

A2 Site Investigation One Westminster Bridge Road, London SE1 7XW	
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Client	Project	Location	Created by	Date
Private Client	99 Frognal	WS01	EB	13.07.2023



A2 Site Investigation	Client	Project	Location	Created by	Date
One Westminster Bridge Road, London SE1 7XW	Private Client	99 Frognal	TP01	ЕВ	13.07.2023





A2 Site Investigation One Westminster Bridge Road, London SE1 7XW

Client	Project	Location	Created by	Date
Private Client	99 Frognal	TP01	EB	13.07.2023



A2 Site Investigation	Client	Project	Location	Created by	Date
One Westminster Bridge Road, London SE1 7XW	Private Client	99 Frognal	TP02	EB	13.07.2023



Client	Project	Location	Created by	Date
Private Client	99 Frognal	TP02	EB	13.07.2023



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Client	Project	Location	Created by	Date
Private Client	99 Frognal	TP04	EB	13.07.2023



Client	Project	Location	Created by	Date
Private Client	99 Frognal	TP04	EB	13.07.2023



A2 Site Investigation	Client	Project	Locatio
One Westminster Bridge Road, London SE1 7XW	Private Client	99 Frognal	TP06

Client	Project	Location	Created by	Date
Private Client	99 Frognal	TP06	EB	13.07.2023



A2 Site Investigation	Client	Project	Location	Created by	Date
One Westminster Bridge Road, London SE1 7XW	Private Client	99 Frognal	TP06	ЕВ	13.07.2023



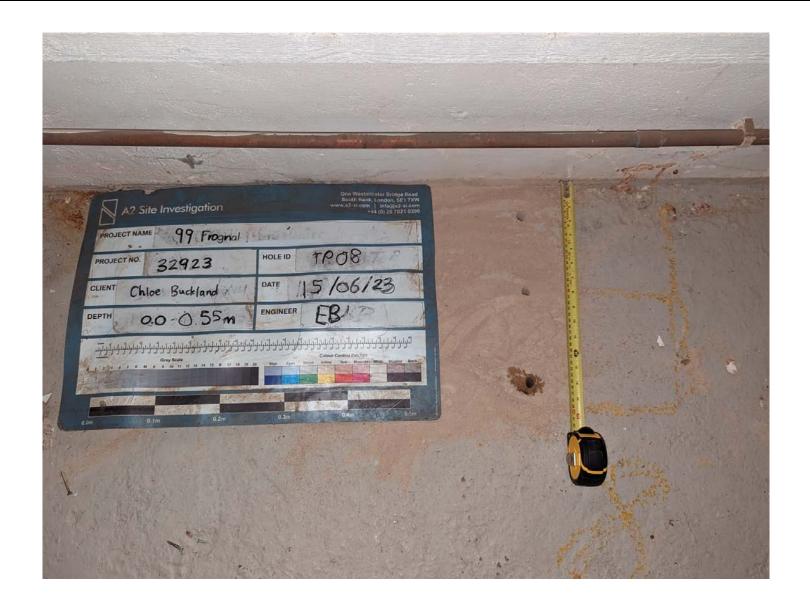
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Client	Project	Location	Created by	Date
Private Client	99 Frognal	TP06	EB	13.07.2023



	A2 Site Investigation One Westminster Bridge Road, London SE1 7XW
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Client	Project	Location	Created by	Date
Private Client	99 Frognal	TP06	EB	13.07.2023



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Client	Project	Location	Created by	Date
Private Client	99 Frognal	TP08	EB	13.07.2023



A2 Site Investigation	Client	Project	Location	Created by	Date
One Westminster Bridge Road, London SE1 7XW	Private Client	99 Frognal	TP09	EB	13.07.2023



	A2 Site Investigation One Westminster Bridge Road, London SE1 7XW
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Client	Project	Location	Created by	Date
Private Client	99 Frognal	TP09	EB	13.07.2023



	A2 Site Investigation One Westminster Bridge Road, London SE1 7XW
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Client	Project	Location	Created by	Date
Private Client	99 Frognal	TP09	EB	13.07.2023

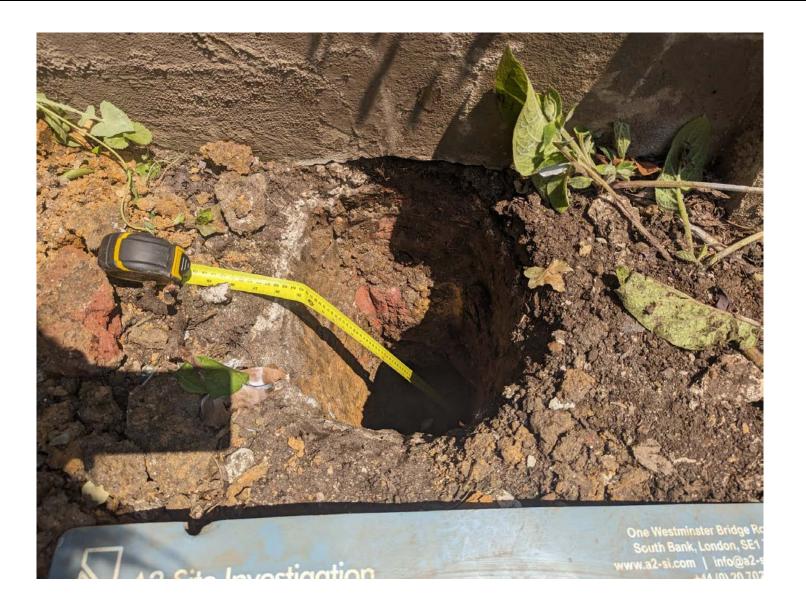


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Client	Project	Location	Created by	Date
Private Client	99 Frognal	TP10	EB	13.07.2023



A2 Site Investigation	Client	Project	Location	Created by	Date
One Westminster Bridge Road, London SE1 7XW	Private Client	99 Frognal	TP11	EB	13.07.2023



A2 Site Investigation	Client	Project	Location	Created by	Date
One Westminster Bridge Road, London SE1 7XW	Private Client	99 Frognal	TP11	EB	13.07.2023



A2 Site Investigation	Client	Project	Location	Created by	Date
One Westminster Bridge Road, London SE1 7XW	Private Client	99 Frognal	TP12	EB	13.07.2023



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Client	Project	Location	Created by	Date
Private Client	99 Frognal	TP12	EB	13.07.2023



A2 Site Investigation	Client	Project	Location	Created by	Date
One Westminster Bridge Road, London SE1 7XW	Private Client	99 Frognal	TP13	EB	13.07.2023



Client	Project	Location	Created by	Date	
Private Client	99 Frognal	TP13	EB	13.07.2023	



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Client	Project	Location	Created by	Date
Private Client	99 Frognal	TP14	EB	13.07.2023



	A2 Site Investigation One Westminster Bridge Road, London SE1 7XW
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Client	Project	Location	Created by	Date
Private Client	99 Frognal	TP14	EB	13.07.2023



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Client	Project	Location	Created by	Date
Private Client	99 Frognal	TP15	EB	13.07.2023



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Client	Project	Location	Created by	Date
Private Client	99 Frognal	TP15	EB	13.07.2023



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Client	Project	Location	Created by	Date
Private Client	99 Frognal	TP18	EB	13.07.2023



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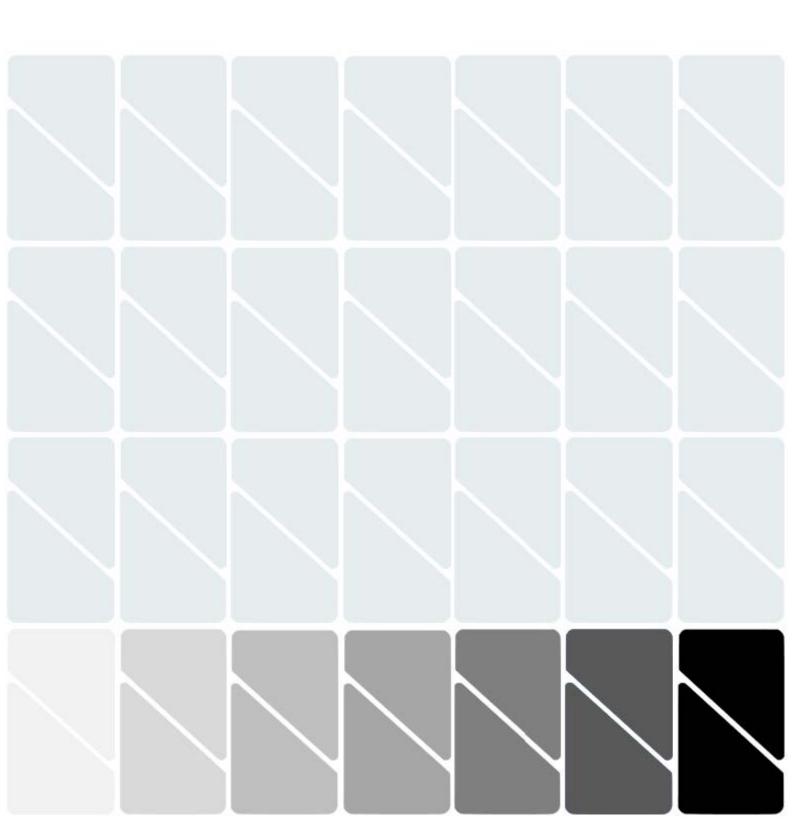
Client	Project	Location	Created by	Date
Private Client	99 Frognal	TP16	EB	13.07.2023



A2 Site Investigation Limited

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Appendix B: Geo-environmental Risk Assessment Matrix

A2SI qualitative risk assessment for geo-environmental purposes is undertaken in accordance with CIRIA C552: Contaminated Land Risk Assessment, A Guide to Good Practice (Rudland et al., 2001). The CIRIA C552 risk categories and the assessment methodology are summarised below in Table B.1, Table B.2 and Table B.3. Potential magnitude and potential likelihood are both classified to enable a risk rating to be assessed.

Potential magnitude takes into account the potential consequences should a complete source–pathway–receptor linkage be present. Potential magnitude is classified as per Table B.1.

Table B.1 Definition of potential magnitude of consequence

Category	Definition							
Severe	Acute risks to human health, catastrophic damage to buildings / property, major pollution to controlled waters.							
Medium	Chronic risk to human health, pollution of sensitive controlled waters, significant effects on sensitive ecosystems or species, significant damage to buildings or structures.							
Mild	Pollution of non-sensitive waters, minor damage to buildings or structures.							
Minor	Damage to non-sensitive ecosystems or species.							

Potential likelihood takes into account the presence of the hazard and receptor as well as the integrity of the pathway for exposure, i.e., whether a source-pathway-receptor linkage is present or not. Potential likelihood is classified as per Table B.2.

Table B.2 Definition of potential likelihood of exposure

Category	Definition								
High Likelihood	Pollutant linkage may be present and is almost certain to occur in the long-term. Or there is evidence of harm to the receptor.								
Likely	Pollutant linkage may be present, and it is probable that it will occur over the long-term.								
Low Likelihood	Pollutant linkage may be present, and there is a possibility that it will occur, although there is no certainty that it will do so.								
Unlikely	Pollutant linkage may be present, but it is improbable that it will occur.								

The potential magnitude of consequence and the potential likelihood of exposure are assessed in accordance with the risk matrix presented in Table B.3.



Table B.3 Geo-environmental risk assessment matrix

		Potential Magnitude of Consequence									
		Severe	Medium	Mild	Minor						
Potential Likelihood of Exposure	High Likelihood	Very High	High	Moderate	Low to Moderate						
	Likely	High	Moderate	Low to Moderate	Low						
	Low Likelihood	Moderate	Low to Moderate	Low	Very Low						
	Unlikely	Low to Moderate	Low	Very Low	Very Low						



Appendix C: GQRA Screening Tables

Human Health Generic Quantitative Assessment for Soil

32923 - 99 Frogna



											327204				327424	237425
Laboratory Report Ref.				327100	327101	327102	327103	327104	327105	327197		327109	327116	327117		
Exploratory Location Ref.		Residential with Home Grown Produce		TP15	TP14	TP13	TP12	TP01	WS01	BH02	BH01	BH03	TP09	TP02	TP10	TP03
Sample Depth (m)				0.50	0.30	0.20	0.30	0.20	0.40	0.50	0.30	0.30	0.10	0.50	0.40	0.50
Sample Date				13/06/23	13/06/23	13/06/23	13/06/23	14/06/23	14/06/23	15/06/23	15/06/23	12/06/23	12/06/23	12/06/23	15/06/23	15/06/23
Made Ground / Natural ?	Units			Made Ground	Made Ground	Marie Ground	Made Ground	Marie Ground	Marie Ground	Made Ground	Made Ground	Made Ground	Topsoil	Made Ground	Marie Ground	Made Ground
made Ground / Hattarar :	Ollits	GAC	GAC Ref.	made diodilo	made Ground	made diodile	made diduiti	made diodino	made diodilo	made di dalla	made dicent	made diodino	Topaon	made dicult	made diddin	made diculio
Anions and Other																
Moisture Content	%			8.8	9.5	10.3	11.3	8.7	11.8	11.3	13.6	8.4	15.9	15.1	6.8	18.8
Water Soluble Sulphate Hexavalent Chromium	mg/kg ma/ka	21	DEFRA C4SLs	n/t n/t	rin rin	n/t n/t	nit nit	103	n/t n/t	nt nt	fn fn	n/t n/t	< 40	n/t n/t	nit nit	113
Water Soluble Boron	marka mg/kg	290	LQM SAULs	n/t	rn rn	n/t	nt nt	< 0.8	n/t	nt nt	nt tn	n/t n/t	1.9	n/t	nt nt	< 0.8
Acid Neutralisation Capacity	mol/ka		-	n/t	n/t	n/t	nt	< 0.1	n/t	fin	nt	n/t	n/t	n/t	nit.	nt
Fraction of Organic Carbon	%			n/t	n/t	n/t	nit	0.0030 2.49	n/t	n/t	nt.	n/t	0.0238	n/t	nit	0.0097
Loss on Ignition pH	pH units			n/t n/t	rin rin	n/t t/n	nit nit	2.49 8.8	n/t t/n	fn fn	žn žn	n/t fin	n/t 7.8	n/t 9.3	nt nt	nt 5.8
Soil Organic Matter	%			n/t	n/t	n/t	nt	0.6	n/t	n/t 2.1	nt 0.87	n/t	3.6	n/t 0.55	nt	1.1
Total Organic Carbon	%		_	1.3	2.4	3.2	2.3	0.30	0.52	2.1	0.87	0.49	2.4	0.55	1.5	0.97
Heavy Metals and Metalloids																
Arsenic	mg/kg	37	DEFRA C4SLs	n/t	n/t	nt	nit	17.0	nt	nit	nt	nit	20.0	n/t	nit	17.7
Barium	marka		CL:AIRE GAC	n/t	- to	- to	- fin	82.0	- to	nt.	- ža	n/t	135	n/t	nt.	92.6
Bervlium Cadmium	marka marka	1.7 22	DEFRA C4SLs	n/t n/t	rin rin	n/t n/t	nit nit	< 1.0	n/t n/t	nt nt	nt nt	n/t n/t	1.0	n/t n/t	nt nt	< 1.0 < 0.5
Chromium	ma/ka	910	LOM SAULs	nt	70	nt	fin	28.0	nt	nt	në.	fin	31.0	n/t	fit.	31.7
Chromium (III)	marka marka	2400	LQM S4ULs	n/t n/t	fn fn	n/t 2/n	nit nit	28.0 23.0	n/t 2/n	fin fin	žn.	fin fin	31.0 44.0	n/t n/t	nt nt	31.7 44.9
Copper Lead	ma/ka	200	DEFRA C4SLs	nit	žo.	nt	fin	94.0	nt	nt	në.	nit	238	n/t	fit.	821
Mercury	ma/ka	11	LOM SAULs	n/t	n/t	nit	nt	< 0.5	nit	fin	nt	n/t	< 0.5	n/t	nit .	0.6
Molybdenum Nickel	mg/kg mg/kg	130	LQM S4ULs	n/t n/t	n/t	n/t n/t	nit nit	< 0.5	n/t n/t	nt nt	nt nt	n/t n/t	< 0.5	n/t n/t	nt nt	1.0
Notes Selenium	marka marka	250	LQM S4ULs	nd nd	20	n6	100	< 1.0	n6	nt	že že	nd the	< 1.0	100	nt nt	< 1.0
Vanadium	mg/kg	410 3700	LQM S4ULs	n/t	n/t	n/t	nit	40.0	n/t	nit	nt	n/t	37.0	n/t	nit	49.3
Zinc	mg/kg	ar00	LUM SAULS	nit	n/t	n/t	nit	80.0	n/t	nit	nt	nit	124	nit	nit	86.4
Asbestos																
Asbestos Gravimetric Analysis Total	%	Detection 0.001	-	n/t n/t	n/t	nit nit	nit nit	Not Detected n/t	nit nit	fn fn	nt nt	fin fin	Detected 0.07	nt nt	nt nt	None Detected n/t
Gravimetric Analysis by ACM Type	%	0.001	A-squared GAC	n/t	n/t	nit	nit	n/t	nit	nt	nt.	n/t		n/t	nit	nt
Free Fibre Analysis Total Asbestos	%	0.001		n't n't	n/t n/t	nit nit	n/t n/t	fn fn	nit nit	- fit	žn žn	fin fin	< 0.001	nt nt	nt to	žn žn
	- 79	0.001		ns	nvs .	- m	ns	ns.	- m	mt	n/s	nt	0.07	n/t	mt	n/t
PAHS																
Naphthalene	mg/kg	2.3 170	LQRM S4SLs	n/t	n/t	n/t	nit	< 0.1	n/t	nit	nt	n/t	< 0.1	nit	nit	c < 0.1
Acenephthylene Acenephthene	marka marka	210	LQRM S4SLs	fin fin	7n	n/t n/t	fin fin	< 0.1	n/t n/t	nt.	žn žn	n/t t/n	< 0.1 < 0.1	n/t n/t	nt.	c < 0.1 c < 0.1
Fluorene	mg/kg	170	LQRM S4SLs	n/t	n/t	n/t	nt	< 0.1	n/t	nit	nt.	n/t	< 0.1	n/t	nit .	c < 0.1
Phenarthrene	marka	95	LQRM 848Ls	n/t	- fo	nit .	- fo	0.1	nit .	- fit	- ža	n/t	< 0.1	n/t	- fit	0 < 0.1
Anthracene Fluoranthene	marka marka	2400	LQRM S4SLs	n/t n/t	r'n T'n	n/t n/t	nit fin	< 0.1	n/t n/t	nt nt	nt fn	n/t n/t	< 0.1	n/t n/t	nt nt	c < 0.1 c 0.2
Pyrana	marka	620	LQRM S4SLs	nd.	n3	nii .	- fo	0.5	nii .	. fin	ža	. Do	0.1	n/i	fin .	c 0.2
Bergo/alanthracene Chrysene	ma/ka mg/kg	7.2 15	LQRM S4SLs LQRM S4SLs	n/t n/t	n't n't	n/t n/t	nit nit	0.4	n/t	nt nt	nt nt	n/t n/t	< 0.1 < 0.1	n/t n/t	nt nt	c < 0.1 c < 0.1
Benzo(b)fluoranthene	mg/kg mg/kg	2.6 77	LQRM 848Ls	n/t	n/t	n/t	nit	0.4	n/t	nt	nt	n/t	< 0.1	nit	nt	c < 0.1
Benzork)fluoranthene	ma/ka		LQRM S4SLs	n/t	n/t	n/t	fin	0.5	n/t	nit	nt	n/t	< 0.1	nit	nit	c < 0.1
Benzo(a)pyrene Indeno(1,2,3-cd)pyrene	mg/kg mg/kg	5 27	DEFRA C4SLs	n/t n/t	fin fin	n/t Zin	nit nit	0.4	n/t Zin	fin fin	nt fo	fin fin	< 0.1	n/t n/t	nt nt	c < 0.1 c < 0.1
Dibergo(a, h)anthracene	ma/ka	0.24	LQRM S4SLs	nit	20	nt	fin	< 0.1	nt	nt	nt	nt.	< 0.1	n/t	fin .	c < 0.1
Benzo(g,h,i]perylene Total PAH(16)	mg/kg	320	LQRM S4SLs	n/t	n/t	n/t	nit	0.3 4.3	n/t	nit	nt.	n/t	< 0.1 < 0.4	n/t	nit	c < 0.1 c 0.5
Total (of 17) PAHs	mg/kg mg/kg		-	n/t n/t	n/t r/n	n/t n/t	nit nit	4.3	n/t n/t	nit nit	nt nt	n/t n/t	< 0.4 n/t	n/t n/t	nt nt	e 0.5
	3.9															
PH CS-OS Aliphatic		42	LORM SASIs													
>C5-O8 Aliphatic >C6-C8 Aliphatic	marka marka	100	LQRM S4SLs	n/t n/t	rin tin	n/t n/t	nit nit	< 0.01	n/t n/t	fin fin	žn žn	n/t t/n	< 0.01	n/t n/t	nt nt	c < 0.01 c < 0.01
>C8-C10 Aliphatic	mg/kg	27	LQRM S4SLs	n/t	n/t	n/t	nit	< 1.0	n/t	nt	nt.	n/t	< 1.0	n/t	nit	c < 1.0
>C10-C12 Aliohatic >C12-C16 Aliohatic	marka marka	130	LQRM S4SLs LQRM S4SLs	n/L	20	n/L	for for	< 1.0 < 1.0	n/L	nt.	nt.	n/t	<1.0 <1.0	65	nt.	c < 1.0 c < 1.0
>C16-C21 Aliphatic	marka marka			n/t n/t	n/t r/n	n/t n/t	nt nt	2.2	n/t n/t	nt nt	nt nt	n/t n/t	< 1.0	n/t n/t	nt nt	c < 1.0 c 2.2
>C21-C35 Aliphatic	marka	65,000	LQRM S4SLs	nd.	n3	nii .	- fo	3.8	nii .	. fin	ža	. Do	1.0	n/i	fin .	c 38.4
>C35-C40 Aliohatic Total (>C5-C40) Aliphatic	marka marka	65.000	LORM S4SLs	n/t n/t	n't n't	n/t n/t	nit nit	< 1.0 6.0	n/t n/t	nt nt	nt nt	n/t n/t	< 1.0 < 1.0	n/t n/t	nt nt	c 16.2 c 56.7
>C5-C7 Aromatic	ma/ka	70	LQRM S4SLs	fin fin	žn.	n/t	fin	< 0.01	n/t	fin	žn.	n/t	< 0.01	n/t	fin	c < 0.01
>C7-C8 Aromatic	mg/kg	130	LQRM 848Ls	n/t	n/t	n/t	nt	< 0.01	n/t	nt	n/t	n/t	< 0.01	n/t	nt	c < 0.01
>C8-C10 Aromatic >C10-C12 Aromatic	mg/kg mg/kg	34 74	LQRM 848Ls	n/t n/t	nt nt	n/t n/t	nit nit	< 1.0 < 1.0	n/t n/t	fin fin	žn žn	fin fin	1.5	n/t n/t	fin fin	c < 1.0 c < 1.0
>C12-C16 Aromatic	mg/kg	140	LQRM S4SLs	n/t	n/t	n/t	nit	1.2	n/t	nt	nt.	n/t	< 1.0	n/t	nit	c < 1.0
>C16-C21 Aromatic	mg/kg	260 1100	LQRM S4SLs LQRM S4SLs	n/t	n/t	n/t	nit	2.7	n/t	nit	nt	n/t	< 1.0	n/t	nit	c < 1.0
>C21-C35 Aromatic >C35-C40 Aromatic	marka marka	1100	LQRM S4SLs	fin fin	for	2n 2n	nt.	7.6 5.6	2n 2n	fin fin	žn.	fin fin	1.4	nt nt	nt.	c 7.4
Total (>C5-C40) Aromatic	mg/kg		-	n/t	n/t	n/t	nit	17.1	n/t	nit	nt	nit	5.2	nit	nit	c 7.4
Total (>C5-C40) Al/Aro	mg/kg			n/t	n/t	n/t	nit	23.1	n/t	nit	žn.	n/t	5.2	nit	nt	c 64.1
Mineral Oil w Florisil	mg/kg			nit	n/t	nit	nit	13	nit	nit	nt	nit	nt	nit	nit	nt
BTEX and MTBE																
Bergene	ug/kg	200	DEFRA C4SLs	n/t	n/t	n/t	nit	< 10.0	n/t	nit	nt	n/t	< 10.0	n/t	nit	c < 10.0
Toluene	uarka uarka	130,000	LQRM S4SLs	n/L	20	n/L	- 10	< 10.0 < 10.0	n/L	nt.	nt.	n/t	< 10.0 < 10.0	65	nt.	c < 10.0
Ethylberzene Xylenes	ug/kg	56,000	LQRM S4SLs	n/t n/t	fin fin	n/t n/t	nit nit	< 10.0	n/t n/t	nt nt	nt tn	n/t n/t	< 10.0	n/t n/t	nt nt	c < 10.0 c < 10.0
MTBE	ug/kg	49,000	CL:AIRE GAC	1/0	70	0/3	fn.	< 10.0	0/3	nt.	žn.	n/t	< 10.0	n/s	nt.	c < 10.0
Total BTEX	mg/kg			n/t	n/t	n/t	nit	< 0.01	n/t	nit	nt	n/t	nt	n/t	nit	nt
PCB																
Total PCBs (7 congeners)	mg/kg	0.008	EA 9GV	n/t	n/t	n/t	nit	< 0.03	n/t	nit	nt	n/t	n/t	n/t	nit	nt



Appendix D: Various Existing and Proposed Development Plans



PLANNING ISSUE

Check all dimensions on site. Do not scale off drawings without prior consultation. Any discrepancies to be reported to architects before execution of relevant works. This drawing has been produced for the planning application of Frognal House, 99 Frognal, London, NW3 6XR and for that application alone and is not intended for use by any other person or for any other purpose. Drawings remain copyright of Hayhurst and Co. and may not be reproduced without written consent or licence.





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Project: Refurbishment & Proposed Extension

Address: Frognal House, 99 Frognal, London, NW3 6XU

Date: 25/10/2023

Scale: 1:100

Original Size: A1

Drawing no: **298 A110**