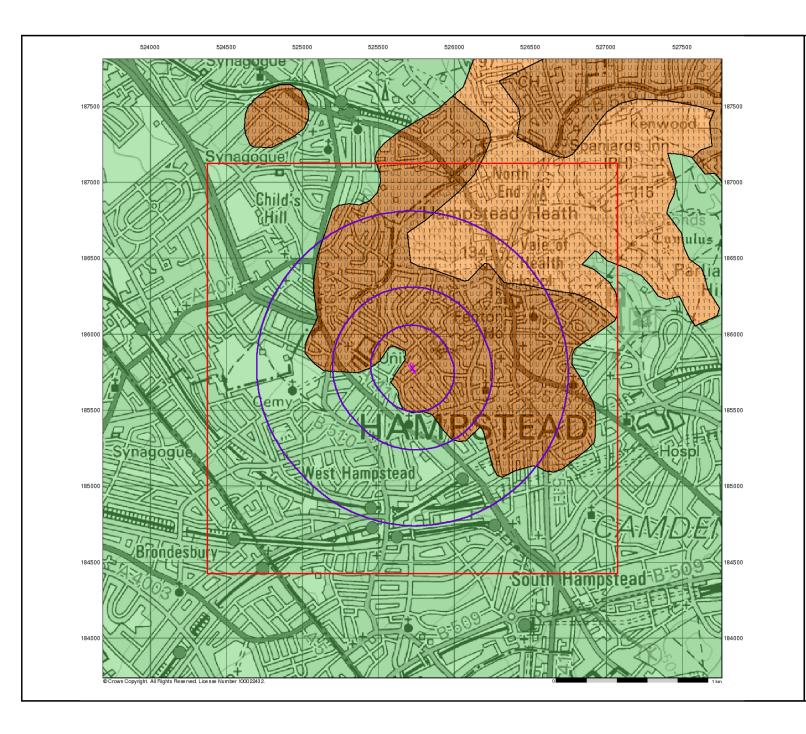
ap D		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Urban Soil Che	emistry Averages				
	Source: Sample Area: Count Id:	British Geological Survey, National Geoscience Information Service London 7189	A13SE (W)	0	4	525726 185774
	Arsenic Minimum Concentration:	1.00 mg/kg				
	Arsenic Average Concentration:	17.00 mg/kg				
	Arsenic Maximum Concentration:	161.00 mg/kg				
	Cadmium Minimum Concentration: Cadmium Average	0.30 mg/kg				
	Concentration: Cadmium Maximum					
	Concentration: Chromium Minimum					
	Concentration: Chromium Average					
	Concentration: Chromium Maximum					
	Concentration: Lead Minimum	11.00 mg/kg				
	Concentration: Lead Average	280.00 mg/kg				
	Concentration: Lead Maximum	10000.00 mg/kg				
	Concentration: Nickel Minimum	2.00 mg/kg				
	Concentration: Nickel Average	28.00 mg/kg				
	Concentration: Nickel Maximum Concentration:	506.00 mg/kg				
	Coal Mining Affecte					
_		not be affected by coal mining				
	Non Coal Mining Are No Hazard	eas of Great Britain				
	Potential for Collaps	sible Ground Stability Hazards				
	Hazard Potential: Source:	Very Low British Geological Survey, National Geoscience Information Service	A13SE (W)	0	4	525726 185774
	Potential for Compr	essible Ground Stability Hazards				
	Hazard Potential: Source:	No Hazard British Geological Survey, National Geoscience Information Service	A13SE (W)	0	4	525726 185774
	Potential for Ground No Hazard	d Dissolution Stability Hazards				
	Potential for Landsl	ide Ground Stability Hazards				
	Hazard Potential:	Very Low	A13SE	0	4	525726
	Source: Potential for Landsl	British Geological Survey, National Geoscience Information Service ide Ground Stability Hazards	(W)			185774
	Hazard Potential: Source:	Low British Geological Survey, National Geoscience Information Service	A13NW (W)	224	4	525475 185780
		g Sand Ground Stability Hazards	(,			.557.50
- 1	Hazard Potential:	Very Low	44005	0	4	525726
	Source:	British Geological Survey, National Geoscience Information Service	A13SE (W)	0		185774
				0		185774
		British Geological Survey, National Geoscience Information Service		57	4	525656
	Potential for Runnin Hazard Potential: Source:	British Geological Survey, National Geoscience Information Service g Sand Ground Stability Hazards No Hazard	(W)		4	525656
	Potential for Runnin Hazard Potential: Source:	British Geological Survey, National Geoscience Information Service g Sand Ground Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service	(W)		4	525656 185828 525819
	Potential for Runnin Hazard Potential: Source: Potential for Runnin Hazard Potential: Source: Potential for Runnin	British Geological Survey, National Geoscience Information Service Ig Sand Ground Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service Ig Sand Ground Stability Hazards Low British Geological Survey, National Geoscience Information Service Ig Sand Ground Stability Hazards	A13NW (NW) A13NE (NE)	57 94	4	525656 185828 525819 185818
	Potential for Runnin Hazard Potential: Source: Potential for Runnin Hazard Potential: Source:	British Geological Survey, National Geoscience Information Service Ig Sand Ground Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service Ig Sand Ground Stability Hazards Low British Geological Survey, National Geoscience Information Service	A13NW (NW)	57		525656 185826 525819 185818
	Potential for Runnin Hazard Potential: Source: Potential for Runnin Hazard Potential: Source: Potential for Runnin Hazard Potential: Source: Potential for Shrinki	British Geological Survey, National Geoscience Information Service Ig Sand Ground Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service Ig Sand Ground Stability Hazards Low British Geological Survey, National Geoscience Information Service Ig Sand Ground Stability Hazards Very Low British Geological Survey, National Geoscience Information Service Information Service	A13NW (NW) A13NE (NE) A13SW (S)	57 94 239	4	525656 185826 525819 185818
	Potential for Runnin Hazard Potential: Source: Potential for Runnin Hazard Potential: Source: Potential for Runnin Hazard Potential: Source:	British Geological Survey, National Geoscience Information Service Ig Sand Ground Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service Ig Sand Ground Stability Hazards Low British Geological Survey, National Geoscience Information Service Ig Sand Ground Stability Hazards Very Low British Geological Survey, National Geoscience Information Service	A13NW (NW) A13NE (NE) A13SW	57 94	4	525656 185828 525819 185818 525643 185523 525726 185774
	Potential for Runnin Hazard Potential: Source: Potential for Runnin Hazard Potential: Source: Potential for Runnin Hazard Potential: Source: Potential for Shrinki Hazard Potential: Source:	British Geological Survey, National Geoscience Information Service Ig Sand Ground Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service Ig Sand Ground Stability Hazards Low British Geological Survey, National Geoscience Information Service Ig Sand Ground Stability Hazards Very Low British Geological Survey, National Geoscience Information Service	A13NW (NW) A13NE (NE) A13SW (S)	57 94 239	4	525656 185828 525819 185818 525643 185523



Geological

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Radon Potential - R	adon Protection Measures				
	Protection Measure: Source:	No radon protective measures are necessary in the construction of new dwellings or extensions British Geological Survey, National Geoscience Information Service	A13SE (W)	0	4	525726 185774
	Radon Potential - R	adon Affected Areas				
	Affected Area: Source:	The property is in a lower probability radon area, as less than 1% of homes are above the action level British Geological Survey, National Geoscience Information Service	A13SE (W)	0	4	525726 185774

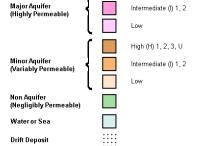
Order Number: 44858907_1_1 Date: 15-Mar-2013 rpr_ec_datasheet v47.0 A Landmark Information Group Service Page 12 of 21



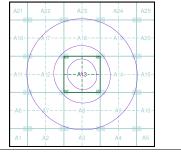


Groundwater Vulnerability

General Specified Site Specified Buffer(s) X Bearing Reference Point Slice 8 Map ID Agency and Hydrological Geological Classes Soil Classes High (H) 1, 2, 3, U



Site Sensitivity Context Map - Slice A



Order Details

44858907_1_1 E12441 525730, 185770 Order Number: Customer Ref: National Grid Reference: Slice: A 0.11

Site Area (Ha): Search Buffer (m):

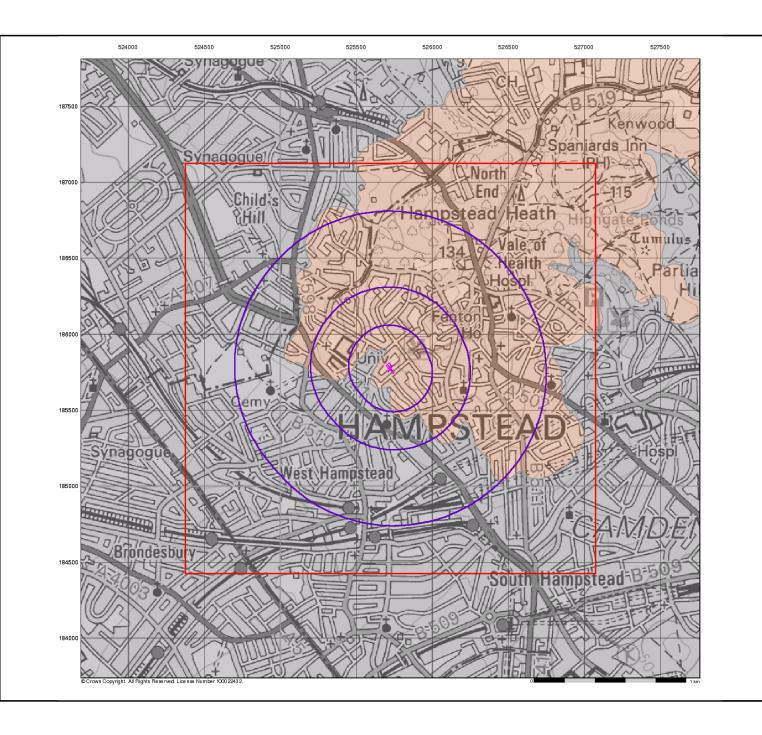
Site Details

2 Oakhill Avenue, LONDON, NW3 7RE



0844 844 9952 0844 844 9951

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Bedrock Aquifer Designation

General

Specified Site
Specified Buffer(s)
X Bearing Reference Point

8 Map ID

Agency and Hydrological

Geological Classes

Principal Aquifer

Secondary A Aquifer

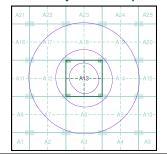
Secondary B Aquifer

Secondary Undifferentiated

Unproductive Strata

Unknown

Site Sensitivity Context Map - Slice A





Order Details

Order Number: Customer Ref: National Grid Reference: 44858907_1_1 E12441 525730, 185770 A 0.11

Site Area (Ha): Search Buffer (m):

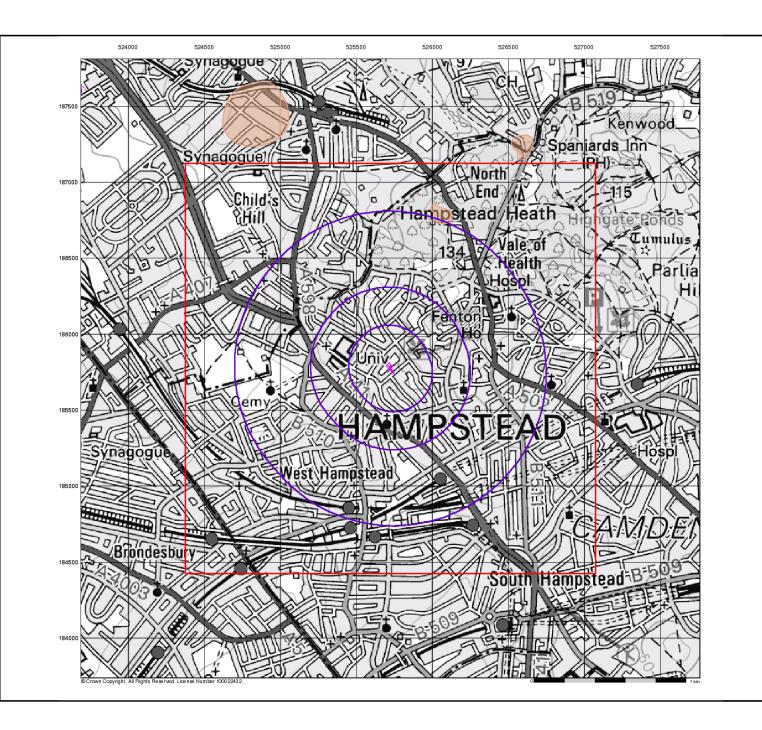
Site Details

2 Oakhill Avenue, LONDON, NW3 7RE



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Superficial Aquifer Designation

General

Specified Site Specified Buffer(s) X Bearing Reference Point

Slice 8 Map ID

Agency and Hydrological

Geological Classes

Principal Aquifer

Secondary A Aquifer

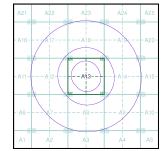
Secondary B Aquifer

Secondary Undifferentiated

Unproductive Strata

Unknown

Site Sensitivity Context Map - Slice A





Order Details

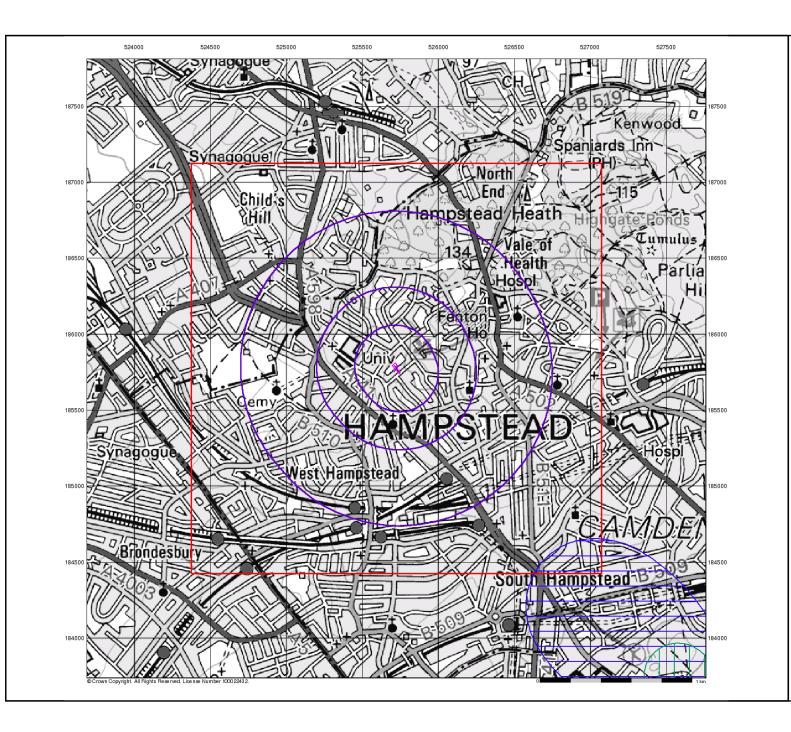
Order Number: Customer Ref: National Grid Reference:

44858907_1_1 E12441 525730, 185770 A 0.11 Site Area (Ha): Search Buffer (m):

Site Details

2 Oakhill Avenue, LONDON, NW3 7RE







Source Protection Zones

General

Specified Site Specified Buffer(s) X Bearing Reference Point

Slice 8 Map ID

Agency and Hydrological

Source Protection Zone I

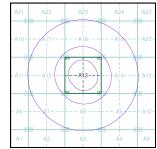
Source Protection Zone II

Source Protection Zone III

Zone of Special Interest

Source Protection Zone Borehole

Site Sensitivity Context Map - Slice A





Order Details Order Number:

44858907_1_1 E12441 525730, 185770 Customer Ref: National Grid Reference:

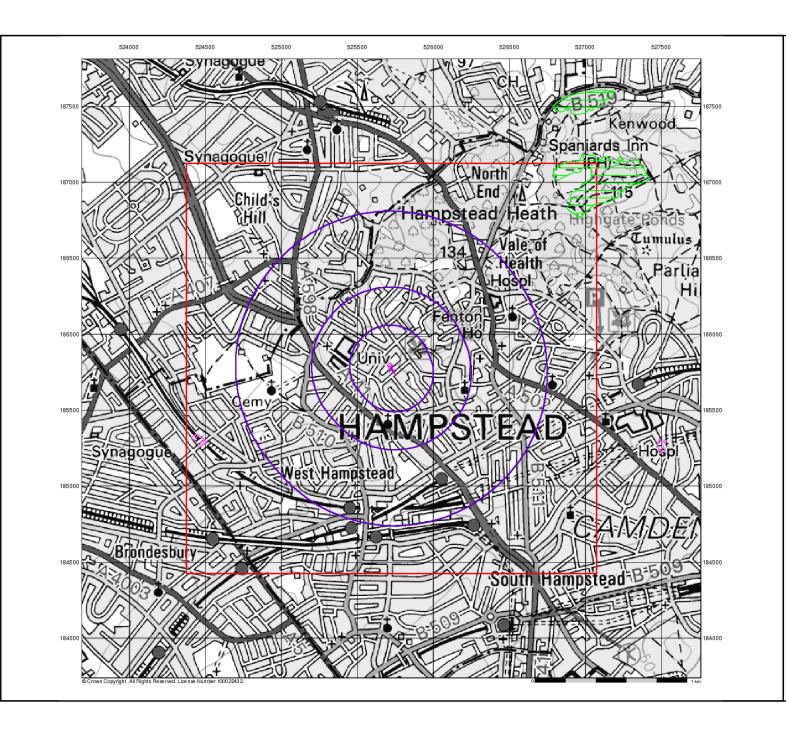
A 0.11

Site Area (Ha): Search Buffer (m):

Site Details

2 Oakhill Avenue, LONDON, NW3 7RE







Sensitive Land Uses

General

Specified Site Specified Buffer(s) X Bearing Reference Point

8 Map ID

Slice

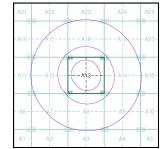
Sensitive Land Uses

- Area of Adopted Green Belt
- National Park Area of Unadopted Green Belt Nitrate Sensitive Area
- Area of Outstanding Natural Beauty
- Nitrate Vulnerable Zone
- Environmentally Sensitive Area
- Ramsar Site

Forest Park

- Site of Special Scientific Interest
- Local Nature Reserve
- Special Area of Conservation
- Marine Nature Reserve
- Special Protection Area
- National Nature Reserve

Site Sensitivity Context Map - Slice A





Order Details Order Number:

Customer Ref: National Grid Reference:

44858907_1_1 E12441 525730, 185770 A 0.11

Site Area (Ha): Search Buffer (m): 1000

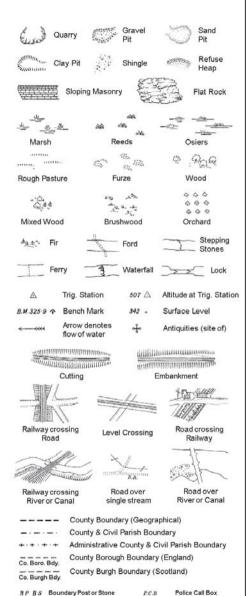
Site Details

2 Oakhill Avenue, LONDON, NW3 7RE



Historical Mapping Legends

Ordnance Survey County Series and Ordnance Survey Plan 1:2.500



P

SL

Sp.

T.C.B

Tr

W

S.P

Pump

Sluice

Spring

Trough

Well

Signal Post

Telephone Call Box

NTL

Normal Tidal Limit

Wd Pp

Wind Pump

B.R.

EP

F.B.

F.P.

G.P

MS

Electricity Pylor

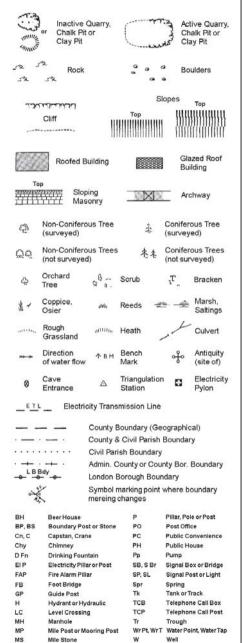
Foot Bridge

Foot Path

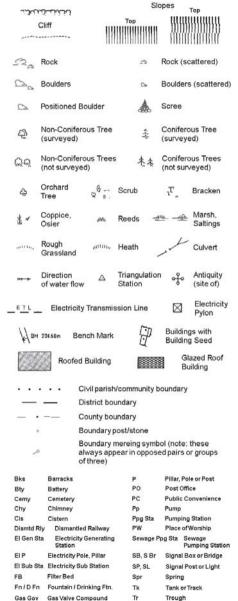
Mile Stone

M.P. M.R. Mooring Post or Ring

Ordnance Survey Plan, Additional SIMs and Large-Scale National Grid Data 1:2,500 and Supply of Unpublished Survey Information 1:2.500 and 1:1.250



1:1.250



Gas Governer

Mile Post or Mile Stone

Guide Post

Manhole

GP

Wind Pump

Water Point, Water Tap

Works (building or area)

WrPt.Wr

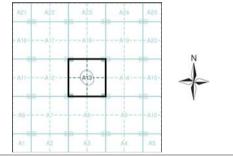
Wks



Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
London	1:2,500	1879	2
Middlesex	1:2,500	1894	3
London	1:2,500	1896	4
London	1:2,500	1915	5
London	1:2,500	1934	6
Historical Aerial Photography	1:1,250	1946 - 1949	7
Ordnance Survey Plan	1:1,250	1954	8
Ordnance Survey Plan	1:2,500	1954 - 1955	9
Additional SIMs	1:2,500	1954 - 1955	10
Additional SIMs	1:1,250	1954 - 1966	11
Ordnance Survey Plan	1:1,250	1962 - 1973	12
Ordnance Survey Plan	1:2,500	1969 - 1970	13
Ordnance Survey Plan	1:1,250	1971 - 1981	14
Supply of Unpublished Survey Information	1:1,250	1974	15
Ordnance Survey Plan	1:1,250	1981	16
Additional SIMs	1:1,250	1986	17
Large-Scale National Grid Data	1:1,250	1991	18
Large-Scale National Grid Data	1:1,250	1991 - 1995	19
Large-Scale National Grid Data	1:1,250	1994 - 1995	20

Historical Map - Segment A13



Order Details

44858907_1_1 Order Number: Customer Ref: E12441 National Grid Reference: 525730, 185770 Slice: 0.11

Site Area (Ha): Search Buffer (m): 100

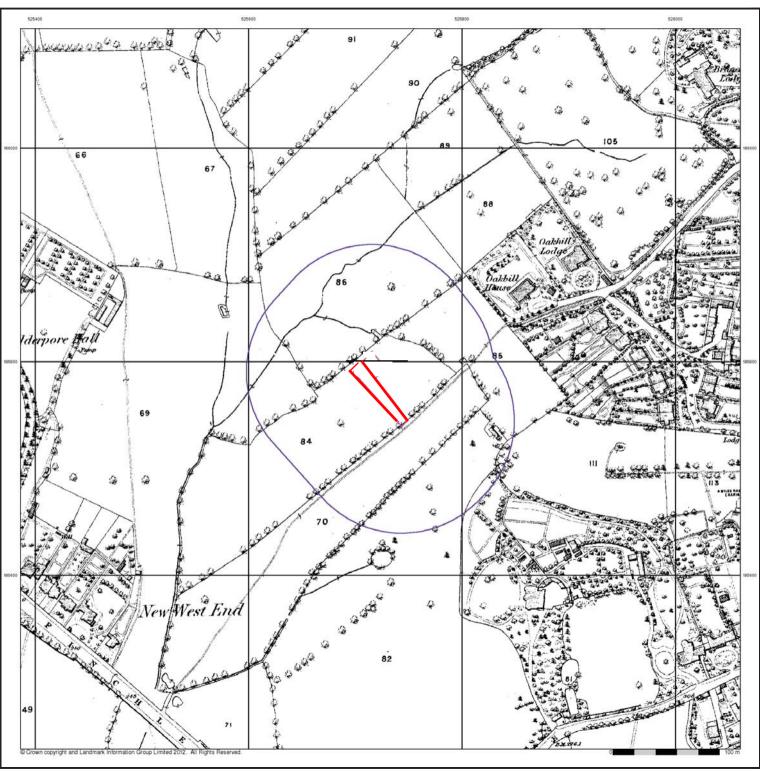
Site Details

2 Oakhill Avenue, LONDON, NW3 7RE



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A Landmark Information Group Service v47.0 15-Mar-2013 Page 1 of 20





Published 1879

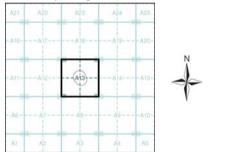
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great covered the whole of what were considered to be the cultivated parts of creat Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

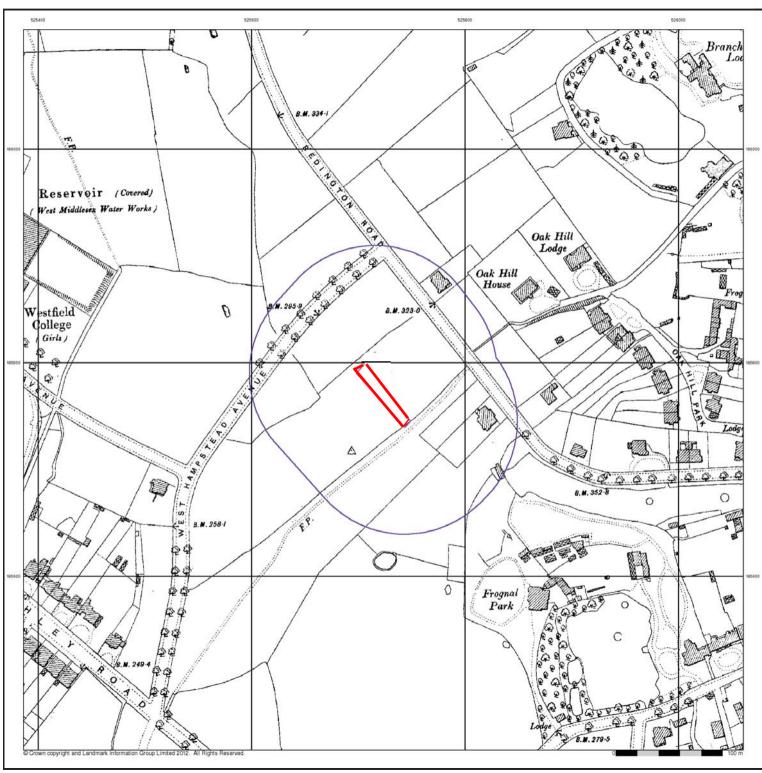
Order Number: 44858907_1_1 Customer Ref: E12441 National Grid Reference: 525730, 185770 Slice:

Site Area (Ha): Search Buffer (m): 0.11 100

Site Details

2 Oakhill Avenue, LONDON, NW3 7RE







Published 1896

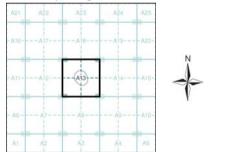
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveyes of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 44858907_1_1
Customer Ref: E12441
National Grid Reference: 525730, 185770
Slice: A

Site Area (Ha): 0.11 Search Buffer (m): 100

Site Details

2 Oakhill Avenue, LONDON, NW3 7RE



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A Landmark Information Group Service v47.0 15-Mar-2013 Page 4 of 20





Published 1915

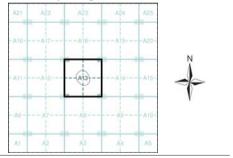
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840 s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1895 covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 44858907_1_1
Customer Ref: E12441
National Grid Reference: 525730, 185770

Slice:

Site Area (Ha): 0.11 Search Buffer (m): 100

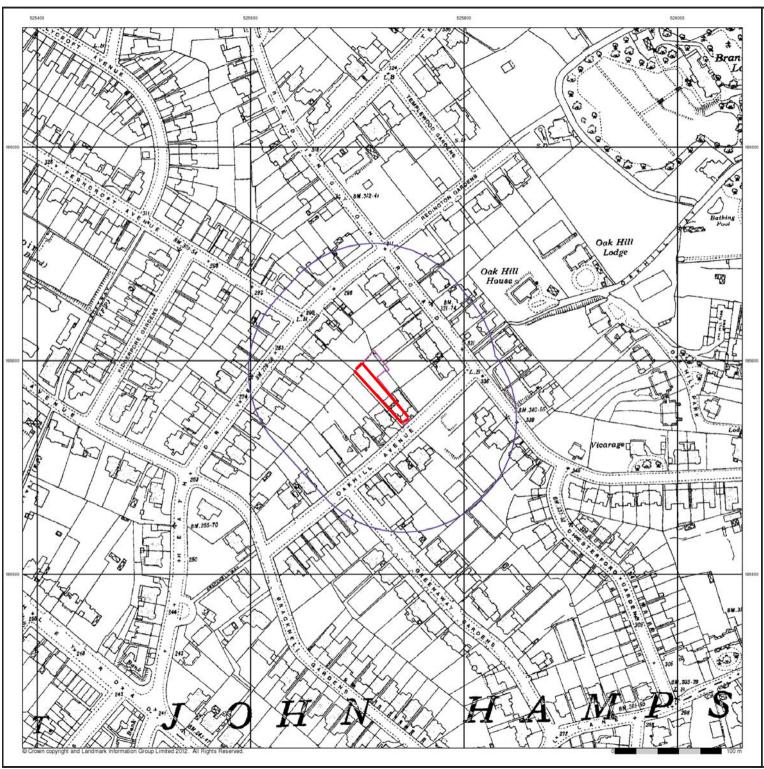
Site Details

2 Oakhill Avenue, LONDON, NW3 7RE



el: 0844 844 9952 ax: 0844 844 9951 (eb: www.envirocheck.c

A Landmark Information Group Service v47.0 15-Mar-2013 Page 5 of 20





Published 1934

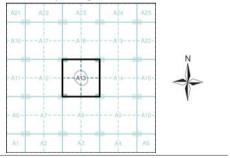
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 44858907_1_1 Customer Ref: E12441 National Grid Reference: 525730, 185770 Slice:

Site Area (Ha): Search Buffer (m): 0.11 100

Site Details

2 Oakhill Avenue, LONDON, NW3 7RE



0844 844 9952 0844 844 9951

A Landmark Information Group Service v47.0 15-Mar-2013 Page 6 of 20