

### Using this report

The following report is designed by Environmental Consultants for Environmental Professionals bringing together the most up-to-date market leading environmental data. This report is provided under and subject to the Terms & Conditions agreed between Groundsure and the Client. The document contains the following sections:

#### 1. Historical Industrial Sites

Provides information on past land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. Potentially Infilled Land features are also included. This search is conducted using radii of up to 500m.

#### 2. Environmental Permits, Incidents and Registers

Provides information on Regulated Industrial Activities and Pollution Incidents as recorded by Regulatory Authorities, and sites determined as Contaminated Land. This search is conducted using radii up to 500m.

#### 3. Landfills and Other Waste Sites

Provides information on landfills and other waste sites that may pose a risk to the study site. This search is conducted using radii up to 1500m.

#### 4. Current Land Uses

Provides information on current land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. These searches are conducted using radii of up to 500m. This includes information on potentially contaminative industrial sites, petrol stations and fuel sites as well as high pressure gas pipelines and underground electricity transmission lines.

#### 5. Geology

Provides information on artificial and superficial deposits and bedrock beneath the study site.

#### 6. Hydrogeology and Hydrology

Provides information on productive strata within the bedrock and superficial geological layers, abstraction licenses, Source Protection Zones (SPZs) and river quality. These searches are conducted using radii of up to 2000m.

#### 7. Flooding

Provides information on river and coastal flooding, flood defences, flood storage areas and groundwater flood areas. This search is conducted using radii of up to 250m.

#### 8. Designated Environmentally Sensitive Sites

Provides information on the Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites, Local Nature Reserves (LNR), Areas of Outstanding Natural Beauty (AONB), National Parks (NP), Environmentally Sensitive Areas, Nitrate Sensitive Areas, Nitrate Vulnerable Zones and World Heritage Sites and Scheduled Ancient Woodland. These searches are conducted using radii of up to 2000m.

#### 9. Natural Hazards

Provides information on a range of natural hazards that may pose a risk to the study site. These factors include natural ground subsidence and radon..

#### 10. Mining

Provides information on areas of coal and non-coal mining and brine affected areas.

#### 11. Contacts

This section of the report provides contact points for statutory bodies and data providers that may be able to provide further information on issues raised within this report. Alternatively, Groundsure provide a free Technical Helpline (08444 159000) for further information and guidance.

#### **Note: Maps**

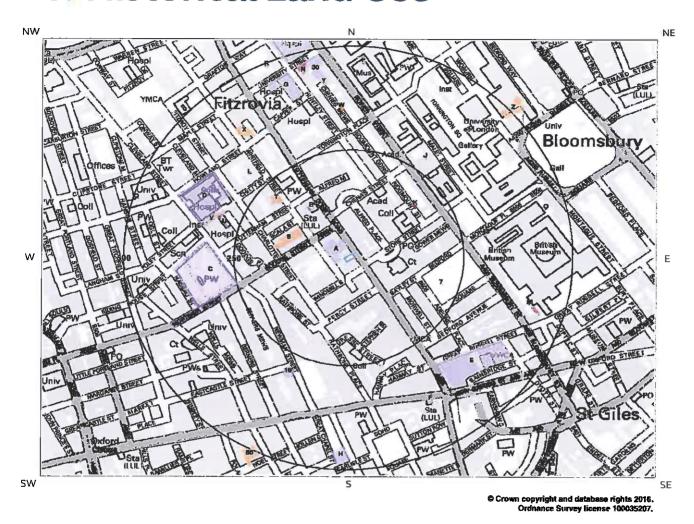
Only certain features are placed on the maps within the report. All features represented on maps found within this search are given an identification number. This number identifies the feature on the mapping and correlates it to the additional information provided below. This identification number precedes all other information and takes the following format -ld: 1, ld: 2, etc. Where numerous features on the same map are in such close proximity that the numbers would obscure each other a letter identifier is used instead to represent the features. (e.g. Three features which overlap may be given the identifier "A" on the map and would be identified separately as features 1A, 3A, 10A on the data tables provided).

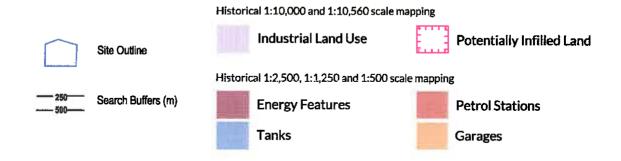
Where a feature is reported in the data tables to a distance greater than the map area, it is noted in the data table as "Not Shown".

All distances given in this report are in Metres (m). Directions are given as compass headings such as N: North, E: East, NE: North East from the nearest point of the study site boundary.



## 1. Historical Land Use







## 1. Historical Industrial Sites

#### 1.1 Potentially Contaminative Uses identified from 1:10,000 scale Mapping

The systematic analysis of data extracted from standard 1:10,560 and 1:10,000 scale historical maps provides the following information:

Records of sites with a potentially contaminative past land use within 500m of the search boundary:

37

ID	Distance [m]	Direction	Use	Date
1A	7	SW	Police Station	1957
2A	20	NW	Police Station	1968
ЗА	20	NW	Police Station	1989
4A	20	NW	Police Station	1973
5B	135	NW	London Transport Station	1989
6B	135	NW	London Transport Station	1973
7	203	E	Unspecified Tank	1948
8C	249	W	Hospital	1895
9C	249	w	Hospital	1882
10C	252	W	Hospital	1989
11C	252	W	Hospital	1968
12C	252	W	Hospital	1957
13C	252	W	Hospital	1973
14C	252	W	Hospital	1948
15C	255	W	Hospital	1898
16C	255	W	Hospital	1938
17C	255	W	Hospital	1920
18C	256	W	Hospital	1895
19	283	SW	London Transport Station	1973
20D	300	NW	Hospital	1989
21D	300	NW	Hospital	1973
22D	303	w	Hospital	1968
23E	314	SE	Brewery	1938
24E	314	SE	Brewery	1920
25F	374	SE	London Transport Station	1989
26F	374	SE	London Transport Station	1968
27F	374	SE	London Transport Station	1973
28G	392	N	Hospital	1973
29G	395	N	Hospital	1968
30	412	N	Hospital	1989
31H	444	S	Hospital	1973
32H	444	S	Hospital	1989
33H	444	S	Hospital	1968
341	483	N	Hospital	1938



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35I	483	Ν	Hospital	1920
361	483	N	Hospital	1957
371	483	N	Hospital	1948

#### 1.2 Additional Information - Historical Tank Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical tanks within 500m of the search boundary:

6

ID	Distance (m)	Direction	Use	Date	
381	283	NE	Unspecified Tank	1951	
39J	283	NE	Unspecified Tank	1957	
40J	283	NE	Unspecified Tank	1957	
41J	283	NE	Unspecified Tank	1968	
42J	283	NE	Unspecified Tank	1951	
43J	283	NE	Unspecified Tank	1951	

#### 1.3 Additional Information - Historical Energy Features Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical energy features within 500m of the search boundary:

23

ID	Distance (m)	Direction	Use	Date
44K	181	NE	Electricity Substation	1951
45K	182	NE	Electricity Substation	1951
46L	294	NW	Electricity Substation	1951
47L	294	NW	Electricity Substation	1951
48L	294	NW	Electricity Substation	1951
49	299	E	Electricity Substation	1995
50M	415	E	Electricity Substation	1987
51M	424	E	Electricity Substation	1991
52N	446	N	Electricity Substation	1993
53N	446	N	Electricity Substation	1999
540	451	E	Electricity Substation	1991
550	451	E	Electricity Substation	1987
56N	454	N	Electricity Substation	1985
57P	458	N	Electricity Substation	1951
58P	458	N	Electricity Substation	1952



59N	467	N	Electricity Substation	1991
60Q	490	w	Electricity Substation	1951
61R	490	NW	Electricity Substation	1969
62Q	490	W	Electricity Substation	1951
63R	490	NW	Electricity Substation	1982
64R	490	NW	Electricity Substation	1970
65R	493	NW	Electricity Substation	1952
66R	493	NW	Electricity Substation	1951

#### 1.4 Additional Information - Historical Petrol and Fuel Site Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical petrol stations and fuel sites within 500m of the search boundary:

0

Database searched and no data found.

#### 1.5 Additional Information - Historical Garage and Motor Vehicle Repair Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical garage and motor vehicle repair sites within 500m of the search boundary:

19

ID	Distance (m)	Direction	Use	Date
675	109	NW	Garage	1968
685	110	NW	Garage	1966
69T	197	NW	Garage	1968
70T	197	NW	Garage	1966
71U	272	W	Garage	1993
72U	290	W	Garage	1968
73V	295	W	Garage	1991
74V	295	W	Garage	1990
75V	297	W	Garage	1973
76V	298	W	Garage	1966
77W	347	N	Garages	1952
78W	347	N	Garage	1951
79X	360	NW	Garages	1952
80X	360	NW	Garage	1951
81Y	409	N	Garages	1952
82Y	410	N	Garages	195 <b>1</b>
83Z	480	NE	Garage	1951
84Z	481	NE	Garage	1952



85 489 SW Garage 1951

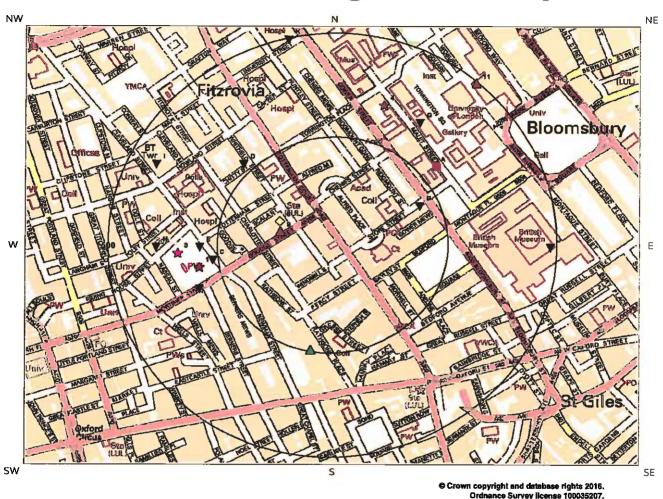
#### 1.6 Potentially Infilled Land

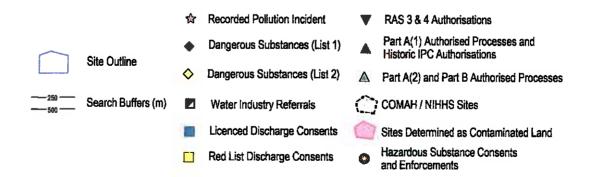
Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site: 0

Database searched and no data found.



# 2. Environmental Permits, Incidents and Registers Map







# 2. Environmental Permits, Incidents and Registers

#### 2.1 Industrial Sites Holding Licences and/or Authorisations

Searches of information provided by the Environment Agency and Local Authorities reveal the following information:

information:	
2.1.1 Records of historic IPC Authorisations within 500m of the study site:	
	0
Database searched and no data found.	
2.1.2 Records of Part A(1) and IPPC Authorised Activities within 500m of the study site:	
	0
Database searched and no data found.	
2.1.3 Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) wi 500m of the study site:	thin
	0
Database searched and no data found.	
2.1.4 Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site:	
	0
Database searched and no data found.	



#### 2.1.5 Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site:

1

The following List 2 Dangerous Substance Inventory Site records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	1	Details
6	121	NW	529483 181761	Name: Capital Fx Ltd Status: Not Active Receiving Water: -	Authorised Substances: Silver

#### 2.1.6 Records of Part A(2) and Part B Activities and Enforcements within 500m of the study site:

3

The following Part A(2) and Part B Activities are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	on NGR	Details				
9	111	W	529484 181737	Address: Parkers Dry Cleaning Ltd, 28 Goodge Street, London, W1T 2QQ Process: Dry Cleaner Status: Current Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified			
10	248	S	529553 181451	Address: Selfridges, 400 Oxford Street, London, W1A 1AB Process: Unloading Of Petrol Into Storage At Service Stations, Unloading Of Petrol Into Storage At Service Stations Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified			
11	494	NE	529928 182092	Address: Total Fina Elf, Russell Court, Woburn Place, London, WC1H 9LW Process: Petrol Station Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified			



#### 2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:

56

The following RAS Licence (3 or 4) records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Address	Operato r	Туре	Permissio n Number	Dates	Status
68B	208	NE	529800 181800	Tronical Medicine	London School Of Hygiene And Tropical Medicine	Disposal Of Radioactive Waste (was Rsa60 Section 6).	AA0531	Date of Approval:26/1/199 6 Effective from:27/1/1996 Last date of update:2015-01- 01	Superseded By Variation
69B	208	NE	529800 181800	London School Of Hygiene And Tropical Medicine, Keppel Street, London, WC1E 7HT	London School Of Hygiene And Tropical Medicine	Disposal Of Radioactive Waste (was Rsa60 Section 6).	AA0531	Date of Approval:20/9/200 4 Effective from:18/10/2004 Last date of update:2015-01- 01	Superseded By Variation
70B	208	NE	529800 181800	London School Of Hygiene And Tropical Medicine, Keppel Street, London, WC1E 7HT	London School Of Hygiene And Tropical Medicine	Disposal Of Radioactive Waste (was Rsa60 Section 6).	AA0531	Date of Approval:1/12/200 3 Effective from:1/1/2004 Last date of update:2015-01- 01	Superseded By Variation
71B	208	NE	529800 181800	London School Of Hygiene And Tropical Medicine, Keppel Street, London, WC1E 7HT	London School Of Hygiene And Tropical Medicine	Keeping And Use Of Radioactive Materials (was Rsa60 Section 1).	AA0540	Date of Approval:5/11/199 3 Effective from:5/11/1993 Last date of update:2015-01- 01	Superseded By Variation
72B	208	NE	529800 181800	London School Of Hygiene And Tropical Medicine, Keppel Street, London, WC1E 7HT	London School Of Hygiene And Tropical Medicine	Disposal Of Radioactive Waste (was Rsa60 Section 6).	AA0531	Date of Approval:5/1/2006 Effective from:5/1/2006 Last date of update:2015-01- 01	Effective
73B	208	NE	529800 181800	London School Of Hygiene And Tropical Medicine, Keppel Street, London, WC1E 7HT	London School Of Hygiene And Tropical Medicine	Keeping And Use Of Radioactive Materials (was Rsa60 Section 1).	AA0540	Date of Approval:11/5/200 5 Effective from:11/5/2005 Last date of update:2015-01- 01	Effective
74C	262	W	529330 181670	Rodaris Pharmaceuticals Ltd, Arthur Stanley House, 6th Floor,45- 50 Tottenham Street, London, W1T 4RN	Rodaris Pharmac euticals Ltd	Keeping And Use Of Radioactive Materials (was Rsa60 Section 1).	BE9829	Date of Approval:18/6/200 2 Effective from:18/6/2002 Last date of update:2015-01- 01	Revoked/ca ncelled



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1D	Distance (m)	Direction	NGR	Address	Operato r	Туре	Permissio n Number	Dates	Status
75C	262	W	529330 181670	Rodaris Pharmaceuticals Ltd, Arthur Stanley House, 6th Floor, 45- 50 Tottenham Street, London, W1T 4RN	Rodaris Pharmac euticals Ltd	Disposal Of Radioactive Waste (was Rsa60 Section 6).	BE9837	Date of Approval:19/5/199 9 Effective from:14/6/1999 Last date of update:2015-01- 01	Superseded By Variation
76C	262	W	529330 181670	Rodaris Pharmaceuticals Ltd, Arthur Stanley House, 6th Floor,45- 50 Tottenham Street, London, W1T 4RN	Rodaris Pharmac euticals Ltd	Keeping And Use Of Radioactive Materials (was Rsa60 Section 1).	BE9829	Date of Approval:19/5/199 9 Effective from:19/5/1999 Last date of update:2015-01- 01	Superseded By Variation
77C	262	W	529330 181670	Rodaris Pharmaceuticals Ltd, Arthur Stanley House, 6th Floor,45- 50 Tottenham Street, London, W1T 4RN	Rodaris Pharmac euticals Ltd	Keeping And Use Of Radioactive Materials (was Rsa60 Section 1).	BE9829	Date of Approval:16/7/200 1 Effective from:16/7/2001 Last date of update:2015-01- 01	Superseded By Variation
78C	262	W	529330 181670	Rodaris Pharmaceuticals Ltd, Arthur Stanley House, 6th Floor, 45- 50 Tottenham Street, London, W1T 4RN	Rodaris Pharmac euticals Ltd	Disposal Of Radioactive Waste (was Rsa60 Section 6).	BE9837	Date of Approval:18/6/200 2 Effective from:14/7/2002 Last date of update:2015-01- 01	Revoked/ca ncelled
79C	262	W	529330 181670	Rodaris Pharmaceuticals Ltd, Arthur Stanley House, 6th Floor, 45- 50 Tottenham Street, London, W1T 4RN	Rodaris Pharmac euticals Ltd	Disposal Of Radioactive Waste (was Rsa60 Section 6).	BE9837	Date of Approval:16/7/200 1 Effective from:13/8/2001 Last date of update:2015-01- 01	Superseded By Variation
80D	273	NW	529400 181900	University College London Hospitals Nhs Foundation Trust, 60 Whitfield Street, London, W1T 4EU	Universit y College London Hospital s Nhs Foundati on Trust	Keeping And Use Of Radioactive Materials (was Rsa60 Section 1).	BV4347	Date of Approval:12/11/20 03 Effective from:12/11/2003 Last date of update:2015-01- 01	Superseded By Variation
81D	273	NW	529400 181900	University College London Hospitals Nhs Foundation Trust, 60 Whitfield Street, London, W1T 4EU	Universit y College London Hospital s Nhs Foundati on Trust	Keeping And Use Of Radioactive Materials (was Rsa60 Section 1).	BV4355	Date of Approval:- Effective from:- Last date of update:2005-01- 06	Valid
82D	273	NW	529400 181900	University College London Hospitals Nhs Foundation Trust, 60 Whitfield Street, London, W1T 4EU	Universit y College London Hospital s Nhs Foundati on Trust	Keeping And Use Of Radioactive Materials (was Rsa60 Section 1).	BV4347	Date of Approval:25/4/200 5 Effective from:25/4/2005 Last date of update:2015-01- 01	Effective



								LOCATION INTEL	LIGENCE
ΙD	Distance (m)	Direction	NGR	Address	Operato r	Туре	Permissio n Number	Dates	Status
83D	273	NW	529400 181900	University College London Hospitals Nhs Foundation Trust, 60 Whitfield Street, London, W1T 4EU	Universit y College London Hospital s Nhs Foundati on Trust	Disposal Of Radioactive Waste (was Rsa60 Section 6).	BV4274	Date of Approval:12/11/20 03 Effective from:10/12/2003 Last date of update:2015-01- 01	Superseded By Variation
84D	273	NW	529400 181900	University College London Hospitals Nhs Foundation Trust, 60 Whitfield Street, London, W1T 4EU	Universit y College London Hospital s Nhs Foundati on Trust	Disposal Of Radioactive Waste (was Rsa60 Section 6).	BV4274	Date of Approval:25/4/200 5 Effective from:23/5/2005 Last date of update:2015-01- 01	Superseded By Variation
85D	273	NW	529400 181900	University College London Hospitals Nhs Foundation Trust, 60 Whitfield Street, London, W1T 4EU	Universit y College London Hospital s Nhs Foundati on Trust	Disposal Of Radioactive Waste (was Rsa60 Section 6).	BV4274	Date of Approval:9/12/200 5 Effective from:9/12/2005 Last date of update:2015-01- 01	Effective
86E	290	w	529300 181700	University College London Hospitals Nhs Foundation Trust,,the Middlesex Hospital,mortimer Street, London, W1T 3AA	Universit y College London Hospital s Nhs Foundati on Trust	Keeping And Use Of Radioactive Materials (was Rsa60 Section 1).	AJ9954	Date of Approval:- Effective from:- Last date of update:2005-01- 06	Valid
87E	290	w	529300 181700	Covidien Uk Commercial Ltd,,the Middlesex Hospital,mortimer Street, London, W1T 3AA	Covidien Uk Commer cial Ltd	Keeping And Use Of Radioactive Materials (was Rsa60 Section 1).	BV2271	Date of Approval:27/5/200 4 Effective from:27/5/2004 Last date of update:2015-01- 01	Superseded By Variation
88E	290	w	529300 181700	University College London Hospitals Nhs Foundation Trust,,the Middlesex Hospital,mortimer Street, London, W1T 3AA	Universit y College London Hospital s Nhs Foundati on Trust	Keeping And Use Of Radioactive Materials (was Rsa60 Section 1).	AJ9954	Date of Approval:27/5/199 3 Effective from:27/5/1993 Last date of update:2015-01- 01	Superseded By Variation
89E	290	W	529300 181700	University College London Hospitals Nhs Foundation Trust,,the Middlesex Hospital,mortimer Street, London, W1T 3AA	Universit y College London Hospital s Nhs Foundati on Trust	Keeping And Use Of Radioactive Materials (was Rsa60 Section 1).	AJ9954	Date of Approval:25/7/200 1 Effective from:25/7/2001 Last date of update:2015-01- 01	Superseded By Variation
90E	290	w	529300 181700	Covidien Uk Commercial Ltd, The Middlesex Hospital, Mortimer Street, London, W1T 3AA	Covidien Uk Commer cial Ltd	Disposal Of Radioactive Waste (was Rsa60 Section 6).	BV2107	Date of Approval:27/5/200 4 Effective from:24/6/2004 Last date of update:2015-01- 01	Revoked/ca ncelled



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ID	Distance (m)	Direction	NGR	Address	Operato r	Туре	Permissio n Number	Dates	Status
91E	290	w	529300 181700	Covidien Uk Commercial Ltd,,the Middlesex Hospital,mortimer Street, London, W1T 3AA	Uk Commer	Keeping And Use Of Radioactive Materials (was Rsa60 Section 1).	BV2271	Date of Approval:20/9/200 Effective from:20/9/2004 Last date of update:2015-01- 01	Revoked/ca ncelled
92E	290	W	529300 181700	University College London Hospitals Nhs Foundation Trust,,the Middlesex Hospital,mortimer Street, London, W1T 3AA	Universit y College London Hospital s Nhs Foundati on Trust	Keeping And Use Of Radioactive Materials (was Rsa60 Section 1).	AJ9954	Date of Approval:14/7/200 5 Effective from:14/7/2005 Last date of update:2015-01- 01	Revoked/ca ncelled
93F	308	w	529300 181600	University College London Hospitals Nhs Foundation Trust, The Middlesex Hospital, London, W1T 3AA	Universit y College London Hospital s Nhs Foundati on Trust	Disposal Of Radioactive Waste (was Rsa60 Section 6).	AA0230	Date of Approval:9/12/200 5 Effective from:9/12/2005 Last date of update:2015-01- 01	Revoked/ca ncelled
94F	308	w	529300 181600	University College London Hospitals Nhs Foundation Trust, The Middlesex Hospital, London, W1T 3AA	Universit y College London Hospital s Nhs Foundati on Trust	Disposal Of Radioactive Waste (was Rsa60 Section 6).	AA0230	Date of Approval: 14/7/200 5 Effective from: 14/7/2005 Last date of update: 2015-01- 01	Superseded By Variation
95F	308	W	529300 181600	University College London Hospitals Nhs Foundation Trust, The Middlesex Hospital,mortimer Street, London, W1T 3AA	Universit y College London Hospital s Nhs Foundati on Trust	Disposal Of Radioactive Waste (was Rsa60 Section 6).	AA0230	Date of Approval:- Effective from:- Last date of update:2005-01- 06	Valid
96F	308	w	529300 181600	Mallinckrodt Medical Holdings Uk Ltd, Mallincrodt Radiopharmacy, The Middlesex Hospital, London, W1T 3AA	Mallinckr odt Medical Holdings Uk Ltd	Disposal Of Radioactive Waste (was Rsa60 Section 6).	BB0027	Date of Approval:24/6/199 8 Effective from:23/7/1998 Last date of update:2015-01- 01	Revoked/ca ncelled
97F	308	W	529300 181600	University College London Hospitals Nhs Foundation Trust, The Middlesex Hospital, London, W1T 3AA	Universit y College London Hospital s Nhs Foundati on Trust	Disposal Of Radioactive Waste (was Rsa60 Section 6).	AA0230	Date of Approval:4/4/2002 Effective from:2/5/2002 Last date of update:2015-01- 01	Superseded By Variation
98F	308	w	529300 181600	Mallinckrodt Medical Holdings Uk Ltd, Mallincrodt Radiopharmacy,the Middlesex Hospital, London, W1T 3AA	Mallinckr odt Medical Holdings Uk Ltd	Keeping And Use Of Radioactive Materials (was Rsa60 Section 1).	BB0035	Date of Approval:24/6/199 8 Effective from:24/6/1998 Last date of update:2015-01- 01	Revoked/ca ncelled



								LOCATION INTEL	LIGENCE
ID	Distance (m)	Direction	NGR	Address	Operato r	Туре	Permissio n Number	Dates	Status
99G	344	NE	529800 182000	Birkbeck College, Malet Street, London, WC1E 7HX	Birkbeck College	Keeping And Use Of Radioactive Materials (was Rsa60 Section 1).	AC1709	Date of Approval:18/7/200 2 Effective from:18/7/2002 Last date of update:2015-01- 01	Revoked/ca ncelled
100G	344	NE	529800 182000	Birkbeck College, Malet Street, London, WC1E 7HX	Birkbeck College	Disposal Of Radioactive Waste (was Rsa60 Section 6).	AC1687	Date of Approval:1/12/200 3 Effective from:1/1/2004 Last date of update:2015-01- 01	Revoked/ca ncelled
101G	344	NE	529800 182000	Birkbeck College, Malet Street, London, WC1E 7HX	Birkbeck College	Disposal Of Radioactive Waste (was Rsa60 Section 6).	AC1687	Date of Approval:31/3/199 1 Effective from:31/3/1991 Last date of update:2015-01- 01	Superseded By Variation
102G	344	NE	529800 182000	Birkbeck College, Malet Street, London, WC1E 7HX	Birkbeck College	Keeping And Use Of Radioactive Materials (was Rsa60 Section 1).	AC1709	Date of Approval:31/3/199 1 Effective from:31/3/1991 Last date of update:2015-01- 01	Superseded By Variation
103H	390	w	529200 181700	University College London, Tottenham Street, Riding House Street, Cleveland Street, London, WC1	Universit y College London	Disposal Of Radioactive Waste (was Rsa60 Section 6).	AS5920	Date of Approval:20/2/200 7 Effective from:20/3/2007 Last date of update:2015-01- 01	Effective
104H	390	w	529200 181700	University College London, Tottenham Street, Riding House Street, Cleveland Street, London, WC1	Universit y College London	Disposal Of Radioactive Waste (was Rsa60 Section 6).	AS5920	Date of Approval:4/1/2006 Effective from:4/1/2006 Last date of update:2015-01- 01	Superseded By Variation
105H	390	W	529200 181700	University College London, Tottenham Street, Riding House Street, Cleveland Street, London, WC1	Universit y College London	Disposal Of Radioactive Waste (was Rsa60 Section 6).	A\$5920	Date of Approval:19/12/19 97 Effective from:1/1/1998 Last date of update:2015-01- 01	Superseded By Variation
106H	390	w	529200 181700	University College London, Tottenham Street, Riding House Street, Cleveland Street, London, WC1	Universit y College London	Disposal Of Radioactive Waste (was Rsa60 Section 6).	AS5920	Date of Approval:14/8/199 5 Effective from:8/9/1995 Last date of update:2015-01- 01	Superseded By Variation



								LOCATION INTEL	LIGENCE
ID	Distance (m)	Direction	NGR	Address	Operato r	Туре	Permissio n Number	Dates	Status
107H	390	W	529200 181700	University College London, Tottenham Street, Riding House Street, Cleveland Street, London, WC1	Universit y College London	Disposal Of Radioactive Waste (was Rsa60 Section 6).	AS5920	Date of Approval:15/1/199 6 Effective from:16/1/1996 Last date of update:2015-01- 01	Superseded By Variation
108H	390	w	529200 181700	University College London, Tottenham Street, Riding House Street, Cleveland Street, London, WC1	Universit y College London	Disposal Of Radioactive Waste (was Rsa60 Section 6).	AS5920	Date of Approval:1/12/200 3 Effective from:1/1/2004 Last date of update:2015-01- 01	Superseded By Variation
1091	436	NW	529200 181900	University Of Westminster, Cavendish Campus, 115 New Cavendish Street, London, W1W 6UW	Universit y Of Westmin ster	Disposal Of Radioactive Waste (was Rsa60 Section 6).	AE0983	Date of Approval:5/6/2003 Effective from:3/7/2003 Last date of update:2015-01- 01	Effective
1101	436	NW	529200 181900	University Of Westminster, Cavendish Campus, 115 New Cavendish Street, London, W1W 6UW	Universit y Of Westmin ster	Disposal Of Radioactive Waste (was Rsa60 Section 6).	AE0983	Date of Approval:31/3/199 1 Effective from:31/3/1991 Last date of update:2015-01- 01	Superseded By Variation
1111	436	NW	529200 181900	University Of Westminster, Cavendish Campus,115 New Cavendish Street, London, W1W 6UW	Universit y Of Westmin ster	Keeping And Use Of Radioactive Materials (was Rsa60 Section 1).	AE0991	Date of Approval:5/6/2003 Effective from:5/6/2003 Last date of update:2015-01- 01	Effective
112J	485	Е	530100 181700	British Museum, Scientific Research, Great Russell Street, London, WC1B 3DG	British Museum	Disposal Of Radioactive Waste (was Rsa60 Section 6).	BF3141	Date of Approval:6/9/1999 Effective from:1/10/1999 Last date of update:2015-01- 01	Superseded By Variation
113J	485	E	530100 181700	British Museum, Scientific Research, Great Russell Street, London, WC1B 3DG	British Museum	Disposal Of Radioactive Waste (was Rsa60 Section 6).	BF3141	Date of Approval:5/1/2006 Effective from:5/1/2006 Last date of update:2015-01- 01	Revoked/ca ncelled
114J	485	Е	530100 181700	British Museum, Scientific Research, Great Russell Street, London, WC1B 3DG	British Museum	Disposal Of Radioactive Waste (was Rsa60 Section 6).	BF3141	Date of Approval:1/12/200 3 Effective from:1/1/2004 Last date of update:2015-01- 01	Superseded By Variation



					_			LOCATION INTEL	LIGENCE
ID	Distance (m)	Direction	NGR	Address	Operato r	Туре	Permissio n Number	Dates	Status
115J	485	E	E 530100 181700	British Museum, Scientific Research,great Russell Street, London, WC1B 3DG	British Museum	Keeping And Use Of Radioactive Materials (was Rsa60 Section 1).	BF3133	Date of Approval:6/9/1999 Effective from:6/9/1999 Last date of update:2015-01- 01	Revoked/ca ncelled
116K	497	N	529500 182200	University College London Hospitals Nhs Foundation Trust, University College Hospital, Gower Street, London, WC1E 6AU	Universit y College London Hospital s Nhs Foundati on Trust	Disposal Of Radioactive Waste (was Rsa60 Section 6).	AA0256	Date of Approval:24/1/200 6 Effective from:21/2/2006 Last date of update:2015-01- 01	Revoked/ca ncelled
117K	497	Ν	529500 182200	University College London Hospitals Nhs Foundation Trust, University College Hospital,gower Street, London, WC1E 6AU	Universit y College London Hospital s Nhs Foundati on Trust	Keeping And Use Of Radioactive Materials (was Rsa60 Section 1).	AC4406	Date of Approval:18/12/20 00 Effective from:18/12/2000 Last date of update:2015-01- 01	Superseded By Variation
<b>1</b> 18K	497	N	529500 182200	University College London Hospitals Nhs Foundation Trust, University College Hospital,gower Street, London, WC1E 6AU	Universit y College London Hospital s Nhs Foundati on Trust	Keeping And Use Of Radioactive Materials (was Rsa60 Section 1).	AC4406	Date of Approval:29/4/200 2 Effective from:29/4/2002 Last date of update:2015-01- 01	Revoked/ca ncelled
119K	497	N	529500 182200	University College London Hospitals Nhs Foundation Trust, University College Hospital,gower Street, London, WC1E 6AU	Universit y College London Hospital s Nhs Foundati on Trust	Keeping And Use Of Radioactive Materials (was Rsa60 Section 1).	AC4406	Date of Approval:- Effective from:- Last date of update:2005-01- 06	Valid
120K	497	N	529500 182200	University College London Hospitals Nhs Foundation Trust, University College Hospital, Gower Street, London, WC1E 6AU	Universit y College London Hospital s Nhs Foundati on Trust	Disposal Of Radioactive Waste (was Rsa60 Section 6).	AA0256	Date of Approval:19/9/200 2 Effective from:17/10/2002 Last date of update:2015-01- 01	Superseded By Variation
121K	497	N	529500 182200	University College And Middlesex School Of Medicine, University College London Of Medicine, Middlesex Hospital Site, London, W1	Universit y College And Middlese x School Of Medicine	Disposal Of Radioactive Waste (was Rsa60 Section 6).	AD9691	Date of Approval:31/3/199   Effective from:31/3/1991 Last date of update:2015-01- 01	Revoked/ca ncelled
122K	497	N	529500 182200	University College London Hospitals Nhs Foundation Trust, University College Hospital,gower Street, London, WC1E 6AU	Universit y College London Hospital s Nhs Foundati on Trust	Disposal Of Radioactive Waste (was Rsa60 Section 6).	AA0256	Date of Approval:- Effective from:- Last date of update:2005-01- 06	Valid



ID	Distance (m)	Direction	NGR	Address	Operato r	Туре	Permissio n Number	Dates	Status
123K	497	N	529500 182200	University College London Hospitals Nhs Foundation Trust, University College Hospital, Gower Street, London, WC1E 6AU	Universit y College London Hospital s Nhs Foundati on Trust	Disposal Of Radioactive Waste (was Rsa60 Section 6).	AA0256	Date of Approval: 18/12/20 00 Effective from: 18/1/2001 Last date of update: 2015-01- 01	Superseded By Variation

2.1.8 Records of Licensed Discharge Consents within 500m of the study site:

2

The following Licensed Discharge Consents records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details				
7A	291	NE	529835 181897	Address: LONDON SCH OF HYGINE&TROP MEDICINE, KEPPEL STREET, ., ., LONDON, WC1E 7HT Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: EPRGP3123KG Permit Version: 1	Receiving Water: Status: NEW ISSUED UNDER EPR 2010 Issue date: 12/01/2011 Effective Date: 12-Jan-2011 Revocation Date: -			
8A	291	NE	529839 181892	Address: LONDON SCH OF HYGINE&TROP MEDICINE, KEPPEL STREET, ., ., LONDON, WC1E 7HT Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: EPRGP3123KG Permit Version: 1	Receiving Water: Status: NEW ISSUED UNDER EPR 2010 Issue date: 12/01/2011 Effective Date: 12-Jan-2011 Revocation Date: -			

2.1.9 Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500m of the study site:

0

Database searched and no data found.

2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site:

0

Database searched and no data found.



#### 2.2 Dangerous or Hazardous Sites

Records of COMAH & NIHHS sites within 500m of the study site:

0

Database searched and no data found.

#### 2.3 Environment Agency Recorded Pollution Incidents

2.3.1 Records of National Incidents Recording System, List 2 within 500m of the study site:

5

The following NIRS List 2 records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details				
1	296	W	529299 181651	Incident Date: 02-Aug-2002 Incident Identification: 96824 Pollutant: Inorganic Chemicals/Products Pollutant Description: Acids	Water Impact: Category 4 (No Impact Land Impact: Category 4 (No Impact) Air Impact: Category 2 (Significant)			
2F	308	W	529300 181600	Incident Date: 28-Nov-2001 Incident Identification: 45407 Pollutant: Specific Waste Materials Pollutant Description: Clinical Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)			
3	342	W	529249 181685	Incident Date: 29-Oct-2001 Incident Identification: 41360 Pollutant: Specific Waste Materials Pollutant Description: Clinical Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)			
4	344	N	529717 182041	Incident Date: 24-Apr-2003 Incident Identification: 153692 Pollutant: Organic Chemicals/Products Pollutant Description: Surfactants and Detergents	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)			
5	395	SE	529804 181358	Incident Date: 16-Feb-2003 Incident Identification: 137183 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)			

#### 2.3.2 Records of National Incidents Recording System, List 1 within 500m of the study site:

0

Database searched and no data found.



0

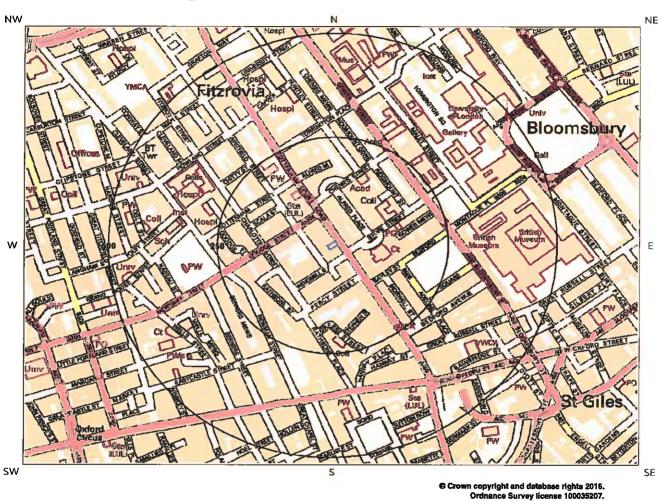
#### 2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990

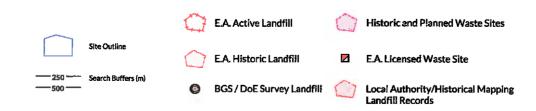
How many records of sites determined as contaminated land under Section 78R of the Environmental Protection Act 1990 are there within 500m of the study site?

Database searched and no data found.



# 3. Landfill and Other Waste Sites Map







## 3. Landfill and Other Waste Sites

3.1 Landfill Sites

3.1.1 Records from Environment Agency landfill data within 1000m of the study site:	
Database searched and no data found.	0
3.1.2 Records of Environment Agency historic landfill sites within 1500m of the study site:	-
	1

The following landfill records are represented as either points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details	
Not shown	1203	E	530700 181200	Site Address: Portugal Street, Lincoln's Inn Fields, London Wc2a Waste Licence: - Site Reference: IMP006 Waste Type: - Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Hold Address: - Operator: - First Recorded: - Last Recorded: -

Database searched and no data found.

3.1.4 Records of Landfills from Local Authority and Historical Mapping Records within 1500m of the study site:

Database searched and no data found.

Database searched and no data round

Report Reference: GS-2667359 Client Reference: C13604 0

0

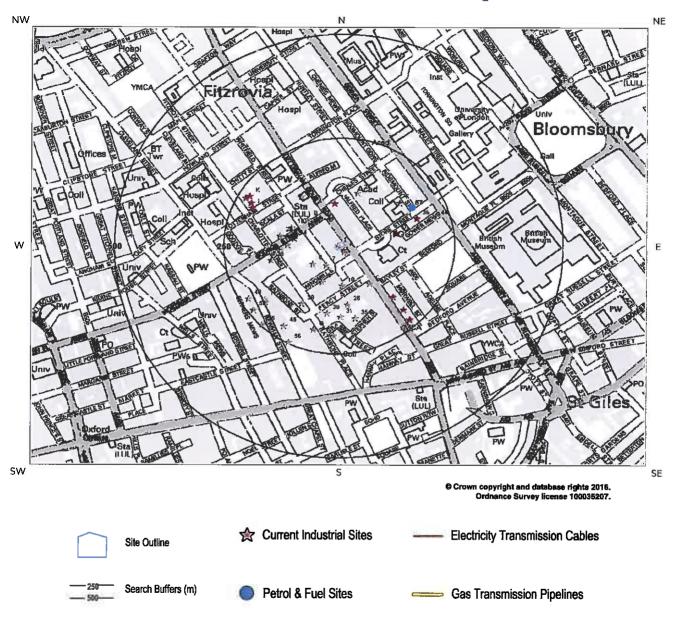


#### 3.2 Other Waste Sites

3.2.1 Records of waste treatment, transfer or disposal sites within 500m of the study site:	
	C
Database searched and no data found.	
3.2.2 Records of Environment Agency licensed waste sites within 1500m of the study site:	
Database searched and no data found.	С



## 4. Current Land Use Map





## 4. Current Land Uses

#### 4.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site:

56

The following records are represented as points on the Current Land Uses map.

ID	Distance (m)	Directio n	Company	NGR	Address	Activity	Category
1	0	On Site	Milano Premium Designs Ltd	529597 181705	,	Beds and Bedding	Consumer Products
2A	8	s	Stones Traders Ltd	529612 181695	,	Electronic Equipment	Industrial Products
3A	12	S	Express Shop Equipment	529613 181691	48, Tottenham Court Road, London, W1T 2EF	Photographic and Optical Equipment	Household, Office, Leisure and Garden
4A	12	S	Zeaba Solutions	529613 181691	48, Tottenham Court Road, London, W1T 2EF	Electrical Equipment Repair and Servicing	Repair and Servicing
5A	12	s	Security Development s	529613 181691	48, Tottenham Court Road, London, W1T 2EF	Electronic Equipment	Industrial Products
6A	16	SE	Westend Repairs	529619 181689	Flat 47, Tottenham Court Road, London, W1T 2EE	Electrical Equipment Repair and Servicing	Repair and Servicing
7	43	SW	Adam B	529572 181658	32, Windmill Street, London, W1T 2JW	Published Goods	Industrial Products
8	64	sw	Works	529541 181662	W1T	Unspecified Works Or Factories	industrial Features
9	83	SW	Finger Music	529562 181618	8, Windmill Street, London, W1T 2JE	Recording Studios and Record Companies	IT, Advertising, Marketing and Media Services
10	86	5	West One Music Group	529607 181609	28, Percy Street, London, W1T 2DB	Recording Studios and Record Companies	IT, Advertising, Marketing and Media Services
11B	89	NW	118 118	529529 181768	Whitfield Court 30-32, Whitfield Street, London, W1T 2RQ	Published Goods	Industrial Products
12B	89	NW	Sinclair I S Pharma	529529 181768	Whitfield Court 30-32, Whitfield Street, London, W1T 2RQ	Medical Equipment, Supplies and Pharmaceuticals	Industrial Products
13B	89	NW	Ekornes Ltd	529529 181768	Kings Court 2-16, Goodge Street, London, W1T 2QA	Carpets, Flooring, Rugs and Soft Furnishings	Consumer Products
14	93	W	Quartet Books	529499 181722	27, Goodge Street, London, W1T 2LD	Published Goods	Industrial Products
15	95	N	Bensons for Beds	529590 181807	209-210, Tottenham Court Road, London, W1T 7PN	Beds and Bedding	Consumer Products
16C	106	SE	Sunrise Ltd	529670 181614	38, Tottenham Court Road, London, W1T 1BZ	Electrical Components	Industrial Products
17C	106	SE	The Digital Centre	529670 181614	38, Tottenham Court Road, London, W1T 1BZ	Photographic and Optical Equipment	Household, Office, Leisure and Garden
18E	107	W	Mac & P C Services	529483 181707	Flat 35, Goodge Street, London, W1T 2PT	Electrical Equipment Repair and Servicing	Repair and Servicing



							LOCATION INTELLIGENCE
ID	Distance (m)	Directio n	Company	NGR	Address	Activity	Category
19	107	NW	We Computing	529492 181749	24, Goodge Street, London, W1T 2QF	Electrical Equipment Repair and Servicing	Repair and Servicing
20D	120	E	Rehau Ltd	529731 181736	26, Store Street, London, WC1E 7BT	Rubber, Silicones and Plastics	Industrial Products
21D	120	E	In Opera UK Ltd	529731 181736	26, Store Street, London, WC1E 7BT	Carpets, Flooring, Rugs and Soft Furnishings	Consumer Products
22D	120	Е	Cairns Latif Associates	529731 181736	26, Store Street, London, WC1E 7BT	Civil Engineers	Engineering Services
23E	122	W	I T Clinic	529468 181696	41, Goodge Street, London, W1T 2PY	Electrical Equipment Repair and Servicing	Repair and Servicing
24	123	N	Space at Work	529642 181832	Whittington House 19-30, Alfred Place, London, WC1E 7EA	Office and Shop Equipment	Industrial Products
25	127	W	Black Eyewear	529466 181729	38, Goodge Street, London, W1T 2QW	Photographic and Optical Equipment	Household, Office, Leisure and Garden
26	133	S	Footage Farm	529620 181563	10-11, Percy Street, London, W1T 1DN	Container and Storage	Transport, Storage and Delivery
27	142	NW	Goodge Street	529515 181824	Group Station Managers Office 75, Tottenham Court Road, London, W1T 2HF	Underground Network Stations	Public Transport, Stations and Infrastructure
28	147	W	Yog	529446 181670	43-45, Charlotte Street, London, W1T 1RS	Dairy Products	Foodstuffs
29	152	SW	Peter Dann	529515 181565	7-9, Charlotte Street, London, W1T 1RG	Civil Engineers	Engineering Services
30	154	\$	Elwin Street Ltd	529574 181542	3, Percy Street, London, W1T 1DE	Published Goods	Industrial Products
31	161	S	Fitzrovia Post	529604 181534	33, Gresse Street, London, W1T 1QU	Recording Studios and Record Companies	IT, Advertising, Marketing and Media Services
32F	161	NE	Facet Publishing	529738 181809	7, Ridgmount Street, London, WC1E 7AE	Published Goods	Industrial Products
33F	161	ΝE	Cilantro Engineering UK Ltd	529738 181809	7, Ridgmount Street, London, WC1E 7AE	Structural Engineers	Engineering Services
34	165	SE	M J All Tec Ltd	529723 181582	246, Tottenham Court Road, London, W1T 7QU	Electrical Equipment Repair and Servicing	Repair and Servicing
35	169	S	Sight & Sound Magazine	529638 181531	21, Stephen Street, London, W1T 1LN	Published Goods	Industrial Products
36	176	E	The Printing Centre	529778 181771	37, Store Street, London, WC1E 7BS	Published Goods	Industrial Products
37G	198	S	Printfast	529543 181503	33-34, Rathbone Place, London, W1T 1JN	Plate Makers, Print Finishers and Type Setters	IT, Advertising, Marketing and Media Services
38G	198	S	Printfast W1	529543 181503	33-34, Rathbone Place, London, W1T 1JN	Published Goods	Industrial Products
39H	202	SW	Montel	529433 181575	33, Newman Street, London, W1T 1PY	Published Goods	Industrial Products
40H	203	SW	Mercantile Vehicle Leasing	529434 181570	32, Newman Street, London, W1T 1PU	Vehicle Hire and Rental	Hire Services
41	204	SE	ASK	529748 181551	248-250, Tottenham Court Road, London, W1T 7QZ	Radar and Telecommunications Equipment	Industrial Products
42	206	5	Sony D A D C	529589 181489	19-22, Rathbone Place, London, W1T 1HY	Electronic Media	Industrial Products



-			<del></del>				LOCATION INTELLIGENCE
ID	Distance (m)	Directio n	Company	NGR	Address	Activity	Category
431	209	NW	Lovefone	529403 181797	64, Charlotte Street, London, W1T 4QD	Electrical Equipment Repair and Servicing	Repair and Servicing
44	215	Е	Aminex	529820 181770	7, Gower Street, London, WC1E 6HA	Special Purpose Machinery and Equipment	Industrial Products
451	216	NW	Central Bikes	529401 181809	68, Charlotte Street, London, W1T 4QF	New Vehicles	Motoring
46	218	sw	Thyssenkrup p Uhde Energy & Power	529475 181512	22, Newman Street, London, W1T 1PH	Civil Engineers	Engineering Services
47K	227	NW	N M R Consultancy	529398 181824	5, Charlotte Mews, London, W1T 4EB	Electronic Equipment	Industrial Products
48	231	SW	Ramboll	529396 181578	60, Newman Street, London, W1T 3DA	Industrial Engineers	Engineering Services
49J	231	SE	Terabyte Electronics Ltd	529762 181528	254-256, Tottenham Court Road, London, W1T 7RD	Electrical Equipment Repair and Servicing	Repair and Servicing
50J	231	SE	Techno Talks	529762 181528	254-256, Tottenham Court Road, London, W1T 7RD	Radar and Telecommunications Equipment	Industrial Products
51J	231	SE	Car Audio & Security Ltd	529762 181528	254-256, Tottenham Court Road, London, W1T 7RD	Vehicle Parts and Accessories	Motoring
<b>52</b> J	231	SE	Mobile Phone Specialist Ltd Within Kamla	529762 181528	251, Tottenham Court Road, London, W1T 7RB	Electrical Equipment Repair and Servicing	Repair and Servicing
53K	232	NW	Inter Voice Over	529389 181820	72, Charlotte Street, London, W1T 4QQ	Recording Studios and Record Companies	IT, Advertising, Marketing and Media Services
54	237	SW	Oldie Publications Ltd	529408 181551	Kenrick House 65, Newman Street, London, W1T 3EG	Published Goods	Industrial Products
55	246	SW	Esquel Apparel Ltd	529427 181515	72, Newman Street, London, W1T 3EH	Clothing, Components and Accessories	Consumer Products
56	247	SW	Buro Happold	529487 181473	17, Newman Street, London, W1T 1PD	Civil Engineers	Engineering Services

#### 4.2 Petrol and Fuel Sites

Records of petrol or fuel sites within 500m of the study site:

The following petrol or fuel site records provided by Catalist are represented as points on the Current Land Use map:

ID	Distance (m)	Directio n	NGR	Company	Address	LPG	Status
57	178	NE	529767 181798	Obsolete	Store Street Service Station, 6, Store Street, Store Street, Richmond Street, London, Greater London, WC1E 7DQ	Not Applicable	Obsolete

Report Reference: GS-2667359 Client Reference: C13604 1



#### 4.3 National Grid High Voltage Underground Electricity Transmission Cables

This dataset identifies the high voltage electricity transmission lines running between generating power plants and electricity substations. The dataset does not include the electricity distribution network (smaller, lower voltage cables distributing power from substations to the local user network). This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high voltage underground electricity transmission cables within 500m of the study site:

O Database searched and no data found.

#### 4.4 National Grid High Pressure Gas Transmission Pipelines

This dataset identifies high-pressure, large diameter pipelines which carry gas between gas terminals, power stations, compressors and storage facilities. The dataset does not include the Local Transmission System (LTS) which supplies gas directly into homes and businesses. This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high pressure gas transmission pipelines within 500m of the study site:					
Database searched and no data found.					



## 5. Geology

#### 5.1 Artificial Ground and Made Ground

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
WGR-OPEN	WORKED GROUND (UNDIVIDED)	VOID

#### 5.2 Superficial Ground and Drift Geology

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
LHGR	LYNCH HILL GRAVEL MEMBER	SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]

#### 5.3 Bedrock and Solid Geology

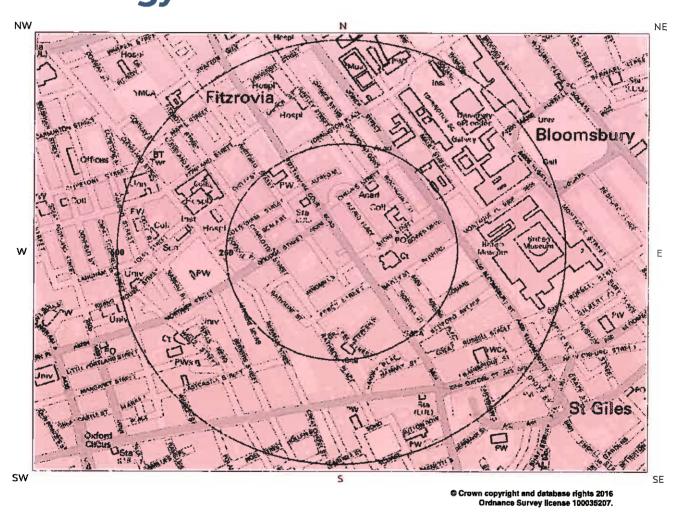
The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
LC-CLSISA	LONDON CLAY FORMATION	CLAY, SILT AND SAND

(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)



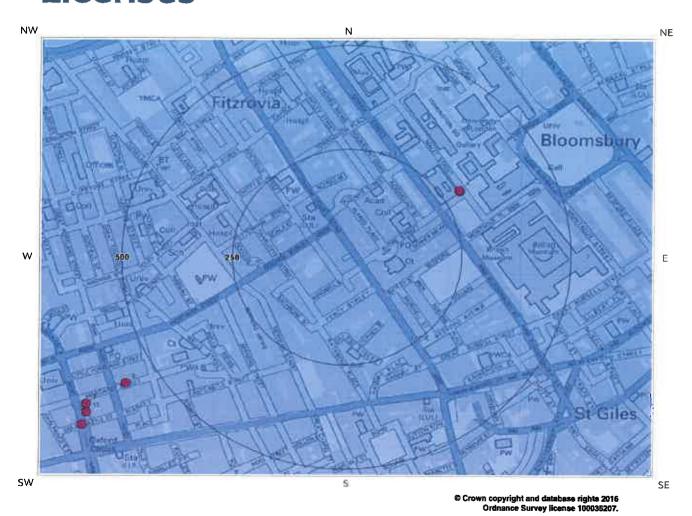
## 6 Hydrogeology and Hydrology 6a. Aquifer Within Superficial Geology

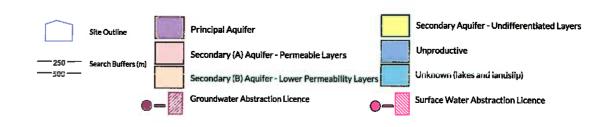






# 6b. Aquifer Within Bedrock Geology and Abstraction Licenses







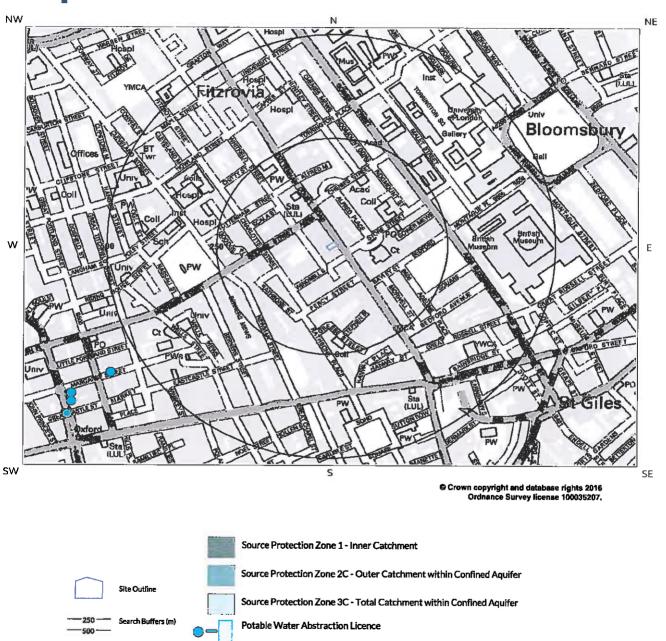
## 6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licenses



Potable Water Abstraction Licence

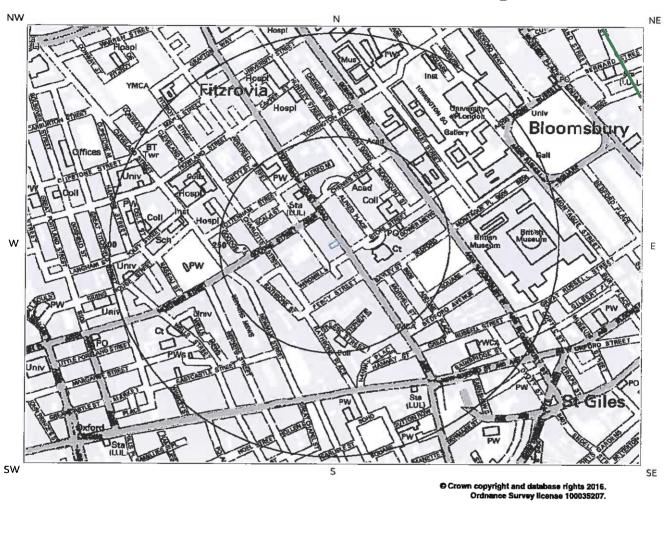


# 6d. Hydrogeology – Source Protection Zones within confined aquifer





## 6e. Hydrology – Detailed River Network and River Quality







## 6. Hydrogeology and Hydrology

#### 6.1 Aquifer within Superficial Deposits

Are there records of strata classification within the superficial geology at or in proximity to the property?

From 1 April 2010, the Environment Agency's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviroinsight User Guide.

The following aquifer records are shown on the Aquifer within Superficial Geology Map (6a):

ID	Distanc e (m)	Direction	Designation	Description
1	0	On Site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers.  These are generally aquifers formerly classified as minor aquifers
2	2 385 E		Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers.  These are generally aquifers formerly classified as minor aquifers

#### 6.2 Aquifer within Bedrock Deposits

Are there records of strata classification within the bedrock geology at or in proximity to the property? Yes

From 1 April 2010, the Environment Agency's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviroinsight User Guide.

The following aquifer records are shown on the Aquifer within Bedrock Geology Map (6b):

ĬD	Distanc e (m)	Direction	Designation	Description
1	0	On Site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
2	385	E	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow



#### **6.3 Groundwater Abstraction Licences**

Are there any Groundwater Abstraction Licences within 2000m of the study site?

Yes

The following Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distanc e (m)	Direction	NGR	Details				
3A	290	NE	529858 181865	Status: Historical Licence No: TH/039/0039/031 Details: Heat Pump Direct Source: Thames Groundwater Point: Borehole 2, Keppel Street Data Type: Point Name: London School of Hygiene and Tropical Medicine	Annual Volume (m³): 203407 Max Daily Volume (m³): 558 Original Application No: NP5/WR/004429 Original Start Date: 8/11/2010 Expiry Date: 31/3/2019 Issue No: 1 Version Start Date: 8/11/2010 Version End Date:			
<b>4</b> A	290	NE	529858 181865	Status: Active Licence No: TH/039/0039/031 Details: Heat Pump Direct Source: Thames Groundwater Point: Keppel Street, Bloomsbury, London - Borehole 2 Data Type: Point Name: London School of Hygiene and Tropical Medicine	Annual Volume (m³): 203407 Max Daily Volume (m³): 558 Original Application No: NP5/WR/004429 Original Start Date: 8/11/2010 Expiry Date: 31/3/2019 Issue No: 1 Version Start Date: 8/11/2010 Version End Date:			
5A	291	NE	529860 181863	Status: Historical Licence No: TH/039/0039/031 Details: Heat Pump Direct Source: Thames Groundwater Point: Borehole 1, Keppel Street Data Type: Point Name: London School of Hygiene and Tropical Medicine	Annual Volume (m³): 203407 Max Daily Volume (m³): 558 Original Application No: NPS/WR/004429 Original Start Date: 8/11/2010 Expiry Date: 31/3/2019 Issue No: 1 Version Start Date: 8/11/2010 Version End Date:			
6A	291	NE	529860 181863	Status: Active Licence No: TH/039/0039/031 Details: Heat Pump Direct Source: Thames Groundwater Point: Keppel Street, Bloomsbury, London - Borehole 1 Data Type: Point Name: London School of Hygiene and Tropical Medicine	Annual Volume (m³): 203407 Max Daily Volume (m³): 558 Original Application No: NPS/WR/004429 Original Start Date: 8/11/2010 Expiry Date: 31/3/2019 Issue No: 1 Version Start Date: 8/11/2010 Version End Date:			
7B	577	SW	529100 181400	Status: Historical Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Walmer House, 296 Regent Street, London W1-borehole B Data Type: Point Name: CAPITAL AND COUNTIES PROPERTY COMPANY LIMITED	Annual Volume (m³): 9126 Max Daily Volume (m³): 25 Original Application No: - Original Start Date: 11/10/1971 Expiry Date: - Issue No: 100 Version Start Date: 26/11/1979 Version End Date:			
8B	577	SW	529100 181400	Status: Historical Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Borehole 'b' At Walmer House, 296 Regent Street, London W1 Data Type: Point Name: CAPITAL AND COUNTIES PROPERTY COMPANY LIMITED	Annual Volume (m³): 9126 Max Daily Volume (m³): 25 Original Application No: - Original Start Date: 11/10/1971 Expiry Date: - Issue No: 100 Version Start Date: 26/11/1979 Version End Date:			



					LOCATION INTELLIGENCE			
ID	Distanc e (m)	Direction	NGR	Details				
9	679	sw	529010 181350	Status: Active Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Walmer House, 296 Regent Street, London, W1b - Borehole 'a' Data Type: Point Name: Pontsarn Investments Limited	Annual Volume (m³): 9126 Max Daily Volume (m³): 25 Original Application No: NPS/WR/011671 Original Start Date: 11/10/1971 Expiry Date: - Issue No: 102 Version Start Date: 29/11/2012 Version End Date:			
10	690	sw	529010 181330	Status: Active Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Walmer House, 296 Regent Street, London, W1b - Borehole 'b' Data Type: Point Name: Pontsarn Investments Limited	Annual Volume (m³): 9126 Max Daily Volume (m³): 25 Original Application No: NPS/WR/011671 Original Start Date: 11/10/1971 Expiry Date: - Issue No: 102 Version Start Date: 29/11/2012 Version End Date:			
11C	715	SW	529000 181300	Status: Historical Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Walmer House, 296 Regent Street, London W1-borehole A Data Type: Point Name: CAPITAL AND COUNTIES PROPERTY COMPANY LIMITED	Annual Volume (m³): 9126 Max Daily Volume (m³): 25 Original Application No: - Original Start Date: 11/10/1971 Expiry Date: - Issue No: 100 Version Start Date: 26/11/1979 Version End Date:			
12C	715	SW	529000 181300	Status: Historical Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Borehole 'a' At Walmer House, 296 Regent Street, London W1 Data Type: Point Name: CAPITAL AND COUNTIES PROPERTY COMPANY LIMITED	Annual Volume (m³): 9126 Max Daily Volume (m³): 25 Original Application No: - Original Start Date: 11/10/1971 Expiry Date: - Issue No: 100 Version Start Date: 26/11/1979 Version End Date:			
Not shown	785	w	528830 181900	Status: Historical Licence No: TH/039/0039/010 Details: Heat Pump Direct Source: Thames Groundwater Point: 10 Weymouth Street, Ridgeford Properties Data Type: Point Name: Ridgeford Properties Limited	Annual Volume (m³): 50000 Max Daily Volume (m³): 400 Original Application No: NPSWR001161 Original Start Date: 13/8/2009 Expiry Date: 31/3/2013 Issue No: 1 Version Start Date: 13/8/2009 Version End Date:			
Not shown	785	W	528830 181900	Status: Active Licence No: TH/039/0039/068 Details: Heat Pump Direct Source: Thames Groundwater Point: 10 Weymouth Street, Ridgeford Properties Data Type: Point Name: Ridgeford Properties Limited	Annual Volume (m³): 50000 Max Daily Volume (m³): 400 Original Application No: NPSWR009221 Original Start Date: 1/4/2013 Expiry Date: 31/3/2025 Issue No: 1 Version Start Date: 1/4/2013 Version End Date:			



					LOCATION INTELLIGENCE		
ID	Distanc e (m)	Direction	NGR	Details			
Not shown	1097	NE	530052 182718		Annual Volume (m³): 327600 Max Daily Volume (m³): 1260 Original Application No: NPSWR000003 Original Start Date: 9/4/2009 Expiry Date: 31/3/2013 Issue No: 1 Version Start Date: 9/4/2009 Version End Date:		
Not shown	1097	NE	530052 182718	Status: Historical Licence No: TH/039/0039/001 Details: Heat Pump Direct Source: Thames Groundwater Point: Borehole At Bidborough House 20 Mabledon Place London Data Type: Point Name: LONDON BOROUGH OF CAMDEN	Annual Volume (m³): 327600 Max Daily Volume (m³): 1260 Original Application No: NPSWR000003 Original Start Date: 9/4/2009 Expiry Date: 31/3/2013 Issue No: 1 Version Start Date: 9/4/2009 Version End Date:		
Not shown	1097	NE	530052 182718	Status: Active Licence No: TH/039/0039/064 Details: Heat Pump Direct Source: Thames Groundwater Point: Borehole At Bidborough House, 20 Mabledon Place, London Data Type: Point Name: University College London	Annual Volume (m³): 327600 Max Daily Volume (m³): 1440 Original Application No: NPS/WR/017625 Original Start Date: 16/4/2013 Expiry Date: 31/3/2019 Issue No: 2 Version Start Date: 21/11/2014 Version End Date:		
Not shown	1131	W	528480 181920	Status: Historical Licence No: 28/39/39/0215 Details: Non-Evaporative Cooling Direct Source: Thames Groundwater Point: 20 Devonshire Place, London-borehole A Data Type: Point Name: TRUSTEES OF THE LONDON CLINIC LIMITED	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: WRA/N/1383 Original Start Date: 24/2/2005 Expiry Date: 31/3/2013 Issue No: 1 Version Start Date: 24/2/2005 Version End Date:		
Not shown	1133	w	528480 181930	Status: Historical Licence No: 28/39/39/0215 Details: Non-Evaporative Cooling Direct Source: Thames Groundwater Point: 3-5 Devonshire Place-borehole A Data Type: Point Name: TRUSTEES OF THE LONDON CLINIC LIMITED	Annual Volume (m³): 122400 Max Daily Volume (m³): 511 Original Application No: WRA/N/1383 Original Start Date: 24/2/2005 Expiry Date: 31/3/2013 Issue No: 1 Version Start Date: 24/2/2005 Version End Date:		
Not shown	1139	w	528470 181910	Status: Historical Licence No: 28/39/39/0215 Details: Non-Evaporative Cooling Direct Source: Thames Groundwater Point: 20 Devonshire Place, London-borehole B Data Type: Point Name: TRUSTEES OF THE LONDON CLINIC LIMITED	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: WRA/N/1383 Original Start Date: 24/2/2005 Expiry Date: 31/3/2013 Issue No: 1 Version Start Date: 24/2/2005 Version End Date:		
Not shown	1152	W	528460 181930	Status: Historical Licence No: 28/39/39/0215 Details: Non-Evaporative Cooling Direct Source: Thames Groundwater Point: 3-5 Devonshire Place-borehole B Data Type: Point Name: TRUSTEES OF THE LONDON CLINIC LIMITED	Annual Volume (m³): 122400 Max Daily Volume (m³): 511 Original Application No: WRA/N/1383 Original Start Date: 24/2/2005 Expiry Date: 31/3/2013 Issue No: 1 Version Start Date: 24/2/2005 Version End Date:		
Not shown	1202	sw	528793 180800	Status: Active Licence No: TH/039/0039/036 Details: Heat Pump Direct Source: Thames Groundwater Point: 40-54 Grosvenor Hill London Data Type: Point Name: Grosvenor Properties	Annual Volume (m³): 438000 Max Daily Volume (m³): 1200 Original Application No: NPS/WR/017057 Original Start Date: 28/2/2011 Expiry Date: 31/3/2019 Issue No: 3 Version Start Date: 14/10/2014 Version End Date:		



					LOCATION INTELLIGENCE
ID	Distanc e (m)	Direction	NGR	Det	rails
Not shown	1202	sw	528765 180766	Direct Source: Thamas Croundwater	Annual Volume (m³): 438000 Max Daily Volume (m³): 1200 Original Application No: NPS/WR/006940 Original Start Date: 28/2/2011 Expiry Date: 31/3/2019 Issue No: 2 Version Start Date: 11/11/2011 Version End Date:
Not shown	1235	SE	530089 180562	Status: Active Licence No: TH/039/0039/067 Details: Heat Pump Direct Source: Thames Groundwater Point: 6 St Martins Place, London, Wc2n - Borehole Data Type: Point Name: ST MARTIN-IN-THE FIELDS LIMITED	Annual Volume (m³): 140000 Max Daily Volume (m³): 760 Original Application No: GEN/39/117 Original Start Date: 1/4/2013 Expiry Date: 31/3/2025 Issue No: 2 Version Start Date: 1/4/2013 Version End Date:
Not shown	1237	SE	530090 180560	Status: Historical Licence No: 28/39/39/0236 Details: Heat Pump Direct Source: Thames Groundwater Point: 6 St Martins Place, London, Wc2n - Borehole Data Type: Point Name: ST MARTIN-IN-THE FIELDS LIMITED	Annual Volume (m³): 52000 Max Daily Volume (m³): 1300 Original Application No: GEN/39/117 Original Start Date: 24/4/2008 Expiry Date: 31/3/2013 Issue No: 1 Version Start Date: 24/4/2008 Version End Date:
Not shown	1239	S	529960 180510	Status: Historical Licence No: 28/39/39/0212 Details: Evaporative Cooling Direct Source: Thames Groundwater Point: The National Gallery- Borehole Data Type: Point Name: THE NATIONAL GALLERY	Annual Volume (m³): 30558 Max Daily Volume (m³): 83.7 Original Application No: WRA/N/1311 Original Start Date: 27/10/2004 Expiry Date: 31/3/2013 Issue No: 1 Version Start Date: 1/4/2008 Version End Date:
Not shown	1239	S	529960 180510	Status: Historical Licence No: 28/39/39/0212 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: The National Gallery- Borehole Data Type: Point Name: THE NATIONAL GALLERY	Annual Volume (m³): 30558 Max Daily Volume (m³): 83.7 Original Application No: WRA/N/1311 Original Start Date: 27/10/2004 Expiry Date: 31/3/2013 Issue No: 1 Version Start Date: 1/4/2008 Version End Date:
Not shown	1246	SW	528765 180766	Status: Active Licence No: TH/039/0039/036 Details: Heat Pump Direct Source: Thames Groundwater Point: 40-54 Grosvenor Hill London Data Type: Point Name: Grosvenor Properties	Annual Volume (m³): 438000 Max Daily Volume (m³): 1200 Original Application No: NPS/WR/017057 Original Start Date: 28/2/2011 Expiry Date: 31/3/2019 Issue No: 3 Version Start Date: 14/10/2014 Version End Date:
Not shown	1246	SW	528765 180766	Status: Historical Licence No: TH/039/0039/036 Details: Heat Pump Direct Source: Thames Groundwater Point: Borehole At 70 Grosvenor Street London Data Type: Point Name: Grosvenor West End Properties Limited	Annual Volume (m³): 473040 Max Daily Volume (m³): 1296 Original Application No: NPS/WR/005113 Original Start Date: 28/2/2011 Expiry Date: 31/3/2019 Issue No: 1 Version Start Date: 28/2/2011 Version End Date:
Not shown	1250	SW	529113 180542	Status: Active Licence No: TH/039/0039/042 Details: Heat Pump Direct Source: Thames Groundwater Point: Borehole At Old Bond Street, London Data Type: Point Name: Prada Retail UK Ltd	Annual Volume (m³): 74043 Max Daily Volume (m³): 354 Original Application No: NPS/WR/007512 Original Start Date: 24/10/2012 Expiry Date: 31/3/2019 Issue No: 1 Version Start Date: 24/10/2012 Version End Date:



					LOCATION INTELLIGENCE		
ID	Distanc e (m)	Direction	NGR	Details			
Not shown	1292	NW	528407 182223	Status: Historical Licence No: TH/039/0039/022 Details: Heat Pump Direct Source: Thames Groundwater Point: Confined Chalk, Doric Villa, York Terrace East, London Data Type: Point Name: Ritblat	Annual Volume (m³): 118260 Max Daily Volume (m³): 324 Original Application No: NPS/WR/002585 Original Start Date: 26/2/2010 Expiry Date: 31/3/2019 Issue No: 1 Version Start Date: 26/2/2010 Version End Date:		
Not shown	1292	NW	528407 182223	Status: Active Licence No: TH/039/0039/022 Details: Heat Pump Direct Source: Thames Groundwater Point: Doric Villa, York Terrace East, London Data Type: Point Name: Ritblat	Annual Volume (m³): 118260 Max Daily Volume (m³): 324 Original Application No: NPS/WR/002585 Original Start Date: 26/2/2010 Expiry Date: 31/3/2019 Issue No: 1 Version Start Date: 26/2/2010 Version End Date:		
Not shown	1470	S	529480 180230	Status: Historical Licence No: 28/39/39/0006 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Borehole At The Army And Navy Club, Pall Mall, London Data Type: Point Name: ARMY & NAVY CLUB	Annual Volume (m³): 15911 Max Daily Volume (m³): 82.7 Original Application No: - Original Start Date: 11/10/1965 Expiry Date: - Issue No: 100 Version Start Date: 1/4/2008 Version End Date:		
Not shown	1470	S	529480 180230	Status: Active Licence No: 28/39/39/0006 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Army And Navy Club, Pall Mall, London Data Type: Point Name: ARMY AND NAVY CLUB LIMITED	Annual Volume (m³): 15911 Max Daily Volume (m³): 82.7 Original Application No: NPS/WR/015097 Original Start Date: 11/10/1965 Expiry Date: - Issue No: 101 Version Start Date: 9/1/2014 Version End Date:		
Not shown	1481	SW	528532 180665	Status: Active Licence No: TH/039/0039/106 Details: Heat Pump Direct Source: Thames Groundwater Point: Borehole At 6 Carlos Place, London Data Type: Point Name: Kering International Limited	Annual Volume (m³): 23511 Max Daily Volume (m³): 100 Original Application No: NPS/WR/017716 Original Start Date: 11/3/2015 Expiry Date: 31/3/2025 Issue No: 1 Version Start Date: 11/3/2015 Version End Date:		
Not shown	1550	SW	528190 181039	Status: Active Licence No: TH/039/0039/039 Details: Heat Pump Direct Source: Thames Groundwater Point: Oxford Street - Borehole C Data Type: Point Name: Park House (Oxford St.) Ltd	Annual Volume (m³): 1955232 Max Daily Volume (m³): 5357 Original Application No: NPS/WR/011448 Original Start Date: 1/9/2011 Expiry Date: 31/3/2019 Issue No: 2 Version Start Date: 17/9/2012 Version End Date:		
Not shown	1550	sw	528190 181039	Status: Historical Licence No: TH/039/0039/039 Details: Heat Pump Direct Source: Thames Groundwater Point: Borehole C- Oxford Street Data Type: Point Name: Park House (Oxford St.) Ltd	Annual Volume (m³): 1955232 Max Daily Volume (m³): 5357 Original Application No: NPS/WR/007024 Original Start Date: 1/9/2011 Expiry Date: 31/3/2019 Issue No: 1 Version Start Date: 1/9/2011 Version End Date:		



	_				LOCATION INTELLIGENCE
ID	Distanc e (m)	Direction	NGR	Det	ails
<b>Not</b> shown	1552	SW	528197 181019	Status: Historical Licence No: TH/039/0039/039 Details: Heat Pump Direct Source: Thames Groundwater Point: Borehole B- Oxford Street Data Type: Point Name: Park House (Oxford St.) Ltd	Annual Volume (m³): 1955232 Max Daily Volume (m³): 5357 Original Application No: NPS/WR/007024 Original Start Date: 1/9/2011 Expiry Date: 31/3/2019 Issue No: 1 Version Start Date: 1/9/2011 Version End Date:
Not shown	1552	SW	528197 181019	Status: Active Licence No: TH/039/0039/039 Details: Heat Pump Direct Source: Thames Groundwater Point: Oxford Street - Borehole B Data Type: Point Name: Park House (Oxford St.) Ltd	Annual Volume (m³): 1955232 Max Daily Volume (m³): 5357 Original Application No: NPS/WR/011448 Original Start Date: 1/9/2011 Expiry Date: 31/3/2019 Issue No: 2 Version Start Date: 17/9/2012 Version End Date:
Not shown	1559	W	528061 181399	Status: Historical Licence No: 28/39/39/0241 Details: Heat Pump Direct Source: Thames Groundwater Point: 7-15 Baker Street, London, W1u - Borehole Data Type: Point Name: AUB (BAKER STREET) DEVELOPMENT LIMITED	Annual Volume (m³): 52560 Max Daily Volume (m³): 201.6 Original Application No: GEN/39/186 Original Start Date: 12/12/2008 Expiry Date: 31/3/2013 Issue No: 1 Version Start Date: 12/12/2008 Version End Date:
Not shown	1559	w	528061 181399	Status: Active Licence No: TH/039/0039/080 Details: Heat Pump Direct Source: Thames Groundwater Point: 7-15 Baker Street, London, W1u - Borehole Data Type: Point Name: AUB (BAKER STREET) DEVELOPMENT LIMITED	Annual Volume (m³): 52560 Max Daily Volume (m³): 202 Original Application No: NPS/WR/009191 Original Start Date: 19/7/2013 Expiry Date: 31/3/2019 Issue No: 1 Version Start Date: 19/7/2013 Version End Date:
Not hown	1595	SE	531030 180970	Status: Historical Licence No: 28/39/39/0025 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Globe House, Victoria Embankment- Borehole B Data Type: Point Name: COMMERZ GRUNDBESITZ INVEST. MBH	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 10/1/1966 Expiry Date: - Issue No: 101 Version Start Date: 28/3/2003 Version End Date:
Not hown	1608	SE	531050 180980	Status: Historical Licence No: 28/39/39/0025 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Globe House, Victoria Embankment- Borehole C Data Type: Point Name: COMMERZ GRUNDBESITZ INVEST. MBH	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 10/1/1966 Expiry Date: - Issue No: 101 Version Start Date: 28/3/2003 Version End Date:



					LOCATION INTELLIGENCE
ID	Distanc e (m)	Direction	NGR	Deta	ails
Not shown	1617	SE	531060 180980	Status: Historical Licence No: 28/39/39/0025 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Globe House, Victoria Embankment- Borehole A Data Type: Point Name: COMMERZ GRUNDBESITZ INVEST. MBH	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 10/1/1966 Expiry Date: - Issue No: 101 Version Start Date: 28/3/2003 Version End Date:
Not shown	1617	SW	528135 180998	Status: Active Licence No: TH/039/0039/039 Details: Heat Pump Direct Source: Thames Groundwater Point: Oxford Street - Borehole A Data Type: Point Name: Park House (Oxford St.) Ltd	Annual Volume (m³): 1955232 Max Daily Volume (m³): 5357 Original Application No: NPS/WR/011448 Original Start Date: 1/9/2011 Expiry Date: 31/3/2019 Issue No: 2 Version Start Date: 17/9/2012 Version End Date:
Not shown	1617	SW	528135 180998	Status: Historical Licence No: TH/039/0039/039 Details: Heat Pump Direct Source: Thames Groundwater Point: Borehole A - Oxford Street Data Type: Point Name: Park House (Oxford St.) Ltd	Annual Volume (m³): 1955232 Max Daily Volume (m³): 5357 Original Application No: NPS/WR/007024 Original Start Date: 1/9/2011 Expiry Date: 31/3/2019 Issue No: 1 Version Start Date: 1/9/2011 Version End Date:
Not shown	1629	SW	528394 180595	Status: Active Licence No: 28/39/39/0228 Details: Non-Evaporative Cooling Direct Source: Thames Groundwater Point: Scotts Restaurant-borehole Data Type: Point Name: CAPRICE HOLDINGS LIMITED	Annual Volume (m³): 123462 Max Daily Volume (m³): 342 Original Application No: NPS/WR/003517 Original Start Date: 3/11/2006 Expiry Date: 31/3/2019 Issue No: 2 Version Start Date: 16/9/2010 Version End Date:
Not shown	1636	SW	528390 180590	Status: Historical Licence No: 28/39/39/0228 Details: Non-Evaporative Cooling Direct Source: Thames Groundwater Point: Scotts Restaurant-borehole Data Type: Point Name: CAPRICE HOLDINGS LIMITED	Annual Volume (m³): 123462 Max Daily Volume (m³): 342 Original Application No: GEN/39/151 Original Start Date: 3/11/2006 Expiry Date: 31/3/2013 Issue No: 1 Version Start Date: 3/11/2006 Version End Date:
Not hown	1655	SE	531000 180800	Status: Historical Licence No: 28/39/39/0025 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Borehole 'b' At Globe House, Temple Place, London Data Type: Point Name: HAMMERSON UK PROPERTIES PLC	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 10/1/1966 Expiry Date: - Issue No: 100 Version Start Date: 14/12/1995 Version End Date:
Not :hown	1655	SE	531000 180800	Status: Historical Licence No: 28/39/39/0025 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Borehole 'a' At Globe House, Temple Place, London Data Type: Point Name: HAMMERSON UK PROPERTIES PLC	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 10/1/1966 Expiry Date: - Issue No: 100 Version Start Date: 14/12/1995 Version End Date:



					LOCATION INTELLIGENCE
D	Distanc e (m)	Direction	NGR	Det	aits
Not shown	1655	SE	531000 180800	Status: Historical Licence No: 28/39/39/0025 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Borehole 'c' At Globe House, Temple Place, London Data Type: Point Name: HAMMERSON UK PROPERTIES PLC	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 10/1/1966 Expiry Date: - Issue No: 100 Version Start Date: 14/12/1995 Version End Date:
Not shown	1752	NE	530368 183294	Status: Active Licence No: TH/039/0039/055 Details: Heat Pump Direct Source: Thames Groundwater Point: Regent Quarter - Borehole A Data Type: Point Name: BNP Paribas Jersey Trust Corp Ltd and Anley Trustees Ltd	Annual Volume (m³): 323612 Max Daily Volume (m³): 2160 Original Application No: NPS/WR/015663 Original Start Date: 6/2/2013 Expiry Date: 31/3/2025 Issue No: 2 Version Start Date: 25/6/2014 Version End Date:
Not shown	1784	w	527850 182100	Status: Historical Licence No: 28/39/39/0070 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Abbey House, Baker Street- Borehole Data Type: Point Name: BASKERVILLE ESTATES (GP) LIMITED	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 13/6/1966 Expiry Date: - Issue No: 102 Version Start Date: 19/12/2003 Version End Date:
Not shown	1791	Е	531300 181100	Status: Historical Licence No: 28/39/39/0077 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Borehole At 37 Fleet Street, London Ec4 Data Type: Point Name: C HOARE & CO	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 13/6/1966 Expiry Date: - Issue No: 100 Version Start Date: 10/6/1968 Version End Date:
Not hown	1814	w	527800 182000	Status: Active Licence No: 28/39/39/0021 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: Thames Groundwater Point: Dorset House, London- 2 Boreholes Data Type: Point Name: Dorset House Residential Limited	Annual Volume (m³): 56370 Max Daily Volume (m³): 318 Original Application No: NPS/WR/017647 Original Start Date: 13/12/1965 Expiry Date: - Issue No: 103 Version Start Date: 20/11/2014 Version End Date:
Not hown	1814	w	527800 182000	Status: Historical Licence No: 28/39/39/0021 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: Thames Groundwater Point: Two Boreholes At Dorset House, Gloucester Place, London. W1 Data Type: Point Name: BELLNORTH LIMITED	Annual Volume (m³): 56370 Max Daily Volume (m³): 318 Original Application No: - Original Start Date: 13/12/1965 Expiry Date: - Issue No: 101 Version Start Date: 10/1/1994 Version End Date:
Not shown	1833	W	527800 182100	Status: Historical Licence No: 28/39/39/0070 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Borehole At Abbey House, Baker Street, London Nw1 Data Type: Point Name: ABBEY NATIONAL PLC	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 13/6/1966 Expiry Date: - Issue No: 101 Version Start Date: 2/5/2000 Version End Date:



					LOCATION INTELLIGENCE	
ID	Distanc e (m)	Direction	NGR	Details		
Not shown	1880	SW	528813 179986	Status: Active Licence No: TH/039/0039/011 Details: Heat Pump Direct Source: Thames Groundwater Point: Green Park, Westminster, London - Borehole A Data Type: Point Name: LONDON UNDERGROUND LIMITED	Annual Volume (m³): 788400 Max Daily Volume (m³): 2160 Original Application No: NPSWR001412 Original Start Date: 24/12/2009 Expiry Date: 31/3/2019 Issue No: 1 Version Start Date: 24/12/2009 Version End Date:	
Not shown	1880	SW	52 <b>8813</b> 179986	Status: Historical Licence No: TH/039/0039/011 Details: Heat Pump Direct Source: Thames Groundwater Point: Borehole At Green Park, Westminster Data Type: Point Name: LONDON UNDERGROUND LIMITED	Annual Volume (m³): 788400 Max Daily Volume (m³): 2160 Original Application No: NPSWR001412 Original Start Date: 24/12/2009 Expiry Date: 31/3/2019 Issue No: 1 Version Start Date: 24/12/2009 Version End Date:	
Not shown	1881	SE	530830 180270	Status: Historical Licence No: 28/39/42/0069 Details: Non-Evaporative Cooling Direct Source: Thames Groundwater Point: Royal Festival Hall, Belvedere Road, Se1 - Borehole Data Type: Point Name: THE SOUTH BANK BOARD LIMITED	Annual Volume (m³): 132000 Max Daily Volume (m³): 825 Original Application No: WRA/S/1191 Original Start Date: 5/5/2005 Expiry Date: 31/3/2013 Issue No: 1 Version Start Date: 5/5/2005 Version End Date:	
Not shown	1882	SE	530826 180266	Status: Historical Licence No: 28/39/42/0069 Details: Non-Evaporative Cooling Direct Source: Thames Groundwater Point: Royal Festival Hall, Belvedere Road, Se1 Borehole A Data Type: Point Name: THE SOUTH BANK BOARD LIMITED	Annual Volume (m³): 257000  Max Daily Volume (m³): 1620  Original Application No: -  Original Start Date: 5/5/2005  Expiry Date: 31/3/2013  Issue No: 2  Version Start Date: 6/7/2007  Version End Date:	
Not shown	1882	SE	530826 180266	Status: Historical Licence No: 28/39/42/0069 Details: General Use Relating To Secondary Category (High Loss) Direct Source: Thames Groundwater Point: Royal Festival Hall, Belvedere Road, Se1 - Borehole A Data Type: Point Name: THE SOUTH BANK BOARD LIMITED	Annual Volume (m³): 257000 Max Daily Volume (m³): 1620 Original Application No: - Original Start Date: 5/5/2005 Expiry Date: 31/3/2013 Issue No: 2 Version Start Date: 6/7/2007 Version End Date:	
Not shown	1882	SE	530826 180266	Status: Active Licence No: 28/39/42/0069/R01 Details: Heat Pump Direct Source: Thames Groundwater Point: Royal Festival Hall, Belvedere Road, Se1 - Borehole A Data Type: Point Name: South Bank Centre Limited	Annual Volume (m³): 257000 Max Daily Volume (m³): 1620 Original Application No: NPS/WR/009246 Original Start Date: 1/4/2014 Expiry Date: 31/3/2019 Issue No: 1 Version Start Date: 1/4/2014 Version End Date:	
Not shown	1916	SE	530737 180153	Status: Historical Licence No: 28/39/42/0069 Details: General Use Relating To Secondary Category (High Loss) Direct Source: Thames Groundwater Point: Royal Festival Hall, Belvedere Road Se1 Borehole B Data Type: Point Name: THE SOUTH BANK BOARD LIMITED	Annual Volume (m³): 257000 Max Daily Volume (m³): 1620 Original Application No: - Original Start Date: 5/5/2005 Expiry Date: 31/3/2013 Issue No: 2 Version Start Date: 6/7/2007 Version End Date:	



					LOCATION INTELLIGENCE
ID	Distanc e (m)	Direction	NGR	Det	ails
Not shown	1916	SE	530737 180153		Annual Volume (m³): 257000 Max Daily Volume (m³): 1620 Original Application No: - Original Start Date: 5/5/2005 Expiry Date: 31/3/2013 Issue No: 2 Version Start Date: 6/7/2007 Version End Date:
Not shown	1916	SE	530737 180153	Status: Active Licence No: 28/39/42/0069/R01 Details: Heat Pump Direct Source: Thames Groundwater Point: Royal Festival Hall, Belvedere Road Se1 - Borehole B Data Type: Point Name: South Bank Centre Limited	Annual Volume (m³): 257000 Max Daily Volume (m³): 1620 Original Application No: NPS/WR/009246 Original Start Date: 1/4/2014 Expiry Date: 31/3/2019 Issue No: 1 Version Start Date: 1/4/2014 Version End Date:
Not shown	1937	SW	528794 179932	Status: Active Licence No: TH/039/0039/011 Details: Heat Pump Direct Source: Thames Groundwater Point: Green Park, Westminster, London - Borehole B Data Type: Point Name: LONDON UNDERGROUND LIMITED	Annual Volume (m³): 788400 Max Daily Volume (m³): 2160 Original Application No: NPSWR001412 Original Start Date: 24/12/2009 Expiry Date: 31/3/2019 Issue No: 1 Version Start Date: 24/12/2009 Version End Date:
Not shown	1937	SW	528794 179932	Status: Historical Licence No: TH/039/0039/011 Details: Heat Pump Direct Source: Thames Groundwater Point: Borehole At Green Park, Westminster Data Type: Point Name: LONDON UNDERGROUND LIMITED	Annual Volume (m³): 788400 Max Daily Volume (m³): 2160 Original Application No: NPSWR001412 Original Start Date: 24/12/2009 Expiry Date: 31/3/2019 Issue No: 1 Version Start Date: 24/12/2009 Version End Date:
Not shown	1945	NE	531239 182777	Status: Active Licence No: TH/039/0039/059 Details: Potable Water Supply - Direct Direct Source: Thames Groundwater Point: Borehole At New River Head Data Type: Point Name: THAMES WATER UTILITIES LTD	Annual Volume (m³): 1261440 Max Daily Volume (m³): 3456 Original Application No: NPS/WR/009226 Original Start Date: 1/4/2013 Expiry Date: 31/3/2025 Issue No: 1 Version Start Date: 1/4/2013 Version End Date:
Not hown	1971	NE	531280 182760	Status: Historical Licence No: 28/39/39/0201 Details: Potable Water Supply - Direct Direct Source: Thames Groundwater Point: New River Head, Finsbury - Borehole Data Type: Point Name: THAMES WATER UTILITIES LTD	Annual Volume (m³): 1261440 Max Daily Volume (m³): 3456 Original Application No: WRA/R/2/2 Original Start Date: 8/1/2004 Expiry Date: 31/3/2013 Issue No: 1 Version Start Date: 8/1/2004 Version End Date:
Not hown	1985	Е	531600 181700	Status: Historical Licence No: 28/39/39/0176 Details: Evaporative Cooling Direct Source: Thames Groundwater Point: Charterhouse Street, London - Borehole A Data Type: Point Name: CITIGEN (LONDON) LTD	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 23/12/1994 Expiry Date: 31/12/2004 Issue No: 100 Version Start Date: 11/1/1995 Version End Date:
Not hown	1985	E	531600 181700	Status: Historical Licence No: 28/39/39/0176 Details: Evaporative Cooling Direct Source: Thames Groundwater Point: Charterhouse Street, London - Borehole B Data Type: Point Name: CITIGEN (LONDON) LTD	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 23/12/1994 Expiry Date: 31/12/2004 Issue No: 100 Version Start Date: 11/1/1995 Version End Date:



## **6.4 Surface Water Abstraction Licences**

Are there any Surface Water Abstraction Licences within 2000m of the study site?

Yes

The following Surface Water Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	NGR	Details	
Not shown	1890	N	529750 183600	Status: Historical Licence No: 28/39/39/0172 Details: Make-Up or Top Up Water Direct Source: Thames Surface Water - Non Tidal Point: Grand Union Canal At Camley Street Nature Park, London Data Type: Point Name: BRITISH WATERWAYS BOARD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 18/9/1991 Expiry Date: - Issue No: 100 Version Start Date: 18/9/1991 Version End Date:
Not shown	1890	N	529750 183600	Status: Historical Licence No: 28/39/39/0172 Details: Make-Up or Top Up Water Direct Source: Thames Surface Water - Non Tidal Point: Camley Street Nature Park, London Data Type: Point Name: BRITISH WATERWAYS BOARD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 18/9/1991 Version End Date:
Not shown	1937	N	530310 183520	Status: Active Licence No: 28/39/39/0164 Details: Non-Evaporative Cooling Direct Source: Thames Surface Water - Non Tidal Point: Maiden Lane Bridge, London, Nw1 - Regents Canal Data Type: Point Name: Canal and River Trust	Annual Volume (m³): 7010000 Max Daily Volume (m³): 19520 Application No: - Original Start Date: 18/7/1980 Expiry Date: - Issue No: 101 Version Start Date: 17/12/2007 Version End Date:

## **6.5 Potable Water Abstraction Licences**

Are there any Potable Water Abstraction Licences within 2000m of the study site?

Yes

The following Potable Water Abstraction Licences records are represented as points, lines and regions on the SPZ and Potable Water Abstraction Licences Map (6c):

ID	Distanc e (m)	Direction	NGR	Details	
1A	577	sw	529100 181400	Status: Historical Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Walmer House, 296 Regent Street, London W1-borehole B Data Type: Point Name: CAPITAL AND COUNTIES PROPERTY COMPANY LIMITED	Annual Volume (m³): 9126 Max Daily Volume (m²): 25 Original Application No: - Original Start Date: 11/10/1971 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:

Report Reference: GS-2667359

Client Reference: C13604



					LOCATION INTELLIGENCE
ID	Distanc e (m)	Direction	NGR	Det	ails
2A	577	SW	529100 181400	Status: Historical Licence No: 28/39/39/0138  Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services  Direct Source: Thames Groundwater Point: Borehole 'b' At Walmer House, 296 Regent Street, London W1 Data Type: Point  Name: CAPITAL AND COUNTIES PROPERTY COMPANY LIMITED	Annual Volume (m³): 9126 Max Daily Volume (m³): 25 Original Application No: - Original Start Date: 11/10/1971 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:
3	679	SW	529010 181350	Status: Active Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Walmer House, 296 Regent Street, London, W1b - Borehole 'a' Data Type: Point Name: Pontsarn Investments Limited	Annual Volume (m³): 9126 Max Daily Volume (m³): 25 Original Application No: NPS/WR/011671 Original Start Date: 11/10/1971 Expiry Date: - Issue No: 102 Version Start Date: Version End Date:
4	690	SW	529010 181330	Status: Active Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Walmer House, 296 Regent Street, London, W1b - Borehole 'b' Data Type: Point Name: Pontsarn Investments Limited	Annual Volume (m³): 9126 Max Daily Volume (m³): 25 Original Application No: NPS/WR/011671 Original Start Date: 11/10/1971 Expiry Date: - Issue No: 102 Version Start Date: Version End Date:
5B	715	SW	529000 181300	Status: Historical Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Borehole 'a' At Walmer House, 296 Regent Street, London W1 Data Type: Point Name: CAPITAL AND COUNTIES PROPERTY COMPANY LIMITED	Annual Volume (m³): 9126 Max Daily Volume (m³): 25 Original Application No: - Original Start Date: 11/10/1971 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:
6B	715	SW	529000 181300	Status: Historical Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Walmer House, 296 Regent Street, London W1-borehole A Data Type: Point Name: CAPITAL AND COUNTIES PROPERTY COMPANY LIMITED	Annual Volume (m³): 9126 Max Daily Volume (m³): 25 Original Application No: - Original Start Date: 11/10/1971 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:
Not shown	1239	5	529960 180510	Status: Historical Licence No: 28/39/39/0212 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: The National Gallery- Borehole Data Type: Point Name: THE NATIONAL GALLERY	Annual Volume (m³): 30558 Max Daily Volume (m³): 83.7 Original Application No: WRA/N/1311 Original Start Date: 27/10/2004 Expiry Date: 31/3/2013 Issue No: 1 Version Start Date: Version End Date:



					LOCATION INTELLIGENCE
ID	Distanc e (m)	Direction	NGR	Deta	ails
Not shown	1470	S	529480 180230	Status: Historical Licence No: 28/39/39/0006 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Borehole At The Army And Navy Club, Pall Mall, London Data Type: Point Name: ARMY & NAVY CLUB	Annual Volume (m³): 15911 Max Daily Volume (m³): 82.7 Original Application No: - Original Start Date: 11/10/1965 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:
Not shown	1470	S	529480 180230	Status: Active Licence No: 28/39/39/0006 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Army And Navy Club, Pall Mall, London Data Type: Point Name: ARMY AND NAVY CLUB LIMITED	Annual Volume (m³): 15911 Max Daily Volume (m³): 82.7 Original Application No: NPS/WR/015097 Original Start Date: 11/10/1965 Expiry Date: - Issue No: 101 Version Start Date: Version End Date:
Not shown	1595	SE	531030 180970	Status: Historical Licence No: 28/39/39/0025 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Globe House, Victoria Embankment- Borehole B Data Type: Point Name: COMMERZ GRUNDBESITZ INVEST. MBH	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 10/1/1966 Expiry Date: - Issue No: 101 Version Start Date: Version End Date:
Not shown	1608	SE	531050 180980	Status: Historical Licence No: 28/39/39/0025 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Globe House, Victoria Embankment- Borehole C Data Type: Point Name: COMMERZ GRUNDBESITZ INVEST. MBH	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 10/1/1966 Expiry Date: - Issue No: 101 Version Start Date: Version End Date:
Not shown	1617	SE	531060 180980	Status: Historical Licence No: 28/39/39/0025 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Globe House, Victoria Embankment- Borehole A Data Type: Point Name: COMMERZ GRUNDBESITZ INVEST. MBH	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 10/1/1966 Expiry Date: - Issue No: 101 Version Start Date: Version End Date:
Not hown	1655	SE	531000 180800	Status: Historical Licence No: 28/39/39/0025 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Borehole 'a' At Globe House, Temple Place, London Data Type: Point Name: HAMMERSON UK PROPERTIES PLC	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 10/1/1966 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:



					LOCATION INTELLIGENCE
ID	Distanc e (m)	Direction	NGR	Det	alls
Not shown	1655	SE	531000 180800		Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 10/1/1966 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:
Not shown	1655	SE	531000 180800	Status: Historical Licence No: 28/39/39/0025  Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Borehole 'c' At Globe House, Temple Place, London Data Type: Point Name: HAMMERSON UK PROPERTIES PLC	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 10/1/1966 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:
Not shown	1784	w	527850 182100	Status: Historical Licence No: 28/39/39/0070 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Abbey House, Baker Street- Borehole Data Type: Point Name: BASKERVILLE ESTATES (GP) LIMITED	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 13/6/1966 Expiry Date: - Issue No: 102 Version Start Date: Version End Date:
Not shown	1791	E	531300 181100	Status: Historical Licence No: 28/39/39/0077 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Borehole At 37 Fleet Street, London Ec4 Data Type: Point Name: C HOARE & CO	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 13/6/1966 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:
Not hown	1814	w	527800 182000	Status: Active Licence No: 28/39/39/0021 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: Thames Groundwater Point: Dorset House, London- 2 Boreholes Data Type: Point Name: Dorset House Residential Limited	Annual Volume (m³): 56370 Max Daily Volume (m³): 318 Original Application No: NPS/WR/017647 Original Start Date: 13/12/1965 Expiry Date: - Issue No: 103 Version Start Date: Version End Date:
Not hown	1814	W	527800 182000	Status: Historical Licence No: 28/39/39/0021 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: Thames Groundwater Point: Two Boreholes At Dorset House, Gloucester Place, London. W1 Data Type: Point Name: BELLNORTH LIMITED	Annual Volume (m³): 56370 Max Daily Volume (m³): 318 Original Application No: - Original Start Date: 13/12/1965 Expiry Date: - Issue No: 101 Version Start Date: Version End Date:
Not hown	1833	W	527800 182100	Status: Historical Licence No: 28/39/39/0070 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Borehole At Abbey House, Baker Street, London Nw¹ Data Type: Point Name: ABBEY NATIONAL PLC	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 13/6/1966 Expiry Date: - Issue No: 101 Version Start Date: Version End Date:



ID	Distanc e (m)	Direction	NGR	De	tails
Not shown	1945	NE	531239 182777	Status: Active Licence No: TH/039/0039/059 Details: Potable Water Supply - Direct Direct Source: Thames Groundwater Point: Borehole At New River Head Data Type: Point Name: THAMES WATER UTILITIES LTD	Annual Volume (m³): 1261440 Max Daily Volume (m³): 3456 Original Application No: NPS/WR/009226 Original Start Date: 1/4/2013 Expiry Date: 31/3/2025 Issue No: 1 Version Start Date: Version End Date:
Not shown	1971	NE	531280 182760	Status: Historical Licence No: 28/39/39/0201 Details: Potable Water Supply - Direct Direct Source: Thames Groundwater Point: New River Head, Finsbury - Borehole Data Type: Point Name: THAMES WATER UTILITIES LTD	Annual Volume (m³): 1261440 Max Daily Volume (m³): 3456 Original Application No: WRA/R/2/2 Original Start Date: 8/1/2004 Expiry Date: 31/3/2013 Issue No: 1 Version Start Date: Version End Date:

## **6.6 Source Protection Zones**

Are there any Source Protection Zones within 500m of the study site?

No

Database searched and no data found.

## 6.7 Source Protection Zones within Confined Aquifer

Are there any Source Protection Zones within the Confined Aquifer within 500m of the study site?

No

Historically, Source Protection Zone maps have been focused on regulation of activities which occur at or near the ground surface, such as prevention of point source pollution and bacterial contamination of water supplies. Sources in confined aquifers were often considered to be protected from these surface pressures due to the presence of a low permeability confining layer (e.g. glacial till, clay). The increased interest in subsurface activities such as onshore oil and gas exploration, ground source heating and cooling requires protection zones for confined sources to be marked on SPZ maps where this has not already been done.

Database searched and no data found.



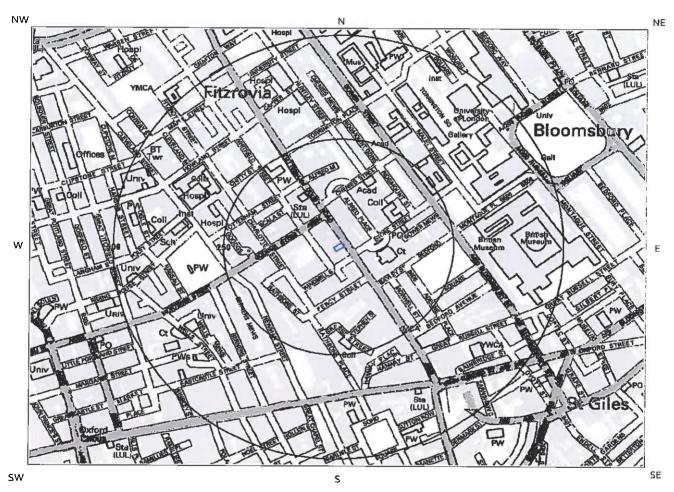
## 6.8 Groundwater Vulnerability and Soil Leaching Potential

Is there any Environment Agency information on groundwater vulnerability and soil leaching potential within 500m of the study site?

(m)	Direction	Classification	Soil Vulnerability Category	Description	
0	On Site	Minor Aquifer/High Leaching Potential	HU	Soil information for urban restored mineral working soils are therefore assum highly permeable in the al site-specific informat	gs. These ned to be bsence of
385	E	Minor Aquifer/High Leaching Potential	HU	Soil information for urban restored mineral working soils are therefore assum highly permeable in the al site-specific informat	gs. These ned to be bsence of
	 liver Qual	•			
Is the	re any Envir	onment Agency information o	on river quality within 1500m o	of the study site?	No
6.9.1	Biological C	Quality:			
		Database sea	rched and no data found.		
6.9.2	Chemical Q	uality:	<del></del>		
		Database sea	rched and no data found.		
		Database sea			
6.10	 Detailed	River Network			
			thin 500m of the study site?		No
		River Network  ailed River Network entries wi	thin 500m of the study site?		No
Are th	ere any Det	River Network  ailed River Network entries wi	,		No
Are th	ere any Det	River Network  ailed River Network entries wi  Database sear	rched and no data found.		No



## 7a. Environment Agency Flood Map for Planning (from rivers and the sea)

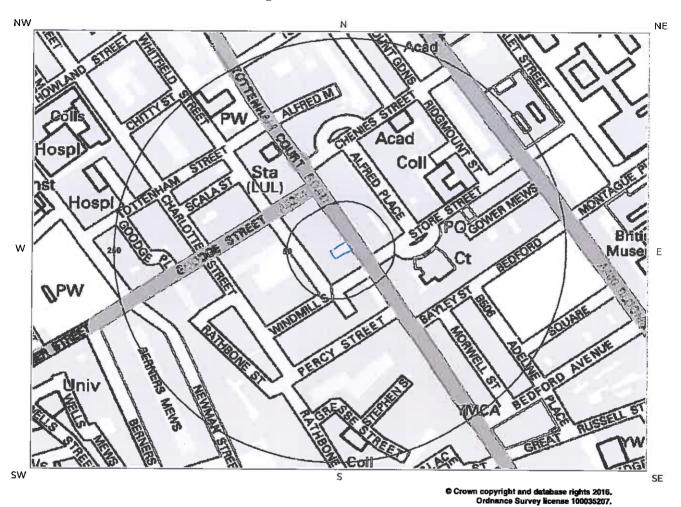


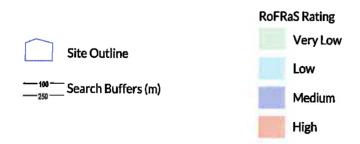
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## 7b. Environment Agency Risk of Flooding from Rivers and the Sea (RoFRaS) Map







## 7 Flooding

## 7.1 River and Coastal Zone 2 Flooding

Is the site within 250m of an Environment Agency Zone 2 floodplain?

No

Environment Agency Zone 2 floodplains estimate the annual probability of flooding as between 1 in 1000 (0.1%) and 1 in 100 (1%) from rivers and between 1 in 1000 (0.1%) and 1 in 200 (0.5%) from the sea. Any relevant data is represented on Map 7a – Flood Map for Planning:

Database searched and no data found.

## 7.2 River and Coastal Zone 3 Flooding

is the site within 250m of an Environment Agency Zone 3 floodplain?

No

Zone 3 shows the extent of a river flood with a 1 in 100 (1%) or greater chance of occurring in any year or a sea flood with a 1 in 200 (0.5%) or greater chance of occurring in any year. Any relevant data is represented on Map 7a – Flood Map for Planning.

Database searched and no data found.

## 7.3 Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating

What is the highest risk of flooding onsite?

Very Low

The Environment Agency RoFRaS database provides an indication of river and coastal flood risk at a national level on a 50m grid with the flood rating at the centre of the grid calculated and given above. The data considers the probability that the flood defences will overtop or breach by considering their location, type, condition and standard of protection.

RoFRaS data for the study site indicates the property is in an area with a Very Low (less than 1 in 1000) chance of flooding in any given year.

## 7.4 Flood Defences

Are there any Flood Defences within 250m of the study site?

Database searched and no data found.

Nο

## 7.5 Areas benefiting from Flood Defences

Are there any areas benefiting from Flood Defences within 250m of the study site?

No



## 7.6 Areas benefiting from Flood Storage

Are there any areas used for Flood Storage within 250m of the study site?

No

## 7.7 Groundwater Flooding Susceptibility Areas

7.7.1 Are there any British Geological Survey groundwater flooding susceptibility areas within 50m of the boundary of the study site?

Does this relate to Clearwater Flooding or Superficial Deposits Flooding? Superficial Deposits Flooding

Notes: Groundwater flooding may either be associated with shallow unconsolidated sedimentary aquifers which overlie unproductive aquifers (Superficial Deposits Flooding), or with unconfined aquifers (Clearwater Flooding).

7.7.2 What is the highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions?

Where potential for groundwater flooding of property situated below ground level is indicated, this means that given the geological conditions there may be a groundwater flooding hazard to basements and other below surface infrastructure. Unless other relevant information, e.g. records of previous flooding, suggests groundwater flooding has occurred before in this area you need take no further action in relation to groundwater flooding hazard. If there are records of previous incidences of groundwater flooding, then is recommended that other information e.g. rainfall history, property type, and land drainage information in addition to previous records of flooding be investigated in order to establish

7.8 Groundwater Flooding Confidence Areas

relative, but not absolute, risk of groundwater flooding.

What is the British Geological Survey confidence rating in this result?

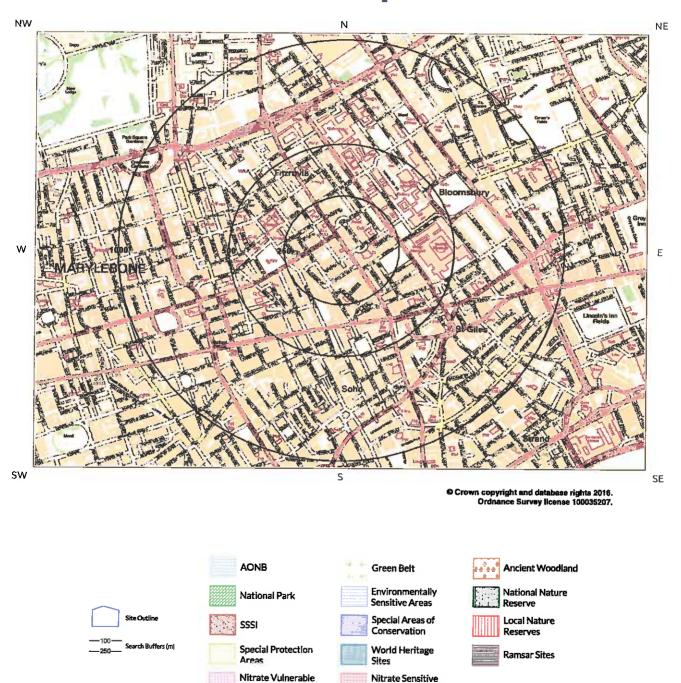
High

Notes: Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

The confidence rating is on a threefold scale - Low, Moderate and High. This provides a relative indication of the BGS confidence in the accuracy of the susceptibility result for groundwater flooding. This is based on the amount and precision of the information used in the assessment. In areas with a relatively lower level of confidence the susceptibility result should be treated with more caution. In other areas with higher levels of confidence the susceptibility result can be used with more confidence.



## 8. Designated Environmentally Sensitive Sites Map





## 8. Designated Environmentally Sensitive Sites

Presence of Designated Environmentally Sensitive Sites within 2000m of the study site?	Yes
8.1 Records of Sites of Special Scientific Interest (SSSI) within 2000m of the stud site:	y
	C
Database searched and no data found.	
8.2 Records of National Nature Reserves (NNR) within 2000m of the study site:	
	0
Database searched and no data found.	
8.3 Records of Special Areas of Conservation (SAC) within 2000m of the study sit	e:
	0
Database searched and no data found.	
8.4 Records of Special Protection Areas (SPA) within 2000m of the study site:	
	0
Database searched and no data found.	
8.5 Records of Ramsar sites within 2000m of the study site:	
	0
Database searched and no data found.	



## 8.6 Records of Ancient Woodland within 2000m of the study site:

			Database searched and no data found.	U
8.7 Re	cords	of Loca	al Nature Reserves (LNR) within 2000m of the study site:	
				1
			ture Reserve (LNR) records provided by Natural England/Natural Resources gons on the Designated Environmentally Sensitive Sites Map:	Wales
ID	ance n)	Direction	LNR Name Data Source	ce
Not nown 16	98	N	Camley Street Nature Park Natural Engl	and
8.8 Red	 cords	of Wor	ld Heritage Sites within 2000m of the study site:	0
			Database searched and no data found.	
8.9 Red	cords	of Envi	ronmentally Sensitive Areas within 2000m of the study site:	o
			Database searched and no data found.	
8.10 Restudy s		s of Are	eas of Outstanding Natural Beauty (AONB) within 2000m of th	o 0
			Database searched and no data found.	v
8.11 Re	ecord	s of Nat	tional Parks (NP) within 2000m of the study site:	0
			Database searched and no data found.	0



## 8.12 Records of Nitrate Sensitive Areas within 2000m of the study site:

Database searched and no data found.	·
8.13 Records of Nitrate Vulnerable Zones within 2000m of the study site:	_
Database searched and no data found.	C
8.14 Records of Green Belt land within 2000m of the study site:	_
Database searched and no data found,	0



## 9. Natural Hazards Findings

## 9.1 Detailed BGS GeoSure Data

BGS GeoSure Data has been searched to 50m. The data is included in tabular format. If you require further information on geology and ground stability, please obtain a Groundsure GeoInsight, available from our website. The following information has been found:

### 9.1.1 Shrink Swell

What is the maximum Shrink-Swell\* hazard rating identified on the study site?

Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

### Hazard

Ground conditions predominantly non-plastic. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely likely due to potential problems with shrink-swell clays.

## 9.1.2 Landslides

What is the maximum Landslide\* hazard rating identified on the study site?

Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

## Hazard

Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

## 9.1.3 Soluble Rocks

What is the maximum Soluble Rocks\* hazard rating identified on the study site?

Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

## Hazard

Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

<sup>\*</sup> This indicates an automatically generated 50m buffer and site.



## 9.1.4 Compressible Ground

What is the maximum Compressible Ground\* hazard rating identified on the study site?

Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

### Hazard

No indicators for compressible deposits identified. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.

## 9.1.5 Collapsible Rocks

What is the maximum Collapsible Rocks\* hazard rating identified on the study site?

Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

### Hazard

Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.

## 9.1.6 Running Sand

What is the maximum Running Sand\*\* hazard rating identified on the study site?

Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

## Hazard

Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required, to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

## 9.2 Radon

## 9.2.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?

The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

<sup>\*</sup> This indicates an automatically generated 50m buffer and site.



## 9.2.2 Radon Protection

Is the property in an area where Radon Protection are required for new properties or extensions to existing

ones as described in publication BR211 by the Building Research Establishment?

No radon protective measures are necessary.



## 10. Mining

## 10.1 Coal Mining

Are there any coal mining areas within 75m of the study site?	No
Database searched and no data found.	
10.2 Non-Coal Mining	
Are there any Non-Coal Mining areas within 50m of the study site boundary?	No
Database searched and no data found.	
10.3 Brine Affected Areas	
Are there any brine affected areas within 75m of the study site? Guidance: No Guidance Required.	No



## **Contact Details**

## Groundsure Helpline

Telephone: 08444 159 000 info@groundsure.com



**Geological Survey** 

## **British Geological Survey Enquiries**

Kingsley Dunham Centre Keyworth, Nottingham NG12 5GG Tel: 0115 936 3143. Fax: 0115 936 3276. Email:

## Web:www.bgs.ac.uk

BGS Geological Hazards Reports and general geological enquiries: enquiries@bgs.ac.uk

## **Environment Agency**

National Customer Contact Centre, PO Box 544 Rotherham, S60 1BY Tel: 08708 506 506

Web:www.environment-agency.gov.uk Email:enquiries@environment-agency.gov.uk

## Public Health England

Public information access office Public Health England, Wellington House 133-155 Waterloo Road, London, SE1 8UG www.gov.uk/phe

Email:enquiries@phe.gov.uk Main switchboard: 020 7654 8000



**British** 



## The Coal Authority

200 Lichfield Lane Mansfield Notts NG18 4RG Tel: 0345 7626 848 DX 716176 Mansfield 5 www.coal.gov.uk



## **Ordnance Survey**

Adanac Drive, Southampton SO16 0AS Tel: 08456 050505



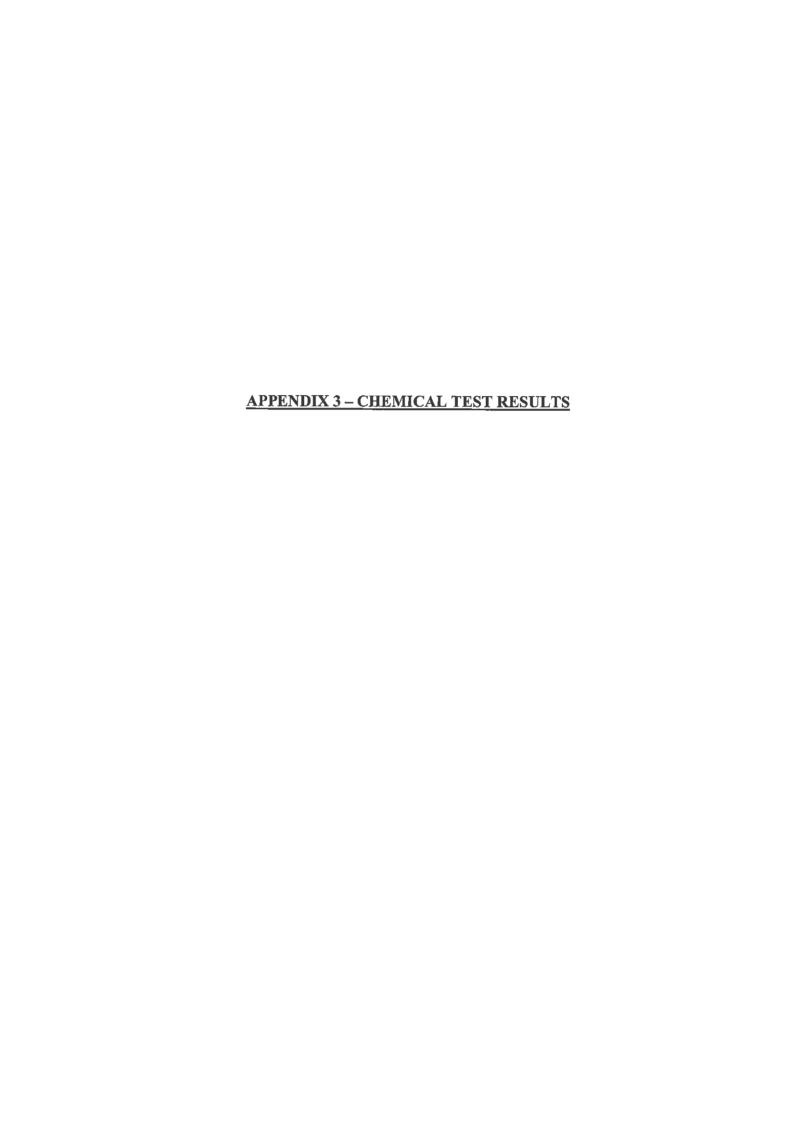
## **Local Authority**

Authority: London Borough of Camden Phone: 020 7974 4444 Web: http://www.camden.gov.uk/ Address: Camden Town Hall, Judd Street, London, WC1H 9JE

## Gemapping PLC

Virginia Villas, High Street, Hartley Witney, Hampshire RG27 8NW Tel: 01252 845444









Chemtest Ltd. Depot Road Newmarket CB8 0AL

Tel: 01638 606070 Email: info@chemtest.co.uk

## **Final Report**

Report No.:

15-24521-1

Initial Date of Issue:

23-Oct-2015

Client

**Ground Engineering Limited** 

**Client Address:** 

Newark Road Peterborough Cambridgeshire

PE1 5UA

Contact(s):

Steve Fleming

**Project** 

C13604 51-52 Tottenham Court Road,

London

**Quotation No.:** 

Date Received:

20-Oct-2015

Order No.:

**Date Instructed:** 

20-Oct-2015

No. of Samples:

4

**Target Date:** 

22-Oct-2015

Turnaround (Wkdays):

(CTD)

3

**Results Due:** 

22-Oct-2015

**Date Approved:** 

23-Oct-2015

Approved By:

Details:

Keith Jones, Technical Manager



18-Oct-2015 15-24621 207190 < 0.50 < 0.10 0.100.100.10 < 0.10 < 0.10 × 0.10 < 0.50 < 0.10 < 0.50 < 0.10 0.22 < 0.10 0.100.10 < 0.10 < 0.30 WS1 7.5 0.40 0.64 0.23 < 2.0 3.0 0.87 30 8 120 9 56 19 18-Oct-2015 < 0.50 < 0.10 < 0.50 < 0.10 < 0.10 < 0.10 < 0.10 < 0.10 < 0.10 < 0.10 < 0.10 < 0.10 < 0.10 < 0.10 < 0.10 < 0.10 < 0.30 < 0.20 < 0.10 < 0.10 < 0.10 < 2.0 WS1 SOIL 2.0 8.2 18 8.3 360 4 130 5.4 14 78 18-Oct-2015 15-24621 207188 < 0.50 < 0.50 < 0.20 < 0.50 2.2 < 0.10 < 0.10 < 0.10 < 0.10 < 0.10 < 0.10 < 0.10 < 0.10 < 0.10 < 0.10 < 0.10 < 0,10 WS1 SOIL 0.9 < 2.0 < 0.30 9.5 0.87 3.0 220 <del>(</del>; 5.9 48 280 24 8 18-Oct-2015 (5.24.5) < 0.10 < 0.10 0.41 < 0.10 < 0.10 207187 < 0.50 < 0.20 130 < 0.50 < 0.10 < 0.10 < 0.30 < 0.10 < 0.10 0.70 0.91 NVS1 SOIL 0.6 < 0.10 99.0 1.9 0.17 0.79 2.9 1.4 25 130 22 22 0.97 **4** Project: C13604 51-52 Tottenham Court Road, London Chemtest Sample ID.: Date Sampled: Sample Type: N/A 0.020 0.010 2300 mg/kg 0.50 2300 mg/kg 0.50 Client Sample ID.: Top Depth (m): Bottom Depth (m): 300 | Mults | 1,000 0.50 0.50 0.50 0.40 0.10 0.10 2700 mg/kg 0.10 2700 mg/kg 0.10 0.30 Client Sample Ref. mg/kg 0.40 0,50 0.50 0,10 0.10 0.10 0.10 2450 mg/kg 0.50 2700 mg/kg 0.10 2700 mg/kg 0.10 2700 mg/kg 0.10 2450 mg/kg 2450 mg/kg 2450 mg/kg 2450 mg/kg 2450 mg/kg 2450 mg/kg 2700 mg/kg 2920 mg/kg mg/kg mg/kg 2450 mg/kg 2490 mg/kg 2700 mg/kg 2700 mg/kg 2700 mg/kg 2325 2450 2120 2030 2625 Accred Sulphate (2:1 Water Soluble) as SO4 Sulphide (Easily Liberatable) Boron (Hot Water Soluble) Indeno(1,2,3-c,d)I<sup>3</sup>yrene Chromium (Hexavalent) Dibenz(a,h)Anthracene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[g,h,i]perylene Benzo[a]anthracene otal Of 16 PAH's Acenaphthylene Benzo[a]pyrene Cyanide (Total) Quotation Nc.: Cyanide (Free) Organic Matter Acenaphthene Phenanthrene Determinand **Fotal Phenols** -luoranthene Naphthalene Anthracene Chromium Order No. Cadmium Selenium Moisture Chrysene -Norene Mercury Copper Arsenic Pyrene Zicke! Lead



## 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

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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

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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



## Final Report

Chemtest Ltd.
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070

Email: info@chemtest.co.uk

Report No.:

15-24526-1

Initial Date of Issue:

28-Oct-2015

Client

Ground Engineering Limited

**Client Address:** 

Newark Road Peterborough Cambridgeshire

PE1 5UA

Contact(s):

Steve Fleming

**Project** 

C13604 51-52 Tottenham Court Rd,

London

**Quotation No.:** 

**Date Received:** 

20-Oct-2015

Order No.:

**Date Instructed:** 

20-Oct-2015

No. of Samples:

1

7

**Target Date:** 

28-Oct-2015

Turnaround (Wkdays):

Results Due:

28-Oct-2015

**Date Approved:** 

28-Oct-2015

Approved By:

**Details:** 

Phil Hellier, Project Director

# Results - 2 Stage WAC

Chemistry to deliver results	

Difference   Control   C	Chemitest Job No:		15-24526							
Part	Cherritest Sample ID:		207235						vaste Acceptan	ce Criteria
Part	Sample Ref:		7						Stoble New	
Part	Sample ID:		WS1						-uon eiger	
Machine   Sop Accred.   Units   Machine   Ma	Top Depth(m):		1.2					loost Macta	reactive	71-0-1
Image Dete:   Is-Oct-2015   Image Dete:   Is-Oct-2015   Image Dete:   Is-Oct-2015   Image Dete:   Is-Oct-2016   Image Dete:   Is-Oct-2016   Image Dete:   Is-Oct-2016	Bottom Depth(m):							andfill	waste in non-	Macto I endfil
Internation   SOP   Accred   Units   Units   Internation   SOP   Accred   Units   Un	Sampling Date:		18-Oct-20	15					bazardons	waste Landill
Analysis         Analysis         0.099         3         —	Determinand	SOP	Accred.						liazardous Landfill	
The particular   The	Total Organic Carbon	2625	ם	%			0 0	٣	Law Allin	ď
11   EX	Loss On Ignition	2610		%			1 2	ļ	2	۶
Color   Colo	Total BTEX	2760	] 	ma/ka			0100	١	:	2
Colai WAC (Mineral OII)   2700   U   mg/kg   Colai WAC (Mineral OII)   2700   U   mg/kg   Colai WAC (Mineral OII)   Colai WAC (Mineral OII)   Coloi N   mg/kg   Coloi OII	Total PCBs (7 Congeners)	2815	n	mg/kg			< 0.10	0 -	1 1	
Color   Colo	TPH Total WAC (Mineral Oil)	2670	U	mg/kg			< 10	500		
Name	Iotal (Of 17) PAH's	2700	z	mg/kg			< 2.0	100	1	
Analysis   Analysis	Hd	2010	n				8.2	;	9^	
Analysis         2:1         B:1         2:1         Cumulative mg/ls         Limit values for compliance less for compliance less mg/ls         Limit values mg/ls         Limit values for compliance less mg/ls         Limit values for compliance less mg/ls         Limit values for compliance less mg/ls         Limit values mg/ls         Limit values for compliance less mg/ls         Limit values mg/ls         Limi	Acid Neutralisation Capacity	2015	Z	mol/kg			0.12		To evaluate	To evaluate
c         mg/l         mg/l         mg/kg         mg/kg           c         1450         U         0.0035         < 0.050         < 0.050           um         1450         U         0.020         0.0068         < 0.050         < 0.050           um         1450         U         0.0078         0.0019         < 0.010         < 0.010           r         1450         U         0.0078         0.0048         < 0.050         < 0.050           r         1450         U         0.0078         0.0048         < 0.050         < 0.050           pun         1450         U         0.0048         < 0.050         < 0.050           pun         1450         U         0.0049         < 0.0010         < 0.010           pun         1450         U         0.0040         < 0.010         < 0.010           pun         1450         U         0.0042         < 0.010         < 0.010           pun         1220         U         0.0042         < 0.010         < 0.010           pun         1220         U         0.025         0.0040         < 0.010         < 0.010           pun         1220         U         0.026	Eluato Analysis			2:1	8:1	2:1	Cumulative	Limit values	for compliance	leaching test
c         1450         U         0.0035         0.0035         < 0.050				mg/l	mg/l	mg/kg	mg/kg	using BS	EN 12457-3 at L	/S 10 I/kg
um         1450         U         0.020         0.0068         < 0.50         < 0.50         20         100           lium         1450         U         0.00012         < 0.0010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.050         < 0.050         0.05         10          10            10	Arsenic	1450	O <sub>I</sub>	0.0035	0.0035	> 0.050	< 0.050	0.5	2	25
um         1450         U         0.00012         < 0.0010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010         < 0.010 <td>Banuro</td> <td>1420</td> <td>n</td> <td>0.020</td> <td>0.0068</td> <td>&lt; 0.50</td> <td>&lt; 0.50</td> <td>20</td> <td>100</td> <td>300</td>	Banuro	1420	n	0.020	0.0068	< 0.50	< 0.50	20	100	300
1450	Cadmium	1450	٦	0.00012	< 0.00010	< 0.010	< 0.010	0.04	1	5
ry         1450         U         6.012         0.0048         < 0.050         < 0.050         2         50         P           ry         1450         U         < 0.0050         < 0.0010         < 0.0050         < 0.0050         0.01         0.01         0.02         0.01         0.02         0.01         0.02         0.01         0.02         0.01         0.02         0.01         0.02         0.01         0.02         0.01         0.02         0.01         0.02	Chromitum	1450	D	0.0078	0.0019	< 0.050	< 0.050	0.5	10	20
YY         1450         U         < 0.00050         < 0.0010         < 0.0050         0.0010         < 0.0050         0.0075         0.12         0.01         0.02           Janum         1450         U         0.038         0.0010         < 0.050	Copper	1450	D	0.012	0.0048	< 0.050	< 0.050	2	20	100
Pariorin         1450         U         0.038         0.0082         0.075         0.12         0.5         10           1450         U         0.0040         0.0010         < 0.050	Mainhain	1450	<b>)</b>	< 0.00050	< 0.00050	< 0.0010	< 0.0050	0.01	0.2	2
1450         U         0.0040         0.0010         < 0.050         < 0.050         0.4         10           Iny         1450         U         < 0.0010	Micho	1450	):	0.038	0.0082	0.075	0.12	0.5	10	30
Only         C 0.0010         C 0.0010         C 0.010         C 0.010 <th< td=""><td>l pad</td><td>1450</td><td><b>⊃</b> :</td><td>0.0040</td><td>0.0010</td><td>&lt; 0.050</td><td>&lt; 0.050</td><td>0.4</td><td>10</td><td>40</td></th<>	l pad	1450	<b>⊃</b>  :	0.0040	0.0010	< 0.050	< 0.050	0.4	10	40
inim         1450         U 0.0042         < 0.0010         < 0.010         < 0.010         0.06         0.7           ide         1450         U 0.025         < 0.0040	Antimony	4450	= =	< 0.0010	< 0.0010	< 0.010	< 0.010	0.5	10	20
ide         1450         U.0042         < 0.0040         < 0.010         < 0.010         0.05         0.05         0.0040         < 0.010         < 0.05         0.0040         < 0.050         < 0.05         0.0040         < 0.050         < 0.050         4         50           ide         1220         U         66         3.9         130         120         800         15000           bissolved Solids         1220         U         1100         56         2100         1800         1000         20000           Dissolved Solids         1020         N         1500         210         3000         3800         4000         60000           ol Index         1920         U         < 0.030	Selenium	1 1		0.0013	< 0.0010	< 0.010	< 0.010	90.0	0.7	5
ide         1220         U         66         3.9         130         120         800         15000           ide         1220         U         66         3.9         130         120         800         15000           nate         1220         U         1100         56         210         1800         100         20000           Dissolved Solids         1020         N         1500         210         3000         3800         4000         60000           ol Index         1920         U         < 0.030         < 0.030         < 0.30         < 0.50         1         -           ived Organic Carbon         U         36         4.9         71         89         500         800	Zioc	4450	) =	0.0042	< 0.0010	< 0.010	< 0.010	0.1	0.5	7
1220         U         66         3.9         130         120         800         15000           1220         U         0.26         0.13         < 1.0	Chloride	450	<b>&gt;</b> :	0.025	0.0040	< 0.50	< 0.50	4	50	200
1220         U         0.26         0.13         < 1.0         1.5         10         150           1020         U         1100         56         2100         1800         1000         20000           1920         U         < 0.030	Eliotica	1220	<b>)</b> :	99	3.9	130	120	800	15000	25000
1220         U         1100         56         2100         1800         1000         20000           1020         N         1500         210         300         3800         4000         60000           1920         U         < 0.030	Sulphyte	1220	<b>-</b>  :	0.26	0.13	< 1.0	1.5	10	150	200
1020         N         1500         210         3000         3800         4000         60000           1920         U         < 0.030	Total Disselved Sallas	1220	٦	1100	56	2100	1800	1000	20000	50000
1920 U < 0.030 < 0.30 < 0.50 1 - 1610 U 36 4.9 71 89 500 800	Dhonol Indox	1020	z :	1500	210	3000	3800	4000	00009	100000
1610 U 36 4.9 71 89 500 800	Discolard Omonia Carbon	1920	]:	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
200	Dissolved Organic Carbon	1610	D	36	4.9	71	89	200	800	1000

Leachate Test Information	Leachant volume 1st extract//	Leachant volume 2nd extract/l	Eluant recovered from 1st extract/l
	0.175	13	
Soild Information	Dry mass of test portion/kg	Moisture (%)	

0.325

1.400

Page 2 of 3



## **Report Information**

## Key

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The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVCOs, PCBs, Phenols

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- A Date of sampling not supplied
- B Sample age exceeds stability time (sampling to extraction)
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## APPENDIX 4

## CLASSIFICATION OF AGGRESSIVE CHEMICAL ENVIRONMENT FOR BURIED CONCRETE

## TABLE C2 - AGGRESSIVE CHEMICAL ENVIRONMENT FOR CONCRETE

## (ACEC) CLASSIFICATION FOR BROWNFIELD LOCATIONS<sup>a</sup>

Sulfate and magne	sium					Groundwa	ter	ACEC
Design Sulfate Class for location	2:1 water/s	oil extract <sup>b</sup>	Groundwate	er	Total potential sulfate <sup>c</sup>	Static water	Mobile water	Class for location
1	2 (SO <sub>4</sub> mg/l)	3 (Mg mg/l)	4 (SO <sub>4</sub> mg/l)	5 (Mg mg/i)	6 (SO <sub>4</sub> %)	7 (pH) <sup>d</sup>	8 {pH} <sup>d</sup>	9
DS-1	< 500		< 400		< 0.24	≥ 2.5		AC-1s
							> 6.5 <sup>d</sup>	AC-1
							5.5-6.5	AC-2z
							4.5-5.5	AC-3z
							2.5-4.5	AC-4z
DS-2	500-1500	•	4001400		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	> 1200e	3100-6000	> 1000 e	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	> 2.4	> 5.5		AC-4s
						2.5–5.5	≥2.5	AC-5
OS-5m	> 6000	> 1200 e	> 6000	> 1000 <sup>e</sup>	> 2.4	> 5.5		AC-4ms
				0.000		2.5-5.5	≥2.5	AC-5m

## Notes

- a Brownfield locations 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 Design Sulfate Classes based on 2:1 water/soil extracts have been lowered from previous Digests (Box C7).
- c Applies only to locations where concrete will be exposed to sulfate ions (SO<sub>4</sub>), 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).
- e The limit 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 relevant ACEC classification. Seawater (chloride content about 18 000 mg/l) and stronger brines are not covered by this table.

## **Explanation of suffix symbols to ACEC Class**

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