



Appendix C

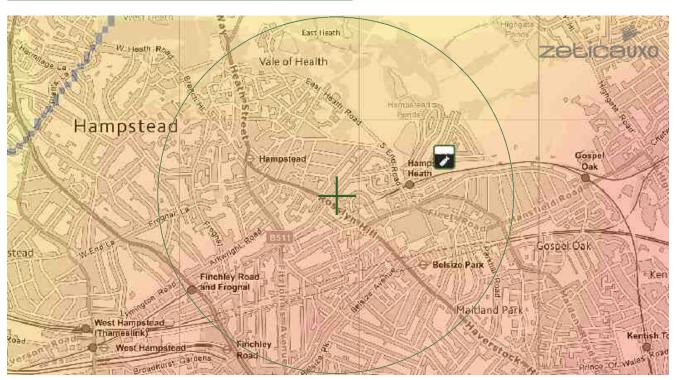
Zetica UXO Unexploded Bomb Risk Map And Preliminary Desk Study Assessment

UNEXPLODED BOMB RISK MAP



SITE LOCATION

Location: NW3 1PA, Map Centre: 526881.185577



London Bomb Risk | Image: miltary | Ima

How to use your Unexploded Bomb (UXB) risk map?

The map indicates the potential for Unexploded Bombs (UXB) to be present as a result of World War Two (WWII) bombing.

You can incorporate the map into your preliminary risk assessment* for potential Unexploded Ordnance (UXO) for a site. Using this map, you can make an informed decision as to whether more in-depth detailed risk assessment* is necessary.

Relative UXB risk across London

The relative risk for the London area is established by plotting the recorded bombing densities.

These are represented as counts of high explosive bombs in km2 area. The areas coloured green represent a record of less than 10 bombs per km2.

Compared to other areas of the UK, this still represents a significant density. However, this is much lower than parts of Central London, where the red colouration indicates in excess of 150 bombs falling per km2, representing a very significant bombing density.

What do I do if my site is in a moderate or high density area?

Generally, we recommend that a detailed UXO desk study and risk assessment is undertaken for sites with a moderate or high bombing density.

Similarly, if your site is near to a designated Luftwaffe target or bombing decoy then additional detailed research is recommended.

More often than not, this further detailed research will conclude that the potential for a significant UXO hazard to be present on your site is actually low.

Never plan site work or undertake a risk assessment using these maps alone. More detail is required, particularly where there may be a source of UXO from other military operations which are not reflected on these maps.

If my site is in a low risk area, do I need to do anything? If both the map and other research confirms that there is a low potential for UXO to be present on your site then, subject to your own comfort and risk tolerance, works can proceed with no special precautions.

A low risk really means that there is no greater probability of encountering UXO than anywhere else in the UK.

If you are unsure whether other sources of UXO may be present, you can ask for one of our **pre-desk study assessments (PDSA)**

If I have any questions, who do I contact?

tel: +44 (0) 1993 886682 email: uxo@zetica.com web: www.zeticauxo.com

The information in this UXB risk map is derived from a number of sources and should be used in conjunction with the accompanying notes on our website: (https://zeticauxo.com/downloads-and-resources/risk-maps/)

Zetica cannot guarantee the accuracy or completeness of the information or data used and cannot accept any liability for any use of the maps. These maps can be used as part of a technical report or similar publication, subject to acknowledgment. The copyright remains with Zetica Ltd.

It is important to note that this map is not a UXO risk assessment and should not be reported as such when reproduced.

*Preliminary and detailed UXO risk assessments are advocated as good practice by industry guidance such as CIRIA C681 'Unexploded Ordnance (UXO), a guide for the construction industry'.



Appendix D

Risk Evaluation



Risk Evaluation

The method for risk evaluation is a qualitative method of interpreting the output from the risk estimation stage of the assessment, based on CIRIA 552⁶⁴. It involves the classification of the:

- Magnitude of the potential consequence (severity) of the risk occurring (Table A).
- Magnitude if the probability (likelihood) of the risk occurring (Table B).

	Consequence (Severity))
Classification	Definition	Example
Severe	 Short term (acute) risk to human health likely to results in 'significant harm' as defined by the Environment Protection Act 1990, Part IIA. Short term risk of pollution (note: Water Resources Act contains no scope for considering significance of pollution) of sensitive water resource. Catastrophic damage to buildings/properties. A short term risk to a particular ecosystem, or organism forming part of such ecosystem (note: the definition of ecological systems within the Draft Circular on Contaminated Land, DETR, 2000). 	 High concentrations of cyanide on the surface of an informal recreation area. Major spillage of contaminants from site into controlled waters. Explosion, causing building collapse (can also equate to short term human health risk if buildings are occupied).
Medium	 Chronic damage to Human Health ('significant harm' as defined in DETR, 2000). Pollution of sensitive water resources (note Water Resources Act contains no scope for considering significance of pollution). A significant change in a particular ecosystem, or organism forming part of such ecosystem. 	 Concentrations of a contaminant from site exceed generic, or site specific assessment criteria. Leaching of contaminants from a site to a major or minor aquifer (Principal and Secondary). Death of a species within a designated nature reserve.
Mild	- Pollution of non-sensitive water resources Significant damage to crops, buildings, structures and services ('significant harm' as defined in DETR, 2000) Damage to sensitive buildings / structures / services or the environment.	Pollution of non-classified groundwater. Damage to building rendering it unsafe to occupy (e.g. foundation damage resulting in instability).
Minor	 - Harm, although not necessarily significant harm, which may result in a financial loss, or expenditure to resolve. - Non-permanent health effects to human health (easily prevented by means such as personal protective clothing etc.). - Easily repairable damage to buildings, structures and services. 	 The presence of contaminants at such concentrations that protective equipment is required during site works. The loss of plants in a landscaping scheme. Discoloration of concrete.

Table A: Classification of consequence.

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

Table B: Classification of probability.

⁶⁴ CIRIA (2001). "Contaminated Land Risk Assessment: A Guide to Good Practice". C552.



These classifications are then compared to indicate the risk presented by each pollutant linkage (Table C). It is important that this classification is only applied where there is a possibility (which can range from high likelihood to unlikely) of a pollutant linkage existing.

			Conse	quence	
		Severe	Medium	Mild	Minor
	High likelihood	Very High Risk	High Risk	Moderate Risk	Moderate / Low Risk
bility	Likely	High Risk	Moderate Risk	Moderate / Low Risk	Low Risk
Probability	Low likelihood	Moderate Risk	Moderate / Low Risk	Low Risk	Very Low Risk
	Unlikely	Moderate / Low Risk Low Risk		Very Low Risk	Very Low Risk

Table C: Comparison of consequence against probability.

Once the risk has been determined the corresponding action can be assessed (Table D).

Risk	Action Required
Very High Risk	 There is a high probability that severe harm could arise to a designated receptor from an identified hazard, OR, there is evidence that sever harm to a designated receptor is currently happening. This risk, if realised, is likely to results in a substantial liability. Urgent investigation (if not already undertaken) and remediation are likely to be required.
High Risk	 Harm is likely to arise to a designated receptor from an identified hazard. Realisation of the risk is likely to present a substantial liability. Urgent investigation (if not undertaken already) is required and remedial works may be necessary in the short term and are likely over the longer term.
Moderate Risk	 It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that any such harm would be severe, or if any harm were to occur it is more likely that the harm would be relatively mild. Investigation (if not already undertaken) is normally required to clarify the risk and to determine the potential liability. Some remedial works may be required in the longer term.
Low Risk	- It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild.
Very Low Risk	- There is a low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe.

Table D: Description of the classification and likely action required.

Where LKC identified a low to very low risk either limited intrusive investigation work, a watching brief (during construction work) or no investigation work will be recommended. This will be dependent on the nature of the site and the proposed development.

Where the risk falls into the moderate/low risk, LKC will undertake an assessment to establish what category the pollutant linkage will fall into (i.e. moderate or low risk will be chosen).

Where LKC identifies a moderate or higher risk intrusive work or precautionary remedial measures will be recommended.



Appendix E

Profile Logs

1 1///		LK C	CONS	ULT LTD				Site	Borehole Number
GROU	D			Park, Eton Hill Road 200 web: www.thelk	•	,	26 2ZS	Former Hampstead Heath Police Station	BH01
Machine : P	ilcon	ı	Diamete		Ground		I (mOD)	Client	Job
	able Percussion	Casing	Diameter		Ground	Leve	i (iiiOD)	Rostrack Limited	Number LKC 22 5242
		Locatio	n		Dates	10010	000	Engineer	Sheet
					06	5/03/2	023	LKC	1/2
Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	(Thi	epth (m) ckness)	Description	Legend Nate
							0.05 0.15	MADE GROUND: TARMACADAM.	
						Ē	(0.35) 0.50	MADE GROUND: CONCRETE.	
0.00.4.00	F0					Ē	(0.40)	MADE GROUND: Greyish yellow and reddish brown sandy angular COBBLES of brick. Sand is fine to coarse.	
0.80-1.00	ES D						0.90 (0.30)	MADE GROUND: Very soft light brown and reddish brown gravelly sandy silty CLAY with medium cobble content and	
1.00 1.20-1.65	SPT N=9			2,2/3,2,2,2		E	1.20	occasional local rootlets. Gravel is angular to subangular and subrounded fine to coarse flint, brick, and ash. Cobbles	88988889
1.20	D D			2,2/0,2,2,2		E	(0.40) 1.60	are angular and rounded brick and rare flint. Sand is fine to coarse.	
						Ē		Frequent drainage pipe fragments at 0.50-0.70mbgl. MADE GROUND: Verv soft light brown and reddish brown	
2.00-2.45	SPT			1,0/0,0,0,0			2.20	gravelly sandy silty CLAY with low cobble content and occasional local rootlets. Gravel is angular to subangular and subrounded fine to coarse flint, brick, and ash. Cobbles are angular brick. Sand is fine to medium.	
2.50-2.95	SPT N=8			2,1/2,2,2,2		الملطاط	(1.30)	MADE GROUND: Yellowish light grey slightly gravelly very sandy SILT. Gravel is angular and rounded fine to medium flint, brick and ash. Sand is fine to medium.	
3.00	D							MADE GROUND: Yellowish brown mottled green grey sandy SILT. Sand is fine to medium.	
3.50-3.95	SPT N=19			4,4/4,4,4,7			3.50	MADE GROUND: Grey sandy SILT with occasional angular fine gravel-sized ash, flint gravel and rare brick fragments. Sand is fine.	
								Firm grey mottled dark green slightly sandy silty CLAY with rare angular fine flint gravel. Sand is fine.	7
						E	(2.00)		2
4.50-4.95	U100					Ē	(2.00)		<u> </u>
4.95	D								<u> </u>
4.95						E			×
						E	5.50	Firm to stiff brown mottled grey and yellow brown slightly	××···
						E		sandy silty CLAY with frequent fine sand-sized selenite crystals. Sand is fine.	
6.00-6.45	SPT N=18			3,4/4,4,5,5				or your of the control of the contro	7
				, , , ,		Ē			<u> </u>
						E			y
						Ē			, — , ·
							(3.20)		<u> </u>
						E			2 <u> </u>
7.50-7.95	SPT N=22			4,5/5,5,6,6		F			3 <u> </u>
						E			<u> </u>
									2
						F			× — ×
	_					E	8.70	Stiff grey silty CLAY with frequent angular fine gravel-sized	× * × · · ·
8.70	D					E		selenite crystals.	<u>×</u> ×
9.00-9.45	SPT N=20			4,4/5,5,5,5		Ē	(4.00)		××
				Water strike(1) at		E	(1.20)		×
				9.90m, rose to 9.60m in 20 mins.		Ē			× <u>*</u> × 1
				5.00m m 20 mms.		鰛	9.90		× V 1
Remarks Logged by su Groundwater	ub-contractor Nasir M r strike at 9.90mbgl.	lodawi.						Scale (approx)	Logged By
								1:50	NM
								Figure N	No. 5242.BH101

I K CONSULT LTD		ULT LTD				Site		Borehole Number		
GROU	P			Park, Eton Hill Road 200 web: www.thelk			26 2ZS	Former Hampstead Heath Police Station	BHO	- 1
Machine : Pi		1	Diameter		Ground		(mOD)	Client	Job	\dashv
	able Percussion	ousing	Diameter		Ground	LUVU	(05)	Rostrack Limited	Numb	
		Locatio	n		Dates	5/03/20	າວວ	Engineer	Sheet	
					00	0/03/20)Z3	LKC	2/2	
Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	(Thi	epth (m) ckness)	Description	Legend	Water
							(0.40) 10.30	Grey angular medium to coarse GRAVEL and COBBLES of claystone.	0.0	
10.50-11.00	U100							Very stiff grey silty CLAY.	××	
11.00	D					E			x x x x x x x x x x x x x x x x x x x	
11.00	D					E			× =	1
						E			×	1
						Ē			×	1
12.00-12.45	SPT N=48			8,10/10,10,13,15		E			×	$\mid \cdot \mid$
						Ē	(4.10)		××	
						E	` ,		××	
						E			××]
						E			××	
						Ē			×	
13.50-13.95	SPT N=55			10,10/10,15,15,15		E			×	1
						Ē			× ×	1
						E			×	1
						E	14.40 14.50	¬ Grey angular COBBLES of claystone.	<u>* — ,</u>	1
14.60-15.00	U100					Ē		Very stiff grey silty CLAY.	××	
						E	(0.60)		××	
15.10	D					Ē	15.10	Complete at 15.10m		1
						E				
						E				
						E				
						E				
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						E				
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Remarks Logged by su Groundwater	b-contractor Nasir M strike at 9.90mbgl.	lodawi.						Scale (approx)	Logge By	:d
-	. 0							1:50	NM	
								Figure I LKC 22	lo. 5242.BH1	101

LK CONSULT LTD Eton Business Park, Eton Hill Road, Radcliffe, M26					e, M26 2ZS	Site Trial Pit Number Tropo Trial Pit Number Tropo Trial Pit Number Tropo Trial Pit Number				
GROUP		1 763 7200 web: w		•					_	
Excavation Method Hand Excavated Trial Pit.	0.34m x	ons 0.48m x 1.20m	Gro	ound L	_evel (mOD)	Client Rostrack Limited		Job Number LKC 22 524		
	Location		Date		03/2023	Engineer LKC		Sheet 1/1		
Depth (m) Sample / Test	Water Depth (m)	Field Record	s Le	vel OD)	Depth (m) (Thickness)	D	escription	Legend	Water	
Plan	(m)				(0.03) (0.03) (0.11) (0.14) (0.36) (0.50) (0.70) (0.70)	MADE GROUND: TARMAC MADE GROUND: CONCR MADE GROUND: Grey and angular COBBLES of brick is angular to subangular ar occasional flint, and ash. S drainage pipe fragments. MADE GROUND: Soft yellor gravelly sandy sifty CLAY. Cand rounded to subrounded and occasional concrete. S	cadam. ETE. d reddish brown gravelly sar with occasional rootlets. Grad subrounded fine to coarse and is fine to coarse. Occasional sand is fine to coarse brick, flint, a cand is fine to medium.	nidy avel e brick, sional	MA MARKET	
	•				.	Scale (approx) 1:10	Logged By	Figure No. LKC 22 5242.TPC)1	

LK CONSULT LTD Eton Business Park, Eton Hill Road, Radcliffe, M26 2.				fe, M26 2ZS	Site Trial Pit Number Former Hampstead Heath Police Station TD02			
GROU	P		1 763 7200 web: www			·		TP02
Excavation Hand Excava	Method ated Trial Pit.	Dimension 0.40m x	ons : 0.70m x 0.70m	Ground	Level (mOD)	Client Rostrack Limited		Job Number LKC 22 5242
		Location	1	Dates 06	6/03/2023	Engineer LKC		Sheet 1/1
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	D	escription	Vater Vater
0.30-0.50	ES .				- (0.50) - (0.50) - (0.20) - (0.70 (- (- (- (- (- (- (- (- (- (- (- (-	concrete and tarmacadam and subrounded fine to coat tarmacadam and rare slate 0.13-0.45m: 0.13m long 0.1	brick footing base encounter	ightly brick, jular adam ed.
		•		•				
		•						
		•						
•	•	-	· ·	- '	s	Scale (approx) 1:10	Logged By	Figure No. LKC 22 5242.TP02

LI«	≪ U ₽	Eton Bu	LK CONSULT LTD Eton Business Park, Eton Hill Road, Tel: 0161 763 7200 web: www.thelkgr				Site Former Hampstead Heath	Police Station	Trial Pit Number TP03	
Excavation		Dimens				 Level (mOD)	Client Rostrack Limited		Job Number LKC 22 524	
		Location	n	D	Oates 07/	/03/2023	Engineer LKC		Sheet 1/1	
Depth (m)	Sample / Tests	Water Depth (m)	Field Reco	rds (Level (mOD)	Depth (m) (Thickness)	D	escription	Legend	Water
						- - - (0.20) -	MADE GROUND: Lino floo CONCRETE.	ring over fibrous membrane	over	
						- 0.20 - - - - - - - (0.80)	MADE GROUND: Soft yellic sandy silty CLAY with low of to subangular and rounded occasional ash. Sand is fin brick. Rare glass fragments	owish brown slightly gravelly cobble content. Gravel is and fine to medium, flint, brick a e to coarse. Cobbles are an s.	gular and igular	
						(0.00) - - - - -	0.09m long brick step en	countered at 0.65mbgl.		
Plan						1.00 	Complete at 1.00m	1.00mbgl, possibly top of		
Plan .							Remarks Hand excavated trial pit logge	ed by sub-contractor Nasir N	Лodawi.	
		•								
						-				
						.	Scale (approx)	Logged By	Figure No.	
							1:10	NM	LKC 22 5242.TP0)3

		ONSULT LTE siness Park, Eton Hil 1 763 7200 web: www	ll Road, Radclif		Site Former Hampstead Heath Police Station		Nu	Trial Pit Number TP04	
Excavation		Dimensi			Level (mOD)	Client Rostrack Limited		I .	b imber 22 5242
		Location	1	Dates 07	7/03/2023	Engineer LKC		Sh	1/1
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	D	escription	Leg	Water
					- - (0.20)	MADE GROUND: Lino floc CONCRETE.	ring over fibrous membrane	over	
0.50-0.70	ES				- 0.20 (1.00)	MADE GROUND: Soft yells slightly gravelly sandy silty content. Gravel is angular coarse, flint, brick and occoarse. Cobbles are angul	owish brown and reddish bro CLAY with medium cobble to subangular and rounded fi asional ash. Sand is fine to ar brick.	wn ine to	<u> </u>
					- - - - -	Angular cobble of concre			
					- 1.20 - - - -	Complete at 1.20m			
Plan .						Remarks Hand excavated trial pit logg	ed by sub-contractor Nasir N	lodawi.	
						, -99	,		
						Scale (approx)	Logged By	Figure No.	•
						1:10	NM	LKC 22 524	12.TP04

LI«	(D	Eton Bu	ONSULT L siness Park, Eto 1 763 7200 web:	n Hill Road	l, Radcliff	fe, M26 2ZS m	Site Former Hampstead Heath	Police Station		Trial Pit Number TP05	
Excavation		Dimensi				Level (mOD)	Client Rostrack Limited			Job Numbe	
		Location			Dates 06	5/03/2023	Engineer LKC			Sheet 1/1	
Depth (m)	Sample / Tests	Water Depth (m)	Field Reco	ords	Level (mOD)	Depth (m) (Thickness	D	escription	L	_egend	Water
Plan .							MADE GROUND: CONCR MADE GROUND: CONCR Complete at 0.25m Remarks Hand excavated trial pit logg. Concrete slab encountered.	ed by sub-contractor Nasir felectric cable signal detected			pit.
							Scale (approx) 1:10	Logged By	Figure LKC 22		2 05

LK			ONSULT usiness Park, Etc		I. Radclifl	fe. M26 2ZS	Site Trial Pit Number S Former Hampstead Heath Police Station		
GRO	U P		61 763 7200 web				F		TP06
Excavation Hand Excav	n Method vated Trial Pit.	Dimens 0.55m	ions c 0.56m x 1.20m		Ground	Level (mOD)	Client Rostrack Limited		Job Number LKC 22 5242
		Locatio	n		Dates		Engineer		Sheet
					07	7/03/2023	LKC		1/1
Depth (m)	Sample / Tests	Water Depth (m)	Field Rec	ords	Level (mOD)	Depth (m) (Thickness	D	escription	Regend Nate
						- (0.10)	MADE GROUND: CONCR	ETE.	50000 5000
						0.10	MADE GROUND: Reddish of brick. Sand is fine to coa	brown sandy angular COBE irse.	BLES
						0.23	MADE GROUND: Soft grey brown slightly gravelly sand content. Gravel is angular i occasional ash. Sand is fin	y brown becoming yellowish dy silty CLAY with low cobble to subangular fine brick and e to coarse.	9
							0.09m long brick step en	countered at 0.70-0.85mbgl	
						-	0.09m long brick step en off retaining wall.	countered at 1.00mbgl, 0.18	sm
						1.19 1.20	bgl.	ETE. Possibly extending to ered at 1.20mbgl, 0.23m off	
						-			
Plan .							Remarks Hand excavated trial pit logg	ed by sub-contractor Nasir N	Modawi.
							p 1999	,	
		٠		•					
							Scale (approx)	Logged By	Figure No.
							1:10	NM	LKC 22 5242.TP06

I I///			ONSULT LTD			Site		Trial Pit Number
GROU) P		usiness Park, Eton Hill Road 61 763 7200 web: www.thelk			Former Hampstead Heath	Police Station	TP07
Excavation		Dimens		Ť	Level (mOD)	Client Rostrack Limited		Job Number LKC 22 5242
		Location	n	Dates 06	6/03/2023	Engineer LKC		Sheet 1/1
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	D	escription	Vater Puedend Pueden P
					- (0.20) - 0.20	MADE GROUND: Plastic s		
					(0.25)	fine.	heeting over yellowish and dy angular COBBLES of bric gular fine to coarse brick. Sa	
0.45-0.65	ES				0.45	MADE GROUND: Yellowisl sandy GRAVEL with low co subangular and rounded fir occasional ash. Sand is fin brick. Rare metal pin.	h and reddish brown very sil obble content. Gravel is angune to coarse flint, brick, and e to coarse. Cobbles are an	ty ılar to gular
					- 0.75	Concrete slab encounters Complete at 0.75m	ed at 0.75mbgl.	
					-			
					_			
Plan .						Remarks Hand excavated trial pit logg	ed by sub-contractor Nasir N	∕lodawi.
							<u> </u>	
					1	Scale (approx) 1:10	Logged By	Figure No. LKC 22 5242.TP07

1 1///	6	LK C	CONSULT LTD				Site	Numbe	or
GROL	l n		usiness Park, Eton Hill Road 61 763 7200 web: www.thelk			26 2ZS	Former Hampstead Heath Police Station	WS0	- 1
Machine : P		Dimens		Ground		l (mOD)	Client	Job	\dashv
Method : D	rive-in Windowless ampler	Dimens	ions	Ground		. (IIIOD)	Rostrack Limited	Number LKC 22 5	
		Locatio	n	Dates	5/03/2	033	Engineer	Sheet	
					,,,,,,	<u> </u>	LKC	1/1	
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	(Thi	epth (m) ckness)	Description	Legend	Water
					E	0.03 0.07	MADE GROUND: TARMACADAM.		
					Ė	(0.53)	MADE GROUND: CONCRETE. MADE GROUND: Greyish yellow and reddish brown sandy		
					E	0.60 (0.40)	angular COBBLES of brick. Sand is fine to coarse.		
1.00-1.20	ES					1.00	MADE GROUND: Green grey mottled dark grey slightly gravelly sandy SILTwith occasional local rootlets. Gravel is	333333	
1.20-1.65	SPT(C) N=5		1,1/1,1,1,2		Ē	(0.9E)	angular to subangular and subrounded fine to medium ash, brick, flint, and occasional concrete. Sand is fine to coarse.		
					F	(0.85)	MADE GROUND: Dark grey sandy angular to subangular and subrounded fine to coarse GRAVEL of ash, clincker,		
1.90-2.00	D				E	(2.55)	occasional brick and flint. Sand is fine to coarse. Rare shell and pottery fragments at 1.00-1.20mbgl.		1
2.00-2.45	SPT(C) N=9		2,1/2,2,2,3			`2.00	Soft to firm yellowish brown mottled brown and grey occasionally slightly sandy silty CLAY with occasional local	7	
					Ē	(1.00)	rootlets and rare angular and rounded fine to medium flint gravel. Sand is fine to medium.	2	
					Ē	()	Firm light yellowish brown mottled grey slightly sandy silty		
3.00-3.45	SPT(C) N=12		2,2/3,3,3,3			3.00	CLAY with occasional local rootlets. Sand is fine. Firm brown mottled grey and yellow brown slightly sandy	× — ×	
3.00-3.43	3F1(0) N-12		2,2/3,3,3,3		E		silty CLAY with occasional local rootlets. Sand is fine.		
					E			3 —	
	_				Ē			<u> </u>	
3.90-4.00 4.00-4.45	D SPT(C) N=11		3,3/3,2,3,3			(2.00)			
					E			,	 ∑ ₁
			Water strike(1) at 4.50m.		E		Angular fine to medium claystone gravel at	×	*
					E	5.00	4.60-4.70mbgl.	× × ×	
5.00-5.45	SPT(C) N=11		2,3/3,3,2,3		Ē	3.00	Firm brown mottled grey and yellow brown sandy silty CLAY with frequent fine to medium sand-sized gypsum crystals.	3 —	
					E	(1.00)	Sand is fine to medium.	7	
					E			<u> </u>	
5.90-6.00 6.00-6.45	D SPT(C) N=11		3,3/2,3,3,3			6.00	Complete at 6.45m	×. — × ·	
					Ē		Complete at 0.45m		
					E				
					Ē				
					Ė				
					E				
					Ē				
					Ē				
					E				
					E				
					E				
Remarks Groundwate	r strike at 4.50mbgl.	•			•		Scale (approx)	Logge By	d
Logged by si	ub-contractor Nasir M	lodawi.							
							1:50	NM No.	\dashv
								10. 5242.WS1	01



Appendix F

Certificate of Analysis – Contamination





Simon Johnson LK Consult Limited Unit 29 Eton Business Park Eton Hill Road Manchester M26 2ZS

Derwentside Environmental Testing Services Ltd

Unit 1
Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Kent
ME17 2JN
t: 01622 850410

DETS Report No: 23-03295

Site Reference: Hampstead Police Station

Project / Job Ref: LK 22 5242

Order No: LK 22 5242

Sample Receipt Date: 09/03/2023

Sample Scheduled Date: 09/03/2023

Report Issue Number: 1

Reporting Date: 17/03/2023

Authorised by:

Kevin Old

Operations Director

KO C

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.





Soil Analysis Certificate						
DETS Report No: 23-03295	Date Sampled	06/03/23	06/03/23	07/03/23	07/03/23	06/03/23
LK Consult Limited	Time Sampled	None Supplied				
Site Reference: Hampstead Police Station	TP / BH No	WS1	BH1	TP6	TP7	WS1
Project / Job Ref: LK 22 5242	Additional Refs	None Supplied				
Order No: LK 22 5242	Depth (m)	1.00 - 1.20	0.80 - 1.00	0.60 - 0.80	0.45 - 0.65	1.90 - 2.00
Reporting Date: 17/03/2023	DETS Sample No	639695	639696	639697	639698	639699

Determinand	Unit	RI	Accreditation					
Asbestos Screen (S)	N/a	N/a		Not Detected	Not Detected	Not Detected	Not Detected	
Hq	pH Units	N/a	MCERTS	7.6	6.5		8.9	7.9
Total Cyanide	mg/kg	< 1	NONE	< 1			< 1	
Free Cyanide	mg/kg	< 1	NONE	< 1			< 1	
W/S Sulphate as SO ₄ (2:1)	mg/l	< 10	MCERTS	57	34	70	178	49
W/S Sulphate as SO ₄ (2:1)	g/l	< 0.01	MCERTS	0.06	0.03	0.07	0.18	0.05
Organic Matter (SOM)	%	< 0.1	MCERTS	36.4	1.9	0.8	0.9	
W/S Chloride (2:1)	mg/kg	< 1	MCERTS					21
W/S Chloride (2:1)	mg/l	< 0.5	MCERTS					10.3
Water Soluble Nitrate (2:1) as NO ₃	mg/kg	< 3	MCERTS					5
Water Soluble Nitrate (2:1) as NO ₃	mg/l	< 1.5	MCERTS					2.3
Arsenic (As)	mg/kg	< 2	MCERTS	66	12	15	7	
W/S Boron	mg/kg	< 1	NONE	1.9			1.1	
Cadmium (Cd)	mg/kg	< 0.2	MCERTS	0.7	< 0.2	< 0.2	< 0.2	
Chromium (Cr)	mg/kg	< 2	MCERTS	16	19	37	12	
Chromium (hexavalent)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	
Copper (Cu)	mg/kg	< 4	MCERTS	317	23	27	19	
Lead (Pb)	mg/kg	< 3	MCERTS	2290	110	44	78	
W/S Magnesium	mg/l	< 0.1	NONE					2.9
Mercury (Hg)	mg/kg	< 1	MCERTS	4.4	< 1	< 1	< 1	
Nickel (Ni)	mg/kg	< 3	MCERTS	43	8	36	9	
Selenium (Se)	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
Vanadium (V)	mg/kg	< 1	MCERTS	99	34	56	21	
Zinc (Zn)	mg/kg	< 3	MCERTS	171	39	66	30	
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2			< 2	

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Method Description page describes if the test is performed on the dried or as-received portion Subcontracted analysis (S)





Soil Analysis Certificate						
DETS Report No: 23-03295	Date Sampled	06/03/23	06/03/23	06/03/23	06/03/23	06/03/23
LK Consult Limited	Time Sampled	None Supplied				
Site Reference: Hampstead Police Station	TP / BH No	WS1	WS1	BH1	BH1	BH1
Project / Job Ref: LK 22 5242	Additional Refs	None Supplied				
Order No: LK 22 5242	Depth (m)	3.90 - 4.00	5.90 - 6.00	4.95	8.70	14.60
Reporting Date: 17/03/2023	DETS Sample No	639700	639701	639702	639703	639704

Determinand	Unit	DI	Accreditation					
Asbestos Screen (S)	N/a	N/a						
pH	-	N/a		7.7	7.6	7.8	8.2	8.3
Total Cyanide		< 1	NONE	7.7	7.0	7.0	0.2	0.0
Free Cyanide		< 1	NONE					
W/S Sulphate as SO ₄ (2:1)		< 10	MCERTS	188	2400	481	1050	642
W/S Sulphate as SO ₄ (2:1)		< 0.01	MCERTS	0.19	2.40	0.48	1.05	0.64
Organic Matter (SOM)	%	< 0.1	MCERTS					
W/S Chloride (2:1)	mg/kg	< 1	MCERTS	54	55	58	100	111
W/S Chloride (2:1)	mg/l	< 0.5	MCERTS	26.9	27.7	29	49.9	55.3
Water Soluble Nitrate (2:1) as NO ₃	mg/kg	< 3	MCERTS	< 3	< 3	< 3	3	7
Water Soluble Nitrate (2:1) as NO ₃	mg/l	< 1.5	MCERTS	< 1.5	< 1.5	< 1.5	1.7	3.5
Arsenic (As)	mg/kg	< 2	MCERTS					
W/S Boron	mg/kg	< 1	NONE					
Cadmium (Cd)	mg/kg	< 0.2	MCERTS					
Chromium (Cr)	mg/kg	< 2	MCERTS					
Chromium (hexavalent)	mg/kg	< 2	NONE					
Copper (Cu)		< 4	MCERTS					
Lead (Pb)	mg/kg	< 3	MCERTS					
W/S Magnesium	mg/l	< 0.1	NONE	10	88	24	61	24
Mercury (Hg)	mg/kg	< 1	MCERTS					
Nickel (Ni)	mg/kg	< 3	MCERTS					
Selenium (Se)	mg/kg	< 2	MCERTS					
Vanadium (V)	5 5	< 1	MCERTS					
Zinc (Zn)	<i>J J</i>	< 3	MCERTS					
Total Phenols (monohydric)	mg/kg	< 2	NONE					

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Method Description page describes if the test is performed on the dried or as-received portion Subcontracted analysis (S)





Goil Analysis Certificate										
DETS Report No: 23-03295	Date Sampled	07/03/23								
LK Consult Limited	Time Sampled	None Supplied								
Site Reference: Hampstead Police Station	TP / BH No	AC1								
Project / Job Ref: LK 22 5242	Additional Refs	None Supplied								
Order No: LK 22 5242	Depth (m)	None Supplied								
Reporting Date: 17/03/2023	DETS Sample No	639705								

Determinand	Unit	RL	Accreditation		
Asbestos Screen (S)	N/a	N/a	ISO17025		
pH	pH Units	N/a	MCERTS		
Total Cyanide	mg/kg	< 1	NONE		
Free Cyanide	mg/kg	< 1	NONE		
W/S Sulphate as SO ₄ (2:1)		< 10	MCERTS		
W/S Sulphate as SO ₄ (2:1)		< 0.01	MCERTS		
Organic Matter (SOM)	%	< 0.1	MCERTS		
W/S Chloride (2:1)	mg/kg	< 1	MCERTS		
W/S Chloride (2:1)		< 0.5	MCERTS		
Water Soluble Nitrate (2:1) as NO ₃	mg/kg	< 3	MCERTS		
Water Soluble Nitrate (2:1) as NO ₃	mg/l	< 1.5	MCERTS		
Arsenic (As)	mg/kg	< 2	MCERTS		
W/S Boron		< 1	NONE		
Cadmium (Cd)	mg/kg	< 0.2	MCERTS		
Chromium (Cr)	mg/kg	< 2	MCERTS		
Chromium (hexavalent)	mg/kg	< 2	NONE		
Copper (Cu)		< 4	MCERTS		
Lead (Pb)	mg/kg	< 3	MCERTS		
W/S Magnesium	mg/l	< 0.1	NONE		
Mercury (Hg)	mg/kg	< 1	MCERTS		
Nickel (Ni)		< 3	MCERTS		
Selenium (Se)		< 2	MCERTS		
Vanadium (V)	<i>y y</i>	< 1	MCERTS		
Zinc (Zn)	mg/kg	< 3	MCERTS		
Total Phenols (monohydric)	mg/kg	< 2	NONE		

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Method Description page describes if the test is performed on the dried or as-received portion Subcontracted analysis (S)





Soil Analysis Certificate - Speciated PAHs						
DETS Report No: 23-03295	Date Sampled	06/03/23	06/03/23	07/03/23	07/03/23	
LK Consult Limited	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Hampstead Police Station	TP / BH No	WS1	BH1	TP6	TP7	
Project / Job Ref: LK 22 5242	Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	
Order No: LK 22 5242	Depth (m)	1.00 - 1.20	0.80 - 1.00	0.60 - 0.80	0.45 - 0.65	
Reporting Date: 17/03/2023	DETS Sample No	639695	639696	639697	639698	

Determinand	Unit	RL	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Phenanthrene	mg/kg	< 0.1	MCERTS	0.23	< 0.1	< 0.1	< 0.1	
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Fluoranthene	mg/kg	< 0.1	MCERTS	0.20	< 0.1	< 0.1	< 0.1	
Pyrene	mg/kg	< 0.1	MCERTS	0.17	< 0.1	< 0.1	< 0.1	
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.14	< 0.1	< 0.1	< 0.1	
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6	< 1.6	< 1.6	





Soil Analysis Certificate - TPH LQM Banded											
DETS Report No: 23-03295	Date Sampled	06/03/23	07/03/23								
LK Consult Limited	Time Sampled	None Supplied	None Supplied								
Site Reference: Hampstead Police Station	TP / BH No	WS1	TP7								
Project / Job Ref: LK 22 5242	Additional Refs	None Supplied	None Supplied								
Order No: LK 22 5242	Depth (m)	1.00 - 1.20	0.45 - 0.65								
Reporting Date: 17/03/2023	DETS Sample No	639695	639698								

Determinand	Unit	RL	Accreditation				
Aliphatic >C5 - C6 : HS 1D MS AL	mg/kg	< 0.01	NONE	< 0.01	< 0.01		
Aliphatic >C6 - C8 : HS_1D_MS_AL	mg/kg	< 0.05	NONE	< 0.05	< 0.05		
Aliphatic >C8 - C10 : EH CU 1D AL	mg/kg	< 2	MCERTS	< 2	< 2		
Aliphatic >C10 - C12 : EH CU 1D AL	mg/kg	< 2	MCERTS	< 2	< 2		
Aliphatic >C12 - C16 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3	< 3		
Aliphatic >C16 - C35 : EH_CU_1D_AL	mg/kg	< 10	MCERTS	< 10	< 10		
Aliphatic >C35 - C44 : EH_CU_1D_AL	mg/kg	< 10	NONE	< 10	< 10		
Aliphatic (C5 - C44) : HS_1D_MS+EH_CU_1D_AL	mg/kg	< 30	NONE	< 30	< 30		
Aromatic >C5 - C7 : HS_1D_MS_AR	mg/kg	< 0.01	NONE	< 0.01	< 0.01		
Aromatic >C7 - C8 : HS_1D_MS_AR	mg/kg	< 0.05	NONE	< 0.05	< 0.05		
Aromatic >C8 - C10 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2		
Aromatic >C10 - C12 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2		
Aromatic >C12 - C16 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2		
Aromatic >C16 - C21 : EH_CU_1D_AR	mg/kg	< 3	MCERTS	< 3	< 3		
Aromatic >C21 - C35 : EH_CU_1D_AR	mg/kg	< 10	MCERTS	< 10	< 10		
Aromatic >C35 - C44 : EH CU 1D AR	mg/kg	< 10	NONE	< 10	< 10		
Aromatic (>C5 - C44): HS_1D_MS+EH_CU_1D_AR	mg/kg	< 30	NONE	< 30	< 30		
Total >C5 - C44 : HS_1D_MS+EH_CU_1D_Tot al	J. J	< 60	NONE	< 60	< 60		





Soil Analysis Certificate - BTEX / MTBE									
DETS Report No: 23-03295	Date Sampled	06/03/23	07/03/23						
LK Consult Limited	Time Sampled	None Supplied	None Supplied						
Site Reference: Hampstead Police Station	TP / BH No	WS1	TP7						
-									
Project / Job Ref: LK 22 5242	Additional Refs	None Supplied	None Supplied						
Order No: LK 22 5242	Depth (m)	1.00 - 1.20	0.45 - 0.65						
Reporting Date: 17/03/2023	DETS Sample No	639695	639698						

Determinand	Unit	RL	Accreditation				
Benzene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2		
Toluene : HS_1D_MS	ug/kg	< 5	MCERTS	< 5	< 5		
Ethylbenzene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2		
p & m-xylene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2		
o-xylene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2		
MTBE: HS_1D_MS	ug/kg	< 5	MCERTS	< 5	< 5		





4480

Bulk Analysis Certificate									
DETS Report No: 23-03295	Date Sampled	07/03/23							
LK Consult Limited	Time Sampled	None Supplied							
Site Reference: Hampstead Police Station	TP / BH No	AC1							
-									
Project / Job Ref: LK 22 5242	Additional Refs	None Supplied							
Order No: LK 22 5242	Depth (m)	None Supplied							
Reporting Date: 17/03/2023	DETS Sample No	639705							

Determinand	Unit	RL	Accreditation			
Asbestos Type (S)	PLM Result	N/a	ISO17025	Not Detected		
Sample Matrix (S)	Material Type	N/a	NONE	Board		

The samples have been examined to identify the presence of asbestiform minerals by polarising light microscopy and dispersion staining technique to In-House Procedures QTSE600 Determination of Asbestos in Bulk Materials; Asbestos in Soils/Sediments (fibre screening and identification) that is in accordance with the Health and Safety Executive HSG 248 Appendix 2.

Opinions and interpretations expressed herein are outside the scope of UKAS Accreditation.

RL: Reporting Limi

Subcontracted analysis (S)

This report refers to samples as received, and Dets Ltd, takes no responsibility for the accuracy or competence of sampling by others.

 $The \ material \ description \ shall \ be \ regarded \ as \ tentative \ and \ is \ not \ included \ in \ our \ scope \ of \ UKAS \ Accreditation.$





Soil Analysis Certificate - Sample Descriptions

DETS Report No: 23-03295

LK Consult Limited

Site Reference: Hampstead Police Station

Project / Job Ref: LK 22 5242

Order No: LK 22 5242

Reporting Date: 17/03/2023

DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
639695	WS1	None Supplied	1.00 - 1.20	19	Black sandy clay with brick and concrete
639696	BH1	None Supplied	0.80 - 1.00	15.4	Light brown sandy clay
639697	TP6	None Supplied	0.60 - 0.80	17.1	Light brown clay
639698	TP7	None Supplied	0.45 - 0.65	12.1	Brown sandy clay
639699	WS1	None Supplied	1.90 - 2.00	19.1	Orange clay
639700	WS1	None Supplied	3.90 - 4.00	19.7	Brown clay
639701	WS1	None Supplied	5.90 - 6.00	18.7	Brown clay
639702	BH1	None Supplied	4.95	18.9	Brown clay
639703	BH1	None Supplied	8.70	16.8	Brown clay
639704	BH1	None Supplied	14.60	16.7	Brown clay

Moisture content is part of procedure E003 & is not an accredited test Insufficient Sample $^{\rm VS}$ Unsuitable Sample $^{\rm VS}$





Soil Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 23-03295
LK Consult Limited

Site Reference: Hampstead Police Station
Project / Job Ref: LK 22 5242

Order No: LK 22 5242 Reporting Date: 17/03/2023

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR		Determination of BTEX by headspace GC-MS	E001
Soil	D		Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E002
Soil	D		Determination of chloride by extraction with water & analysed by ion chromatography	E009
Cail	AD	Chromium Havayalant	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of	F016
Soil	AR	Chromium - Hexavalent	1,5 dipnenylcarbazide followed by colorimetry	E016
Soil	AR		Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E015
Soil	D		Gravimetrically determined through extraction with cyclohexane	E011
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	AR	,	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR	EPH (C10 - C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	C12-C16, C16-C21, C21-C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E004
Soil	D	Fluoride - Water Soluble	Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D	Fraction Organic Carbon (FOC)	Determination of TOC by combustion analyser.	E027
Soil	D	Organic Matter (SOM)	Determination of TOC by combustion analyser.	E027
Soil	D	TOC (Total Organic Carbon)	Determination of TOC by combustion analyser.	E027
Soil	AR	Exchangeable Ammonium	Determination of ammonium by discrete analyser.	E029
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D	Magnesium - Water Soluble	Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR		Moisture content; determined gravimetrically	E003
Soil	D	Nitrate - Water Soluble (2:1)	Determination of nitrate by extraction with water & analysed by ion chromatography	E009
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR		Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D	Petroleum Ether Extract (PEE)	Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR		Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E021
Soil	D		Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E013
Soil	D		Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	AR	Culphus Total	Determination of sulphide by distillation followed by colorimetry	E018
Soil	D	Suipnur - Total	Determination of total sulphur by extraction with aqua-regia followed by ICP-OES	E024
Soil	AR	SVOC	Determination of total sulphur by extraction with aqua-regia followed by ICP-OES Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS	E006
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
Soil	AR		Determination of volatile organic compounds by headspace GC-MS	E001
Soil	AR	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001





List of HWOL Acronyms and Operators
DETS Report No: 23-03295
LK Consult Limited
Site Reference: Hampstead Police Station
Project / Job Ref: LK 22 5242
Order No: LK 22 5242
Reporting Date: 17/03/2023

Acronym	Description
HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
2D	GC-GC - Double coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative eg. EH+HS_Total or EH_CU+HS_Total

Det - Acronym
Benzene - HS_1D_MS
Ethylbenzene - HS_1D_MS
MTBE - HS_1D_MS
TPH CWG - Aromatic >C16 - C21 - EH_CU_1D_AR
TPH LQM - Aliphatic >C10 - C12 - EH_CU_1D_AL
TPH LQM - Aliphatic >C12 - C16 - EH_CU_1D_AL
TPH LQM - Aliphatic >C16 - C35 - EH_CU_1D_AL
TPH LQM - Aliphatic >C35 - C44 - EH_CU_1D_AL
TPH LQM - Aliphatic >C5 - C44 - HS_1D_MS+EH_CU_1D_AL
TPH LQM - Aliphatic >C5 - C6 - HS_1D_MS_AL
TPH LQM - Aliphatic >C6 - C8 - HS_1D_MS_AL
TPH LQM - Aliphatic >C8 - C10 - EH_CU_1D_AL
TPH LQM - Aromatic >C10 - C12 - EH_CU_1D_AR
TPH LQM - Aromatic >C12 - C16 - EH_CU_1D_AR
TPH LQM - Aromatic >C21 - C35 - EH_CU_1D_AR
TPH LQM - Aromatic >C35 - C44 - EH_CU_1D_AR
TPH LQM - Aromatic >C5 - C44 - HS_1D_MS+EH_CU_1D_AR
TPH LQM - Aromatic >C5 - C7 - HS_1D_MS_AR
TPH LQM - Aromatic >C7 - C8 - HS_1D_MS_AR
TPH LQM - Aromatic >C8 - C10 - EH_CU_1D_AR
TPH LQM - Total >C5 - C44 - HS_1D_MS+EH_CU_1D_Total
Toluene - HS_1D_MS
m & p-xylene - HS_1D_MS
o-Xylene - HS_1D_MS





Simon Johnson LK Consult Limited Unit 29 Eton Business Park Eton Hill Road Manchester M26 2ZS

Derwentside Environmental Testing Services Ltd

Unit 1
Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Kent
ME17 2JN
t: 01622 850410

DETS Report No: 23-04973

Site Reference: Hampstead Police Station

Project / Job Ref: None Supplied

Order No: None Supplied

Sample Receipt Date: 13/04/2023

Sample Scheduled Date: 13/04/2023

Report Issue Number: 1

Reporting Date: 19/04/2023

Authorised by:

Kevin Old

Operations Director

KO C

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.





Water Analysis Certificate DETS Report No: 23-04973 LK Consult Limited Date Sampled 11/04/23 11/04/23 Time Sampled 1240 1120 Site Reference: Hampstead Police Station TP / BH No BH01 WS01 Project / Job Ref: None Supplied Additional Refs None Supplied 2.73 None Supplied Order No: None Supplied Depth (m) 1.60 Reporting Date: 19/04/2023 **DETS Sample No** 646748 646749

Determinand	Unit	RL	Accreditation			
pН	pH Units	N/a	ISO17025	7.2	7.3	
Total Cyanide	ug/l	< 5	ISO17025	< 5	< 5	
Free Cyanide	ug/l	< 5	ISO17025	< 5	< 5	
Sulphate as SO ₄	mg/l	< 1	ISO17025	1220	1950	
Dissolved Organic Carbon (DOC)	mg/l	< 0.1	ISO17025	15.3	8.1	
Hardness - Total	mgCaCO3/I	< 1	NONE	1630	2320	
Arsenic (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	
Boron (dissolved)	ug/l	< 5	ISO17025	357	476	
Cadmium (dissolved)	ug/l	< 0.4	ISO17025	< 0.4	< 0.4	
Chromium (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	
Chromium (hexavalent)	ug/l	< 20	NONE	< 20	< 20	
Copper (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	
Lead (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	
Mercury (dissolved)	ug/l	< 0.05	ISO17025	< 0.05	< 0.05	
Nickel (dissolved)	ug/l	< 5	ISO17025	9	10	
Selenium (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	
Vanadium (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	
Zinc (dissolved)	ug/l	< 2	ISO17025	5	8	
Calcium (dissolved)	mg/l	< 0.2	ISO17025	329	515	
Total Phenols (monohydric)	ug/l	< 10	ISO17025	< 10	< 10	

Subcontracted analysis ^(S) Insufficient sample ^{I/S} Unsuitable Sample ^{U/S}



Tel: 01622 850410

Water Analysis Certificate - Speciated PAH									
DETS Report No: 23-04973	Date Sampled	11/04/23	11/04/23						
LK Consult Limited	Time Sampled	1240	1120						
Site Reference: Hampstead Police Station	TP / BH No	BH01	WS01						
Project / Job Ref: None Supplied	Additional Refs	None Supplied	None Supplied						
Order No: None Supplied	Depth (m)	2.73	1.60						
Reporting Date: 19/04/2023	DETS Sample No	646748	646749	•					

Determinand	Unit	RL	Accreditation				
Naphthalene	ug/l	< 0.01	NONE	0.17	< 0.01		
Acenaphthylene	ug/l	< 0.01	NONE	< 0.01	< 0.01		
Acenaphthene	ug/l	< 0.01	NONE	< 0.01	< 0.01		
Fluorene	ug/l	< 0.01	NONE	< 0.01	< 0.01		
Phenanthrene		< 0.01		< 0.01	< 0.01		
Anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01		
Fluoranthene	ug/l	< 0.01	NONE	< 0.01	< 0.01		
Pyrene	ug/l	< 0.01	NONE	< 0.01	< 0.01		
Benzo(a)anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01		
Chrysene		< 0.01		< 0.01	< 0.01		
Benzo(b)fluoranthene	ug/l	< 0.01	NONE	< 0.01	< 0.01		
Benzo(k)fluoranthene	ug/l	< 0.01	NONE	< 0.01	< 0.01		
Benzo(a)pyrene	ug/l	< 0.01	NONE	< 0.01	< 0.01		
Indeno(1,2,3-cd)pyrene	ug/l	< 0.01	NONE	< 0.01	< 0.01		
Dibenz(a,h)anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01		
Benzo(ghi)perylene	ug/l	0.008	NONE	< 0.008	< 0.008		
Total EPA-16 PAHs	ug/l	< 0.16	NONE	0.17	< 0.16		



Tel: 01622 850410

Water Analysis Certificate - TPH LQM Banded										
DETS Report No: 23-04973	Date Sampled	11/04/23	11/04/23							
LK Consult Limited	Time Sampled	1240	1120							
Site Reference: Hampstead Police Station	TP / BH No	BH01	WS01							
Project / Job Ref: None Supplied	Additional Refs	None Supplied	None Supplied							
Order No: None Supplied	Depth (m)	2.73	1.60							
Reporting Date: 19/04/2023	DETS Sample No	646748	646749							

Determinand	Unit	RL	Accreditation				
Aliphatic >C5 - C6 :	ug/l	< 10		< 10	< 10		
HS_1D_MS_AL	ug/i	< 10	NONE	< 10	< 10		
Aliphatic >C6 - C8 :	ug/l	< 10	NONE	< 10	< 10		
HS_1D_MS_AL	-51.						
Aliphatic >C8 - C10 :	ug/l	< 10	NONE	< 10	< 10		
EH_CU_1D_AL Aliphatic >C10 - C12 :							
EH_CU_1D_AL	ug/l	< 10	NONE	< 10	< 10		
Aliphatic >C12 - C16 :							
EH_CU_1D_AL	ug/l	< 10	NONE	< 10	< 10		
Aliphatic >C16 - C35 :							
EH CU 1D AL	ug/l	< 10	NONE	< 10	< 10		
Aliphatic >C35 - C44 :	//	. 10	NONE	< 10	< 10		
EH CU 1D AL	ug/l	< 10					
Aliphatic (C5 - C44) :							
HS_1D_MS+EH_CU_1D_AL	ug/l	< 70	NONE	< 70	< 70		
Aromatic >C5 - C7 :	ug/l	< 10	NONE	< 10	< 10		
HS_1D_MS_AR	-51.						
Aromatic >C7 - C8 :	ug/l	< 10	NONE	< 10	< 10		
HS_1D_MS_AR Aromatic >C8 - C10 :							
EH CU 1D AR	ug/l	< 10	NONE	< 10	< 10		
Aromatic >C10 - C12 :		1					
EH CU 1D AR	ug/l	< 10	NONE	< 10	< 10		
Aromatic >C12 - C16 :	ug/l	< 10	NONE	< 10	< 10		
EH_CU_1D_AR							
Aromatic >C16 - C21 :	ug/l	< 10	NONE	< 10	< 10		
EH_CU_1D_AR							
Aromatic >C21 - C35 :	ug/l	< 10	NONE	< 10	< 10		
EH_CU_1D_AR	ug/i	` 10	HONE	110	110		
Aromatic >C35 - C44 :	ug/l	< 10	NONE	< 10	< 10		
EH_CU_1D_AR	-51.				. = -		
Aromatic (>C5 - C44) :	. n	. 70	NONE	JONE	. 70		
HS_1D_MS+EH_CU_1D_AR	ug/l	< 70	NONE	< 70	< 70		
Total >C5 - C44 :							
HS 1D MS+EH CU 1D Tot	ug/l	< 140	NONE	< 140	< 140		
al	ug/i	\ 170	NONL	\ 1 1 0	\ 1 1 0		
aı							



DETS Ltd Unit 1, Rose Lane Industrial Estate Rose Lane Lenham Heath Maidstone Kent ME17 2JN Tel: 01622 850410



Water Analysis Certificate - BTEX / MTBE DETS Report No: 23-04973 11/04/23 1240 **Date Sampled** 11/04/23 Time Sampled LK Consult Limited 1120 Site Reference: Hampstead Police Station TP / BH No BH01 WS01 Project / Job Ref: None Supplied Order No: None Supplied Reporting Date: 19/04/2023 **Additional Refs** None Supplied None Supplied Depth (m) 2.73 1.60 **DETS Sample No** 646748 646749

Determinand	Unit	RL	Accreditation				
Benzene : HS_1D_MS	ug/l	< 1	ISO17025	< 1	< 1		
Toluene : HS_1D_MS	ug/l	< 5	ISO17025	< 5	< 5		
Ethylbenzene : HS_1D_MS	ug/l	< 5	ISO17025	< 5	< 5		
p & m-xylene : HS_1D_MS	ug/l	< 10	ISO17025	< 10	< 10		
o-xylene : HS_1D_MS	ug/l	< 5	ISO17025	< 5	< 5		
MTBE : HS_1D_MS	ug/l	< 10	ISO17025	< 10	< 10		



DETS Ltd Unit 1, Rose Lane Industrial Estate Rose Lane Lenham Heath Maidstone Kent ME17 2JN Tel: 01622 850410



Water Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 23-04973
LK Consult Limited

Site Reference: Hampstead Police Station

Project / Job Ref: None Supplied Order No: None Supplied Reporting Date: 19/04/2023

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Water	UF	Alkalinity	Determination of alkalinity by titration against hydrochloric acid using bromocresol green as the end point	E103
Water	F	Ammoniacal Nitrogen	Determination of ammoniacal nitrogen by discrete analyser.	E126
Water	UF		Determination of BTEX by headspace GC-MS	E101
Water	F		Determination of cations by filtration followed by ICP-MS	E102
Water	UF		Determination using a COD reactor followed by colorimetry	E112
Water	F		Determination of chloride by filtration & analysed by ion chromatography	E109
Water	F	Chromium - Hexavalent	Determination of hexavalent chromium by acidification, addition of 1,5 diphenylcarbazide followed by	E116
Water	UF	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E115
Water	UF	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E115
Water	UF		Determination of total cyanide by distillation followed by colorimetry	E115
Water	UF	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through liquid:liquid extraction with cyclohexane	E111
Water	F		Determination of liquid:liquid extraction with hexane followed by GC-FID	E104
Water	F	Dissolved Organic Content (DOC)	Determination of DOC by filtration followed by low heat with persulphate addition followed by IR dete	E110
Water	UF	Electrical Conductivity	Determination of electrical conductivity by electrometric measurement	E123
Water	F	EPH (C10 - C40)	Determination of liquid:liquid extraction with hexane followed by GC-FID	E104
Water	F	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of liquid:liquid extraction with hexane followed by GC-FID for C8 to C40. C6 to C8 by	E104
Water	F		Determination of Fluoride by filtration & analysed by ion chromatography	E109
Water	F F		Determination of Priorities by Microbial Strain Str	E102
Leachate	F		Based on National Rivers Authority leaching test 1994	E301
Leachate	F		Based on BS EN 12457 Pt1, 2, 3	E302
Water	F.		Determination of metals by filtration followed by ICP-MS	E102
Water	F		Determination of liquid: liquid extraction with hexane followed by GI-FID	E104
Water	F		Determination of nitrate by filtration & analysed by ion chromatography	E109
Water	UF		Determination of phenois by distillation followed by colorimetry	E121
Water	F	PAH - Speciated (EPA 16)	Determination of PAH compounds by concentration through SPE cartridge, collection in	E105
\A/=+=::	F		dichloromethane followed by GC-MS	F100
Water	UF		Determination of PCB compounds by concentration through SPE cartridge, collection in dichloromethal	
Water	UF		Gravimetrically determined through liquid:liquid extraction with petroleum ether	E111 E107
Water			Determination of pH by electrometric measurement	
Water	F UF		Determination of phosphate by filtration & analysed by ion chromatography	E109
Water	UF F		Determination of redox potential by electrometric measurement	E113 E109
Water			Determination of sulphate by filtration & analysed by ion chromatography	
Water Water	UF F	Sulpride	Determination of sulphide by distillation followed by colorimetry Determination of semi-volatile organic compounds by concentration through SPE cartridge, collection	E118 E106
147.1.		Tillian Edward Mallia (TEM)	in dichloromethane followed by GC-MS	F111
Water	UF		Gravimetrically determined through liquid:liquid extraction with toluene	E111
Water	UF	Total Organic Carbon (TOC)	Low heat with persulphate addition followed by IR detection	E110
Water	F		Determination of liquid:liquid extraction with hexane, fractionating with SPE followed by GC-FID for C8 to C35. C5 to C8 by headspace GC-MS	E104
Water	F	aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)		E104
Water	UF		Determination of volatile organic compounds by headspace GC-MS	E101
Water	UF	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E101

Key

F Filtered UF Unfiltered



DETS Ltd Unit 1, Rose Lane Industrial Estate Rose Lane Lenham Heath Maidstone Kent ME17 2JN Tel: 01622 850410



ist of HWOL Acronyms and Operators						

Acronym	Description
HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
2D	GC-GC - Double coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative eg. EH+HS_Total or EH_CU+HS_Total

Det - Acronym
Benzene - HS_1D_MS
Ethylbenzene - HS_1D_MS
MTBE - HS_1D_MS
TPH LQM - Aliphatic >C10 - C12 - EH_CU_1D_AL
TPH LQM - Aliphatic >C12 - C16 - EH_CU_1D_AL
TPH LQM - Aliphatic >C16 - C35 - EH_CU_1D_AL
TPH LQM - Aliphatic >C35 - C44 - EH_CU_1D_AL
TPH LQM - Aliphatic >C5 - C44 - HS_1D_MS+EH_CU_1D_AL
TPH LQM - Aliphatic >C5 - C6 - HS_1D_MS_AL
TPH LQM - Aliphatic >C6 - C8 - HS_1D_MS_AL
TPH LQM - Aliphatic >C8 - C10 - EH_CU_1D_AL
TPH LQM - Aromatic >C10 - C12 - EH_CU_1D_AR
TPH LQM - Aromatic >C12 - C16 - EH_CU_1D_AR
TPH LQM - Aromatic >C16 - C21 - EH_CU_1D_AR
TPH LQM - Aromatic >C21 - C35 - EH_CU_1D_AR
TPH LQM - Aromatic >C35 - C44 - EH_CU_1D_AR
TPH LQM - Aromatic >C5 - C44 - HS_1D_MS+EH_CU_1D_AR
TPH LQM - Aromatic >C5 - C7 - HS_1D_MS_AR
TPH LQM - Aromatic >C7 - C8 - HS_1D_MS_AR
TPH LQM - Aromatic >C8 - C10 - EH_CU_1D_AR
TPH LQM - Total >C5 - C44 - HS_1D_MS+EH_CU_1D_Total
Toluene - HS_1D_MS
m & p-xylene - HS_1D_MS
o-Xylene - HS_1D_MS



Appendix G

Certificate of Analysis - Geotechnical

The LK Group Ref: LKC 22 5242



TEST REPORT

Client LK Consult Ltd

Address Unit 29 Eton Business Park

Eton Hill Road

Radcliffe

Greater Manchester

M26 2ZS

Contract LKC 22 5242 -

Hampstead Police Station

Job Number MRN 4606/32

Date of Issue 31 March 2023

Page 1 of 8

Approved Signatories

S J Hutchings, O P Davies

Notes

- 1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.
- 2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.
- 3 Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.
- 4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.
- 5 The results included within the report are representative of the samples submitted for analysis.
- 6 This certificate should not be reproduced, except in full, without the express permission of the laboratory.



Andrew House, Hadfield Street, Dukinfield, Cheshire SK16 4QX Tel: 0161 475 0870 Email: enquiries@murrayrix.com Website: www.murrayrix.com

Also at: London: 020 8523 1999

ANDREW HOUSE, HADFIELD STREET, DUKINFIELD, CHESHIRE SK16 4QX TEL 0161 475 0870

TEST CERTIFICATE

UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION

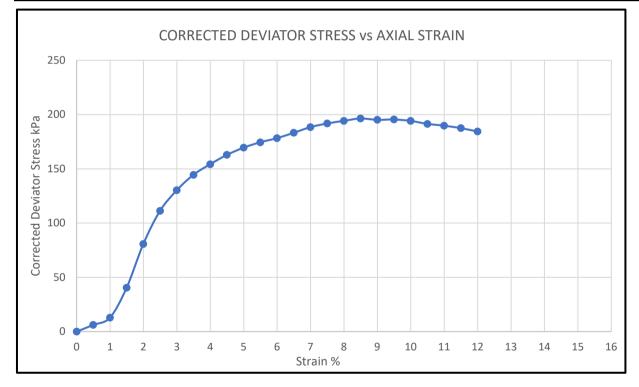
BS EN ISO 17892-8:2018

CLIENT	LK Consult Ltd
SITE	LKC 22 5242 - Hampstead Police Station
JOB NUMBER	MRN 4606/32

SAMPLE LABEL	BH1 10.5 (U100)	DATE SAMPLED	Not advised			
LAB SAMPLE No.	122592	DATE RECEIVED	16-Mar-23			
DATE TESTED	24-Mar-23	SAMPLED BY	Client			
MATERIAL	Stiff dark brown grey clayey slightly sandy SILT					
ADVISED SOURCE	Site Investigation Sample					

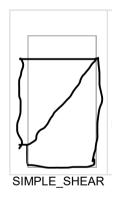
INITIAL CONDITIONS

Specimen	Sample Length (mm)	450	Specimen depth from top of Sample (mm)	50
Location	Sample Orientation	Vertical	Specimen Condition	Undisturbed
	Specimen Length (mm)	202	Specimen Water Content (%)	29.5
	Specimen Diameter (mm)	103	Specimen Bulk Density (Mg/m3)	1.94
	Membrane Thickness (mm)	0.4	Specimen Dry Density (Mg/m3)	1.50
	Membrane Correction	3.39		



TEST TYPESINGLE STAGE

SKETCH OF SPECIMEN AT FAILURE



Cell Pressure	Failure Strain	Rate of Strain	Corrected Deviator	Shear Strength Cu
(kPa)	(%)	(%/min)	Stress (kPa)	(kPa)
205	8.5	2.0	196	98

Remarks/Abnormalities

Name

O.P Davies BA (Hons) (Laboratory Manager)

Signed



Date 31 March 2023

ANDREW HOUSE, HADFIELD STREET, DUKINFIELD, CHESHIRE SK16 4QX TEL 0161 475 0870

TEST CERTIFICATE

UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION

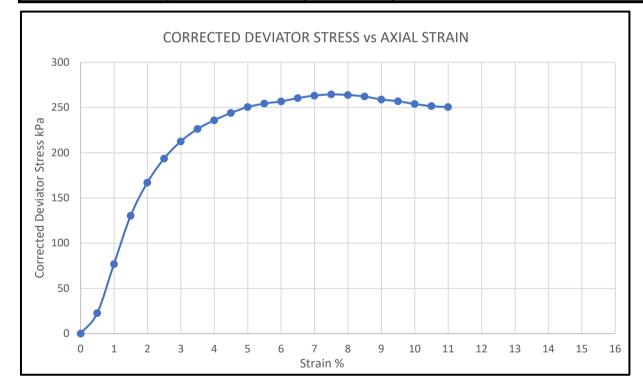
BS EN ISO 17892-8:2018

CLIENT	LK Consult Ltd
SITE	LKC 22 5242 - Hampstead Police Station
JOB NUMBER	MRN 4606/32

SAMPLE LABEL	BH1 14.6 (U100)	DATE SAMPLED	Not advised			
LAB SAMPLE No.	122593	DATE RECEIVED	16-Mar-23			
DATE TESTED	24-Mar-23	SAMPLED BY	Client			
MATERIAL	Stiff dark brown grey clayey slightly sandy SILT					
ADVISED SOURCE	Site Investigation Sample					

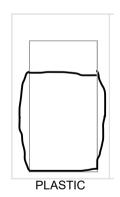
INITIAL CONDITIONS

Specimen]	Sample Length (mm)	350	Specimen depth from top of Sample (mm)	50
Location		Sample Orientation	Vertical	Specimen Condition	Undisturbed
		Specimen Length (mm)	203	Specimen Water Content (%)	28.4
		Specimen Diameter (mm)	102	Specimen Bulk Density (Mg/m3)	2.00
		Membrane Thickness (mm)	0.4	Specimen Dry Density (Mg/m3)	1.56
	 J	Membrane Correction	3.39		



TEST TYPESINGLE STAGE

SKETCH OF SPECIMEN AT FAILURE



ı	Cell Pressure	Failure Strain	Rate of Strain	Corrected Deviator	Shear Strength Cu
	(kPa)	(%)	(%/min)	Stress (kPa)	(kPa)
	300	7.5	2.0	265	132

Remarks/Abnormalities

Name

O.P Davies BA (Hons) (Laboratory Manager)

Signed



Date 31 March 2023

ANDREW HOUSE, HADFIELD STREET, DUKINFIELD, CHESHIRE SK16 4QX TEL 0161 475 0870

TEST CERTIFICATE

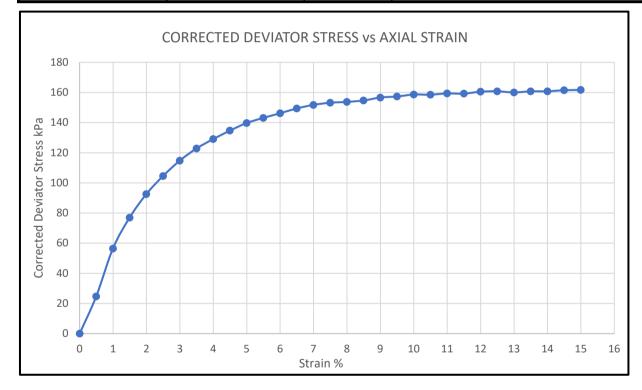
UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION

CLIENT	LK Consult Ltd	
SITE	C 22 5242 - Hampstead Police Station	
JOB NUMBER	MRN 4606/32	

SAMPLE LABEL	BH1 4.5 (U100)	DATE SAMPLED	Not advised
LAB SAMPLE No.	122594	DATE RECEIVED	16-Mar-23
DATE TESTED	24-Mar-23	SAMPLED BY	Client
MATERIAL	Stiff grey brown mottled silty	slightly sandy CLAY	
ADVISED SOURCE	Site Investigation Sample	ite Investigation Sample	

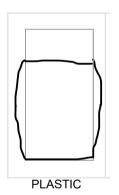
INITIAL CONDITIONS

Specimen		Sample Length (mm)	450	Specimen depth from top of Sample (mm)	100
Location		Sample Orientation	Vertical	Specimen Condition	Undisturbed
		Specimen Length (mm)	199	Specimen Water Content (%)	28.4
		Specimen Diameter (mm)	102	Specimen Bulk Density (Mg/m3)	1.97
		Membrane Thickness (mm)	0.4	Specimen Dry Density (Mg/m3)	1.53
	I	Membrane Correction	3.39		



TEST TYPE SINGLE STAGE

SKETCH OF SPECIMEN AT FAILURE



Cell Pressure	Failure Strain	Rate of Strain	Corrected Deviator	Shear Strength Cu
(kPa)	(%)	(%/min)	Stress (kPa)	(kPa)
94	15.0	2.0	162	81

Remarks/Abnormalities

Name

O.P Davies BA (Hons) (Laboratory Manager)

Signed



Date 31 March 2023





TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A1:2021 Clause 5.3 (30° FALL CONE) 1 POINT METHOD PLASTIC LIMIT BS EN ISO 17892-12:2018+A1:2021 Clause 5.5 WATER CONTENT METHOD BS EN ISO 17892-1:2014

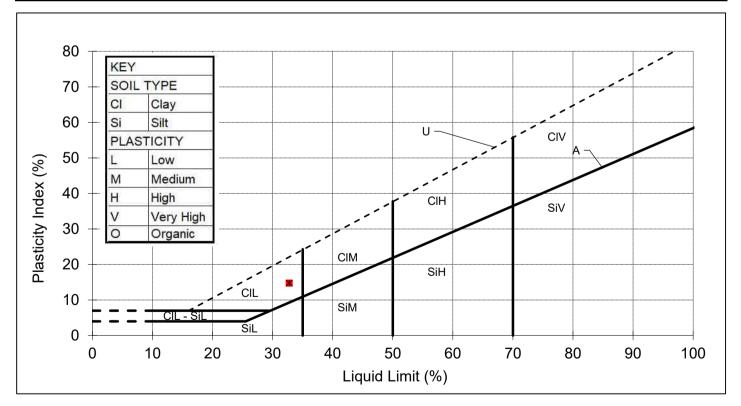
CLIENT LK Consult Ltd	
SITE	LKC 22 5242 - Hampstead Police Station
JOB NUMBER	MRN 4606/32

SAMPLE LABEL	BH1 1.0 (D)	DATE SAMPLED	Not advised
SAMPLE No.	122595	DATE RECEIVED	16-Mar-23
DATE TESTED	20-Mar-23	SAMPLED BY	Client

MATERIAL	Firm brown very silty sandy CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Moisture Content %	Correction Factor	Correction factor
Determination 1 (avg	20.0	32.8	1 000	from Clayton and
Determination 2 (avg	20.0	32.7	1.000	Jukes 1978

Natural Moisture	Liquid Limit	Plastic Limit	Plasticity Index	Passing
Content (%)	(%)	(%)	(%)	425 micron (%)
22.1	33	18	15	77



REMARKS

SIGNED

NAME O.P. Davies BA (Hons)

(Laboratory Manager)

DATE

31-Mar-23

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TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A1:2021 Clause 5.3 (30° FALL CONE) 1 POINT METHOD PLASTIC LIMIT BS EN ISO 17892-12:2018+A1:2021 Clause 5.5

WATER CONTENT METHOD BS EN ISO 17892-1:2014

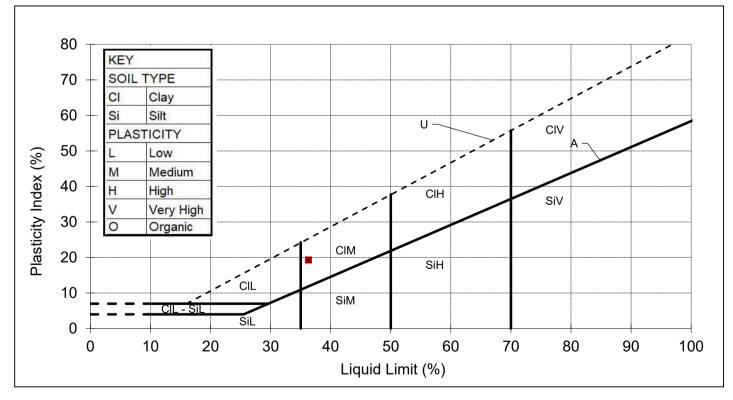
CLIENT LK Consult Ltd	
SITE	LKC 22 5242 - Hampstead Police Station
JOB NUMBER	MRN 4606/32

SAMPLE LABEL	BH1 1.2 (D)	DATE SAMPLED	Not advised
SAMPLE No.	122596	DATE RECEIVED	16-Mar-23
DATE TESTED	20-Mar-23	SAMPLED BY	Client

MATERIAL	Firm brown very silty slightly sandy slightly gravelly CLAY			
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing	
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved	

Test Readings	mm (average)	Moisture Content %	Correction Factor	Correction factor
Determination 1 (avg)	18.4	35.3	1.028	from Clayton and
Determination 2 (avg)	18.5	35.3	1.026	Jukes 1978

Natural Moisture	Liquid Limit	Plastic Limit	Plasticity Index	Passing
Content (%)	(%)	(%)	(%)	425 micron (%)
19.6	36	17	19	



REMARKS

SIGNED

NAME O.P. Davies BA (Hons)

(Laboratory Manager)

DATE 31-Mar-23

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TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A1:2021 Clause 5.3 (30° FALL CONE) 1 POINT METHOD PLASTIC LIMIT BS EN ISO 17892-12:2018+A1:2021 Clause 5.5

WATER CONTENT METHOD BS EN ISO 17892-1:2014

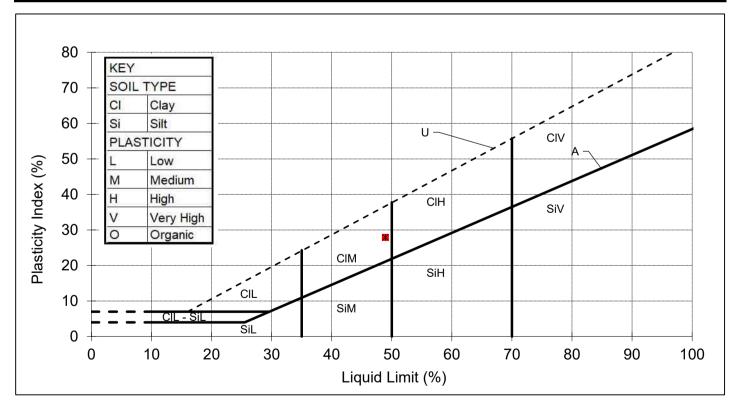
CLIENT	LK Consult Ltd				
SITE	LKC 22 5242 - Hampstead Police Station				
JOB NUMBER	MRN 4606/32				

SAMPLE LABEL	BH1 3.0 (D)	DATE SAMPLED	Not advised
SAMPLE No.	122597	DATE RECEIVED	16-Mar-23
DATE TESTED	20-Mar-23	SAMPLED BY	Client

MATERIAL	Stiff grey silty slightly sandy CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings	s mm (average)	Moisture Content %	Correction Factor	Correction factor
Determination 1 (avg)	19.3	48.3	1.014	from Clayton and
Determination 2 (avg)	19.3	48.2	1.014	Jukes 1978

Natural Moisture	Liquid Limit	Plastic Limit	Plasticity Index	Passing
Content (%)	(%)	(%)	(%)	425 micron (%)
24.4	49	21	28	100



REMARKS

SIGNED

NAME O.P. Davies BA (Hons)

(Laboratory Manager)

DATE 31-Mar-23

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TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A1:2021 Clause 5.3 (30° FALL CONE) 1 POINT METHOD PLASTIC LIMIT BS EN ISO 17892-12:2018+A1:2021 Clause 5.5

WATER CONTENT METHOD BS EN ISO 17892-1:2014

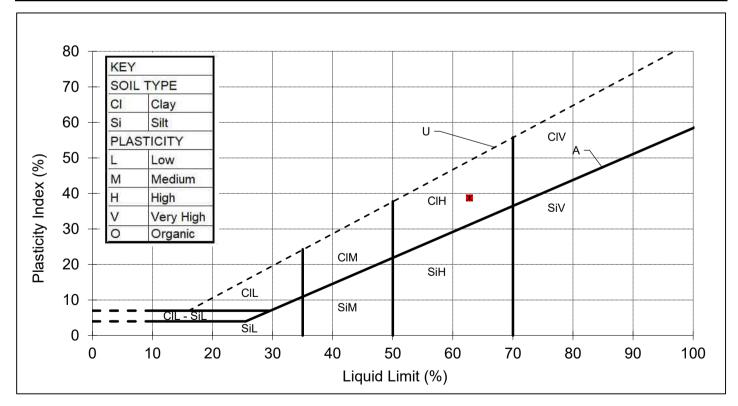
CLIENT	LK Consult Ltd
SITE	LKC 22 5242 - Hampstead Police Station
JOB NUMBER	MRN 4606/32

SAMPLE LABEL	BH1 11 (D)	DATE SAMPLED	Not advised
SAMPLE No.	122598	DATE RECEIVED	16-Mar-23
DATE TESTED	20-Mar-23	SAMPLED BY	Client

MATERIAL	Stiff dark grey silty CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings	mm (average)	Moisture Content %	Correction Factor	Correction factor		
Determination 1 (avg)	Determination 1 (avg) 20.0		1.001	from Clayton and		
Determination 2 (avg)	20.0	62.6	1.001	Jukes 1978		

Natural Moisture	Liquid Limit	Plastic Limit	Plasticity Index	Passing		
Content (%)	(%)	(%)	(%)	425 micron (%)		
28.6	63	24	39	100		



REMARKS

SIGNED

NAME O.P. Davies BA (Hons)

(Laboratory Manager)

DATE

31-Mar-23

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Appendix H Generic Assessment Criteria Values

The LK Group Ref: LKC 22 5242

Substance	Residential F (with (home- grown g produce)		Allotments	Commercial	Public Open Space 1	Public Open Space 2
Arsenic	37 mg/kg	40 mg/kg	49 mg/kg	640 mg/kg	79 mg/kg	170 mg/kg
Benzene	0.87 mg/kg	3.3 mg/kg	0.18 mg/kg	98 mg/kg	140 mg/kg	230 mg/kg
Benzo(a)pyrene	5.0 mg/kg	5.3 mg/kg	5.7 mg/kg	77 mg/kg	10 mg/kg	21 mg/kg
Cadmium	22 mg/kg	150 mg/kg	3.9 mg/kg	410 mg/kg	220 mg/kg	880 mg/kg
Chromium VI	21 mg/kg	21 mg/kg	170 mg/kg	49 mg/kg	21 mg/kg	250 mg/kg
Lead	200 mg/kg	310 mg/kg	80 mg/kg	2300 mg/kg	630 mg/kg	1300 mg/kg

Summary Table for the Generic Assessment Criteria for Human Health Risk Assessment Land Quality Management (LQM) S4ULs.

	GAC are based on sandy m soils with a pH 7.		LQM Generic Assessment Criteria (mg/kg) Dry weight soil									
	Contaminant	SOM	Res +	Res -	Allot.	Comm.	POS _{resi}	POS _{park}				
	Inorganic Arsenic	6%	37	40	43	640	79	170				
	Beryllium	6%	1.7	1.7	35	12	2.2	63				
	Boron	6%	290	11,000	45	240,000	21,000	46,000				
	Cadmium	6%	11	85	1.9	190	120	532				
	Chromium (III)	6%	910	910	18,000	8,600	1,500	33,000				
	Chromium (VI)	6%	6.0	6.0	1.8	33	7.7	220				
SIS	Copper	6%	2,400	7,100	520	68,000	12,000	44,000				
Metals	Elemental Mercury	6%	1.2	1.2	21	58 (25.8) vap	16	30 (25.8) vap				
2	Inorganic Mercury	6%	40	56	19	1,100	120	240				
	Methylmercury	6%	11	15	6.0	320	40	68				
	Nickel	6%	180	180	230	980	230	3,400				
	Selenium	6%	250	430	88	12,000	1,100	1,800				
	Vanadium	6%	410	1,200	91	9,000	2,000	5,000				
	Zinc	6%	3,700	40,000	620	730,000	81,000	170,000				
		1%	0.087	0.38	0.017	27	72	90				
	Benzene	2.5%	0.17	0.70	0.034	47	72	100				
		6%	0.37	1.4	0.075	90	73	110				
		1%	130	880 (869) vap	22	56,000 (869) vap	56,000	87,000 (869) vap				
	Toluene	2.5%	290	1,900	51	110,000 (1,920) vap	56,000	95,000 (1,920) vap				
s		6%	660	3,900	120	180,000 (4,360) vap	56,000	100,000 (4,360) vap				
Compounds		1%	47	83	16	5,700 (518) vap	24,000	17,000 (518) vap				
no	Ethylbenzene	2.5%	110	190	39	13,000 (1,220) vap	24,000	22,000 (1,220) vap				
du	·	6%	260	440	91	27,000 (2,840) vap	25,000	27,000 (2,840) vap				
Ņ		1%	60	88	28	6,600 (478) sol	41,000	17,000 (478) sol				
I×	o-xylene	2.5%	140	210	67	15,000 (1,120) sol	42,000	24,000 (1,120) sol				
втех	, ,	6%	330	480	160	33,000 (2,620) sol	43,000	33,000 (2,620) sol				
æ		1%	59	82	31	6,200 (625) vap	41.000	17,000 (625) vap				
	m-xylene	2.5%	140	190	74	14,000 (1,470) vap	42,000	24,000 (1,470) vap				
	•	6%	320	450	170	31,000 (3,460) vap	43,000	32,000 (3,460) vap				
		1%	56	79	29	5,900 (576) sol	41,000	17,000 (576) sol				
	ρ-xylene	2.5%	130	180	69	14,000 (1,350) sol	42,000	23,000 (1,350) sol				
	b	6%	310	430	160	30,000 (3,170) sol	43,000	31,000 (3,170) sol				

NOTES
Sol/vap = solubility / vapour limit (potentially use if free product identified, although highly conservative). f = oral, dermal and inhalation exposures compared to oral HCV.

	GAC are based on sandy m soils with a pH 7.		LQM Generic Assessment Criteria (mg/kg) Dry weight soil									
	Contaminant SOM			Res -	Allot.	Comm.	POS _{resi}	POS _{park}				
		1%	210	3,000 (57.1) sol	34	84,000 (57.0) sol	15,000	29,000				
	Acenaphthene	2.5%	510	4,700 (141) sol	85	97,000 (141) sol	15,000	30,000				
		6%	1,100	6,000 (336) sol	200	100,000	15,000	30,000				
		1%	170	2,900 (86.1) sol	28	83,000 (86.1) sol	15,000	29,000				
	Acenaphthylene	2.5%	420	4,600 (212) sol	69	97,000 (212) sol	15,000	30,000				
		6%	920	6,000 (506) sol	160	100,000	15,000	30,000				
		1%	2,400	31,000 (1.17) vap	380	520,000	74,000	150,000				
	Anthracene	2.5%	5,400	35,000	950	540,000	74,000	150,000				
		6%	11,000	37,000	2,200	540,000	74,000	150,000				
		1%	7.2	11	2.9	170	29	49				
	Benz(a)anthracene	2.5%	11	14	6.5	170	29	56				
		6%	13	15	13	180	29	62				
		1%	2.2	3.2	0.97	35	5.7	11				
	Benzo(a)pyrene (only)	2.5%	2.7	3.2	2.0	35	5.7	12				
		6%	3.0	3.2	3.5	36	5.7	13				
		1%	2.6	3.9	0.99	44	7.1	13				
	Benzo(b)fluoranthene	2.5%	3.3	4.0	2.1	44	7.2	15				
	1 (1)	6%	3.7	4.0	3.9	45	7.2	16				
(S		1%	320	360	290	3,900	640	1,400				
(PAHs)	Benzo(ghi)perylene	2.5%	340	360	470	4,000	640	1,500				
	3 7/1 7	6%	350	360	640	4,000	640	1,600				
us		1%	77	110	37	1,200	190	370				
00	Benzo(k)fluoranthene	2.5%	93	110	75	1,200	190	410				
ä	()	6%	100	110	130	1,200	190	440				
Polycyclic Aromatic Hydrocarbons		1%	15	30	4.1	350	57	93				
<u>7</u>	Chrysene	2.5%	22	31	9.4	350	57	110				
ᅚ	-	6%	27	32	19	350	57	120				
ati		1%	0.24	0.31	0.14	3.5	0.57	1.1				
Ξ	Dibenzo(ah)anthracene	2.5%	0.28	0.32	0.27	3.6	0.58	1.3				
Ā		6%	0.3	0.32	0.43	3.6	0.58	1.4				
<u>.</u> 2		1%	280	1,500	52	23,000	3,100	6,300				
딩	Fluoranthene	2.5%	560	1,600	130	23,000	3,100	6,300				
Š		6%	890	1,600	290	23,000	3,100	6,400				
Pol		1%	170	2,800 (36.0) sol	27	63,000 (30.9) sol	9,900	20,000				
1-1	Fluorene	2.5%	400	3,800 (76.5) sol	67	68,000	9,900	20,000				
		6%	860	4,500 (183) sol	160	71,000	9,900	20,000				
		1%	27	45	9.5	500	82	150				
	Indeno(123-cd)pyrene	2.5%	36	46	21	510	82	170				
		6%	41	46	39	510	82	180				
		1%	2.3 ^f	2.3 ^f	4.1 ^f	190 ^f (76.4) ^{sol}	4,900 ^f	1,200 ^f (76.4) ^{sol}				
	Naphthalene	2.5%	5.6 ^f	5.6 ^f	10 ^f	460 ^f (183) ^{sol}	4,900 ^f	1,900 ^f (183) ^{sol}				
		6%	13 ^f	13 ^f	24 ^f	1,100 ^f (432) ^{sol}	4,900 ^f	3,000				
		1%	95	1,300 (36.0) sol	15	22,000	3,100	6,200				
	Phenanthrene	2.5%	220	1,500	38	22,000	3,100	6,200				
		6%	440	1,500	90	22,000	3,100	6,300				
		1%	620	3,700	110	54,000	7,400	15,000				
	Pyrene	2.5%	1,200	3,800	270	54,000	7,400	15,000				
		6%	2,000	3,800	620	54,000	7,400	15,000				
	Coal Tar	1%	0.79	1.2	0.32	15	2.2	4.4				
	(B(a)P as surrogate	2.5%	0.98	1.2	0.67	15	2.2	4.7				
	marker)	6%	1.1	1.2	1.2	15	2.2	4.8				

NOTES
Sol/vap = solubility / vapour limit (potentially use if free product identified, although highly conservative). f = naphthalene is based on comparison of inhalation exposure with TDI_{inhal} for localised effect.

All GAC are based on sandy loam soils with a pH 7.

LQM Generic Assessment Criteria (mg/kg) Dry weight soil

With a pH 7. Contaminant	SOM	Res +	Res -	Allot.	Comm.	POS _{resi}	POS _{park}
	JOIN	1/69 ‡	1/62 -	AllUL.	Collill.	ros _{resi}	r OSpark
Aliphatic					· · · · · · · · · · · · · · · · ·		
EC 5-6	1%	42	42	730	3,200 (304) sol	570,000(304) ^{sol}	95,000 (304) sol
EC>6-8	1%	100	100	2,300	7,800 (144) sol	600,000	150,000 (144) sol
EC>8-10	1%	27	27	320	2,000 (78) sol	13,000	14,000 (78) vap
EC>10-12	1%	130 (48) vap	130 (48) vap	2,200	9,700 (48) ^{sol}	13,000	21,000 (48) ^{vap}
EC>12-16	1%	1,100 (24) sol	1,100 (24) sol	11,000	59,000 (24) sol	13,000	25,000 (24) sol
EC>16-35	1%	65,000 (8.48) f,sol	65,000 (8.48) f,sol	260,000 ^f	160,000 ^f	250,000 ^f	450,000 ^f
EC>35-44	1%	65,000 (8.48) f,sol	65,000 (8.48) ^{f,sol}	260,000 ^f	160,000 ^f	250,000 ^f	450,000 ^f
Aliphatic							
EC 5-6			78	1,700	5,900 (558) sol	590.000	130,000 (558) sol
EC>6-8	2.5%	230	230	5,600	17,000 (322) sol	610,000	220,000 (322) sol
EC>8-10	2.5%	65	65	770	4,800 (190) vap	13,000	18,000 (190) vap
EC>10-12	2.5%	330 (118) ^{vap}	330 (118) ^{vap}	4,400	23,000 (118) ^{vap}	13,000	23,000 (118) ^{vap}
EC>12-16	2.5%	2,400 (59) sol	2,400 (59) sol	13,000	82,000 (110) sol	13,000	25,000 (110) sol
EC>16-35	2.5%	92,000 (21) ^{f,sol}	92,000 (21) ^{f,sol}	270,000 ^f	1,700,000 ^f	250,000 ^f	480,000 (39)
		92,000 (21) ^{f,sol}	92,000 (21) 92,000 (21) ^{f,sol}	270,000 f	1,700,000	250,000 ^f	480,000 ^f
EC>35-44	2.5%	92,000 (21)	92,000 (21)	270,000	1,700,000	250,000	480,000
Aliphatic	601	400	460	0.000	40,000 (4, 450) ^{enl}	000 000	400 000 (4 455) 9
EC 5-6	6%	160	160	3,900	12,000 (1,150) sol	600,000	180,000 (1,150) so
EC>6-8	6%	530	530	13,000	40,000 (736) sol	620,000	320,000 (736) sol
EC>8-10	6%	150	150	1,700	11,000 (451) vap	13,000	21,000 (451) vap
EC>10-12	6%	760 (283) vap	760 (283) vap	7,300	47,000 (283) vap	13,000	24,000 (283) vap
EC>12-16	6%	4,300 (142) sol	4,400 (142) sol	13,000	90,000 (142) sol	13,000	26,000 (142) sol
EC>16-35	6%	110,000 ^f	110,000 ^f	270,000 ^f	1,800,000 ^f	250,000 ^f	490,000 ^f
EC>35-44	6%	110,000 ^f	110,000 ^f	270,000 ^f	1,800,000 ^f	250,000 ^f	490,000 ^f
Aromatic	Aromatic						
					los (
as non-threshold)	1%	70	370	13	26,000 (1,220 ^{) sol}	56,000	76,000 (1,220) sol
EC>7-8(toluene)	1%	130	860	22	56,000 (869) vap	56,000	87,000 (869) vap
EC>8-10	1%	34	47	8.6	3,500 (613) vap	5,000	7,200 (613) vap
EC5-7(benzene as non-threshold) EC>7-8(toluene) EC>8-10 EC>10-12 EC>10-12 EC>16-21 EC>21-35 EC>35-44 Aromatic	1%	74	250	13	16,000 (364) sol	5,000	9,200 (364) sol
EC>12-16	1%	140	1,800	23	36,000 (169) ^{sol}	5,100	10,000
E EC>16-21	1%	260 ^f	1,900 ^f	46 ^f	28,000 (103)	3,800 ^f	7,600 ^f
EC>21-35	1%	1,100 ^f	1,900 ^f	370 ^f	28,000 ^f	3,800 ^f	7,800 ^f
EC>21-33 EC>35-44	1%	1,100	1,900	370 ^f	28,000 ^f	3,800 ^f	7,800 ^f
Anamatia	1 /0	1,100	1,900	370	20,000	3,000	7,000
	_						
EC5-7(benzene	2.5%	140	690	27	46,000 (2,260) sol	56,000	84,000 (2,260) so
as non-threshold)						•	
EC>7-8(toluene)	2.5%	290	1,800	51	110,000 (1,920) sol	56,000	95,000 (1,920) so
EC>8-10	2.5%	83	110	21	8,100 (1,500) vap	5,000	8,500 (1,500) vap
EC>10-12	2.5%	180	590	31	28,000 (899) sol	5,000	9,700 (899) sol
EC>12-16	2.5%	330	2,300 (419) sol	57	37,000	5,100	10,000
EC>16-21	2.5%	540 ^f	1,900 ^f	110 ^f	28,000 ^f	3,800 ^f	7,700 ^f
EC>21-35	2.5%	1,500 ^f	1,900 ^f	820 ^f	28,000 ^f	3,800 ^f	7,800 ^f
EC>35-44	2.5%	1,500 ^f	1,900 ^f	820 ^f	28,000 ^f	3,800 ^f	7,800 ^f
Aromatic							
EC5-7(benzene	0.7.	0.5.5	4.455		22 222 (1 - 12) 50	50.000	00 000 // =/ 5: 50
as non-threshold)	6%	300	1,400	57	86,000 (4,710) sol	56,000	92,000 (4,710) so
EC>7-8(toluene)	6%	660	3,900	120	180,000 (4,360)	56,000	100,000 (4,360) va
,							
EC>8-10	6%	190	270	51	17,000 (3,580) vap	5,000	9,300 (3,580) vap
EC>10-12	6%	380	1,200	4	34,000 (2,150) sol	5,000	10,000
EC>12-16	6%	660	2,500	130	38,000	5,100	10,000
EC>16-21	6%	930 ^f	1,900 ^f	260 ^f	28,000 ^f	3,800 ^f	7,800 ^f
EC>21-35	6%	1,700 ^f	1,900 ^f	1,600 ^f	28,000 ^f	3,800 ^f	7,900 ^f
EC>35-44	6%	1,700 ^f	1,900 ^f	1,600 ^f	28,000 ^f	3,800 ^f	7,900 ^f
Aliphatic	1%	1,600 '	1,900 '	1,200 '	28,000 1	3.800 '	7,800
+Aromatic	2.5%	1,800 ^f	1,900 ^f	2,100 ^f	28,000 ^f	3,800 ^f	7,800 ^f
>EC44		1,800 1,900 ^f	1,900 f	3,000 ^f	28,000 ^f		7,800 f
2EU44	6%	1,900	1,900	3,000	∠0,000	3,800 ^f	7,900

NOTES
Sol / Vap = solubility / vapour limit (potentially use if free product identified, although highly conservative). f = oral, dermal and inhalation exposures compared to oral HCV.

	I GAC are based on sandy loam ils with a pH 7.			LQM Generic	Assessme	ent Criteria (mg/kg)	Dry weight	soil
	Contaminant	SOM	Res +	Res -	Allot.	Comm.	POS _{resi}	POS _{park}
	1,2 Dichloroethane	1%	7.1E-03	9.2E-03	4.6E-03	0.67	29	21
	(DCA)	2.5%	1.1E-02	1.3E-02	8.3E-03	0.97	29	24
	(BGA)	6%	1.9E-02	2.3E-02	1.6E-02	1.7	29	28
	1,1,1 Trichloroethane	1%	8.8	9.0	48	660	140,000	57,000 (1,425) vap
	(TCA)	2.5%	18	18	110	1,300	140,000	76,000 (2,915) ^{vap}
	(10/1)	6%	39	40	240	3,000	140,000	100,000 (6,392) vap
	1,1,2,2-Tetrachloroethanes	1%	1.6	3.9	0.41	270	1,400	1,800
	(PCA)	2.5%	3.4	8.0	0.89	550	1,400	2,100
	(. 3.1)	6%	7.5	17	2.0	1,100	1,400	2,300
	1,1,1,2-Tetrachloroethanes	1%	1.2	1.5	0.79	110	1,400	1,500
s	(PCA)	2.5%	2.8	3.5	1.9	250	1,400	1,800
Explosives	(1 57.)	6%	6.4	8.2	4.4	560	1,400	2,100
Si	Tetrachloroethene (PCE)	1%	0.18	0.18	0.65	19	1,400	810 (424) sol
ձ		2.5%	0.39	0.40	1.5	42	1,400	1,100 (951) sol
ш		6%	0.90	0.92	3.6	95	1,400	1,500
⋖ŏ	Tetrachloromethane (carbon	1%	2.6E-02	2.6E-02	0.45	2.9	890	190
es	tetrachloride)	2.5%	5.6E-02	5.6E-02	1.0	6.3	920	270
en	tetracriionde)	6%	0.13	0.13	2.4	14	950	400
Alkenes		1%	1.6E-02	1.7E-02	4.1E-02	1.2	120	70
/ p	Trichloroethene (TCE)	2.5%	3.4E-02	3.6E-02	9.1E-02	2.6	120	91
and '		6%	7.5E-02	8.0E-02	0.21	5.7	120	120
Chloalkanes		1%	0.91	1.2	0.42	99	2,500	2,600
a	Trichloromethane (chloroform)	2.5%	1.7	2.1	0.83	170	2,500	2,800
¥		6%	3.4	4.2	1.7	350	2,500	3,100
ě		1%	6.4E-04	7.7E-04	5.5E-04	5.9E-02	3.5	4.8
ਠ	Chloroethene (vinyl chloride)	2.5%	8.7E-04	1.0E-03	1.0E-03	7.7E-02	3.5	5.0
	,	6%	1.4E-03	1.5E-03	1.8E-03	0.12	3.5	5.4
		1%	1.6	65	0.24	1,000	130	260
	2,4,6-Trinitritoluene (TNT)	2.5%	3.7	66	0.58	1,000	130	270
		6%	8.1	66	1.4	1,000	130	270
		1%	120	13,000	17	210,000	26,000	49,000 (18.7) sol
	RDX	2.5%	250	13,000	38	210,000	26,000	51,000
		6%	540	13,000	85	210,000	27,000	53,000
		1%	5.7	6,700	0.86	110,000	13,000	23,000 (0.35) vap
	HMX	2.5%	13	6,700	1.9	110,000	13,000	23,000 (0.39) vap
		6%	26	6,700	3.9	110,000	13,000	24,000 (0.48) vap
		1%	5.7	7.3	3.2	170	18	30
	Aldrin	2.5%	6.6	7.4	6.1	170	18	31
		6%	7.1	7.5	9.8	170	18	31
		1%	0.97	7.0	0.17	170	18	30
	Dieldrin	2.5%	2.0	7.3	0.41	170	18	30
		6%	3.5	7.4	0.96	170	18	31
		1%	3.3	610	0.5	9,300	1,200	2,300
S	Atrazine	2.5%	7.8	620	1.2	9,400	1,200	2,400
<u> </u>		6%	17.4	620	2.7	9,400	1,200	2,400
Pesticides		1%	3.2E-02	6.4	4.9E-03	140	16	26
es	Dichlorvos	2.5%	6.6E-02	6.5	1.0E-02	140	16	26
ш	2.3.1101700	6%	0.02-02	6.6	2.2E-02	140	16	27
		1%	7.4	160 (3.0E-03) vap	1.2	5,600 (3.0E-03) vap	1,200	2,300
	Endosulfanns (2 isomers)	2.5%	18	280 (7.0E-03) vap	2.9	7,400 (7.0E-03) vap	1,200	2,400
	Lindosulialilis (2 isoliteis)	6%	41	410 (1.6E-02) vap	6.8	8,400 (1.6E-02) vap	1,200	2,500
			8.5E-02	3.7	1.3E-02	65	8.1	2,500
	Hexachlorocyclohexane (3	1%						
	isomers), inc Lindane	2.5%	0.2	3.8	3.2E-02	65	8.1	15
		6%	0.46	3.8	7.7E-02	65	8.1	16

NOTES
Sol / vap = solubility / vapour limit (potentially use if free product identified, although highly conservative).

All GAC are based on sandy loam soils with a pH

LQM Generic Assessment Criteria (mg/kg) Dry weight soil

	Contaminant		Res +	Res -	Allot.	Comm.	POS _{resi}	POS _{park}
		1%	0.46	0.46	5.9	56	11,000	1,300 (675) sol
	Chlorobenzene	2.5%	1.0	1.0	14	130	13,000	2,000 (1,520) sol
		6%	2.4	2.4	32	290	14,000	2,900
	Dichlorobenzenes	1%	23	24	94	2,000 (571) sol	90,000	24,000 (571) sol
	(3 isomers)	2.5%	55	57	230	4,800 (1,370) sol	95,000	36,000 (1,370) sol
	(8 136111613)	6%	130	130	540	11,000 (3,240) sol	98,000	51,000 (3,270) sol
es	Trichlorobenzenes	1%	2.6	2.6	55	220	15,000	1,700 (318) vap
e e	(3 isomers)	2.5%	6.4	6.4	140	530	17,000	2,600 (786) vap
Į Ž	(6 idefficial)	6%	15	15	320	1,300	19,000	4,000 (1,880) vap
Chlorobenzenes	Tetrachlorobenzenes (3 isomers)	1%	0.66	0.75	0.38	49 (39.4) vap	78	110 (39) vap
ě		2.5%	1.6	1.9	0.90	120 (98.1) vap	79	120
ᇊ	(8.188111818)	6%	3.7	4.3	2.2	240 (235) vap	79	130
ľ		1%	5.8	19	1.2	640 (43.0) sol	100	190
	Pentachlorobenzene	2.5%	12	30	3.1	770 (107) sol	100	190
		6%	22	38	7.0	830	100	190
		1%	1.8 (0.20) vap	4.1 (0.20) vap	0.47	110 (0.20) vap	16	30
	Hexachlorobenzene	2.5%	3.3 (0.50) vap	5.7 (0.50) vap	1.1	120	16	30
		6%	4.9	6.7 (1.2) vap	2.5	120	16	30
1=	Chlaranhanala	1%	0.87 ^g	94	0.13 ^g	3,500	620	1,100
١×	Chlorophenols (4 congeners)	2.5%	2.0	150	0.30	4,000	620	1,100
) He	(4 congeners)	6%	4.5	210	0.70	4,300	620	1,100
Chlorophenol		1%	0.22	27 (16.4) vap	3.0E-02	400	60	110
1 \(\frac{1}{2} \)	Pentachlorophenol	2.5%	0.52	29	8.0E-02	400	60	120
ပ	·	6%	1.2	31	0.19	400	60	120
		1%	0.14	0.14	4.8	11	11,000	1,300
	Carbon Disulphide	2.5%	0.29	0.29	10	22	11,000	1,900
		6%	0.62	0.62	23	47	11,000	2,700
S		1%	0.29	0.32	0.25	31	25	48
Others	Hexachlorobutadiene	2.5%	0.7	0.78	0.61	66	25	50
ŏ		6%	1.6	1.8	1.4	120	25	51
		1%	280	750	66	760 ^{dir} (31,000)	760 ^{dir} (11,000)	760 ^{dir} (8,600)
	Phenol	2.5%	550	1,300	140	1,500 ^{dir} (35,000)	1,500 ^{dir} (11,000)	1,500 ^{dir} (9,700)
		6%	1,100	2,300	280	3,200 ^{dir} (37,000)	3,200 ^{dir} (11,000)	3,200 ^{dir} (11,000)

NOTES Sol/yan

Sol / vap = solubility / vapour limit (potentially use if free product identified, although highly conservative).

dir = S4uls based on threshold protective of direct skin contact with phenol (brackets long term exposure for illustration purposes).

g = derived based on 2,3,4,6-tetrachlorophenol.



Appendix I HazWaste Online Output Sheets

The LK Group Ref: LKC 22 5242





Waste Classification Report

HazWasteOnline[™] classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

- a) understand the origin of the waste
- b) select the correct List of Waste code(s)
- c) confirm that the list of determinands, results and sampling plan are fit for purpose
- d) select and justify the chosen metal species (Appendix B)
- e) correctly apply moisture correction and other available corrections
- f) add the meta data for their user-defined substances (Appendix A)
- g) check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)





664S0-5O13K-UVD0

Job name

LKC 22 5242

Description/Comments

Project Site

LKC 22 5242 Hampstead Police Station

Classified by

Name: Company: Peter Dunn LK Group

Date:

19 Jun 2023 06:56 GMT

Telephone: **0161 763 7200**

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

HazWasteOnline™ Certification:

CERTIFIED

Course

Hazardous Waste Classification Most recent 3 year Refresher **Date** 18 Sep 2019 02 Aug 2022

Next 3 year Refresher due by Aug 2025

Purpose of classification

2 - Material Characterisation

Address of the waste

56 Roslyn Hill London Post Code NW3 1PA

SIC for the process giving rise to the waste

Description of industry/producer giving rise to the waste

Development of brownfield land

Description of the specific process, sub-process and/or activity that created the waste

construction

Description of the waste

made ground and soil





Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	WS1-1.00 - 1.20-06/03/2023	1.00 - 1.20	Non Hazardous	riazai a proportios	3
2	BH1-0.80 - 1.00-06/03/2023	0.80 - 1.00	Non Hazardous		6
3	TP6-0.60 - 0.80-07/03/2023	0.60 - 0.80	Non Hazardous		8
4	TP7-0.45 - 0.65-07/03/2023	0.45 - 0.65	Non Hazardous		10
5	WS1-1.90 - 2.00-06/03/2023	1.90 - 2.00	Non Hazardous		13
6	WS1-3.90 - 4.00-06/03/2023	3.90 - 4.00	Non Hazardous		14
7	WS1-5.90 - 6.00-06/03/2023	5.90 - 6.00	Non Hazardous		15
8	BH1-4.95-06/03/2023	4.95	Non Hazardous		16
9	BH1-8.70-06/03/2023	8.70	Non Hazardous		17
10	BH1-14.60-06/03/2023	14.60	Non Hazardous		18

Related documents

# Name	Description
1 23-03295.1.hwol	DETS South .hwol file used to populate the Job
2 LK SUITE 1 - 5	waste stream template used to create this Job

Report

Created by: Peter Dunn Created date: 19 Jun 2023 06:56 GMT

Appendices	Page
Appendix A: Classifier defined and non GB MCL determinands	19
Appendix B: Rationale for selection of metal species	20
Appendix C: Version	21

Page 2 of 22 664S0-5O13K-UVDQ9 www.hazwasteonline.com



Classification of sample: WS1-1.00 - 1.20-06/03/2023

Non Hazardous Waste Classified as 17 05 04 in the List of Waste

Sample details

Sample name: LoW Code: WS1-1.00 - 1.20-06/03/2023 Chapter: Sample Depth: 1.00 - 1.20 m

Entry:

from contaminated sites) 17 05 04 (Soil and stones other than those mentioned in 17 05

17: Construction and Demolition Wastes (including excavated soil

03)

Moisture content:

(wet weight correction)

Hazard properties

None identified

Determinands

Moisture content: 19% Wet Weight Moisture Correction applied (MC)

#		EU CLP index number	Determinand EC Number	CAS Number	CLP Note	User entere	ed data	Conv. Factor	Compound	conc.	Classification value	MC Applied	Conc. Not Used
1	4	arsenic { arsenic tr	rioxide }	1327-53-3		66	mg/kg	1.32	70.585	mg/kg	0.00706 %	√	
2	æ\$	cadmium { cadmiu 048-002-00-0	m oxide }	1306-19-0		0.7	mg/kg	1.142	0.648	mg/kg	0.0000648 %	√	
3	4				16	mg/kg	1.462	18.942	mg/kg	0.00189 %	√		
4	æ		215-160-9 oxide; copper (I) ox 215-270-7	1308-38-9 iide } 1317-39-1		317	mg/kg	1.126	289.094	mg/kg	0.0289 %	√	
5	_				4.4	mg/kg	1.353	4.824	mg/kg	0.000482 %	√		
6	_	nickel { nickel(II) ox		de) } 1313-99-1 [1]		43	mg/kg	1.273	44.324	mg/kg	0.00443 %	✓	
7	4	lead { lead composed lead lead composed lead lead composed lead comp		ception of those	1	2290	mg/kg		1854.9	mg/kg	0.185 %	√	
8	4	selenium { seleniu	m compounds with elenide and those s Annex }			<2	mg/kg	1.405	<2.81	mg/kg	<0.000281 %		<lod< th=""></lod<>
9	4		nadium pentaoxide	e; vanadium		99	mg/kg	1.785	143.154	mg/kg	0.0143 %	✓	
10	_	zinc { zinc oxide }	215-222-5	1314-13-2		171	mg/kg	1.245	172.405	mg/kg	0.0172 %	√	
11	4	oxide }	nium(VI) compound			<2	mg/kg	1.923	<3.846	mg/kg	<0.000385 %		<lod< th=""></lod<>
12	æ å	024-001-00-0 boron { diboron tric 005-008-00-8	215-607-8 oxide; boric oxide } 215-125-8	1333-82-0	-	1.9	mg/kg	3.22	4.955	mg/kg	0.000496 %	√	
13	0	TPH (C6 to C40) p		ТРН		<60	mg/kg		<60	mg/kg	<0.006 %		<lod< td=""></lod<>



HazWasteOnline™ Report created by Peter Dunn on 19 Jun 2023

			Determinand		0							eq	
#					CLP Note	User entere	d data	Conv. Factor	Compound	conc.	Classification value	Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number	CLF							MC	
14		tert-butyl methyl etl 2-methoxy-2-methy	Ipropane			<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<lod< td=""></lod<>
			216-653-1	1634-04-4	-								
15		benzene 601-020-00-8	200-753-7	71-43-2	-	<0.002	mg/kg		<0.002	mg/kg	<0.0000002 %		<lod< td=""></lod<>
16		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<lod< td=""></lod<>
			203-625-9	108-88-3	1							Н	
17	Θ	ethylbenzene 601-023-00-4	202-849-4	100-41-4	-	<0.002	mg/kg		<0.002	mg/kg	<0.0000002 %		<lod< td=""></lod<>
H		xylene	202 043 4	100 41 4	+							Н	
18		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.004	mg/kg		<0.004	mg/kg	<0.0000004 %		<lod< td=""></lod<>
19	4	cyanides { salts exception of completerricyanides and management of specified elsewhere	ex cyanides such a nercuric oxycyanide	s ferrocyanides,		<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<lod< td=""></lod<>
	Θ	006-007-00-5 pH			+							Н	
20				PH		7.6	pН		7.6	pН	7.6 pH		
21		naphthalene 601-052-00-2	000 040 5	91-20-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
H		acenaphthylene	202-049-5	91-20-3	+							Н	
22	0	, ,	205-917-1	208-96-8	-	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
23	0	acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
			201-469-6	83-32-9	1	40.1					10.00001 70	Ц	
24	0	fluorene	201-695-5	86-73-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
25	0	phenanthrene	201-581-5	85-01-8	-	0.23	mg/kg		0.186	mg/kg	0.0000186 %	✓	
00	0	anthracene	201-301-3	03-01-0		0.4			0.4	//	0.00004.0/	П	1.00
26			204-371-1	120-12-7	1	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	Ш	<lod< td=""></lod<>
27	Θ	fluoranthene	205-912-4	206-44-0		0.2	mg/kg		0.162	mg/kg	0.0000162 %	✓	
20	0	pyrene	203-312-4	200-44-0		0.47			0.400		0.0000400.0/		
28			204-927-3	129-00-0		0.17	mg/kg		0.138	mg/kg	0.0000138 %	✓	
29		benzo[a]anthracend		56-55-3		0.14	mg/kg		0.113	mg/kg	0.0000113 %	✓	
30		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	П	<lod< td=""></lod<>
\vdash		601-048-00-0 benzo[b]fluoranthei	205-923-4	218-01-9	+							Н	
31			ne 205-911-9	205-99-2	-	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
		benzo[k]fluoranther				2 :	P				0.00001	Н	
32			205-916-6	207-08-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
33	Ī	benzo[a]pyrene; benzo[def]chrysene] _	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
\vdash		601-032-00-3 200-028-5 50-32-8 indeno[123-cd]pyrene		50-32-8	+							Н	
34	0		ene 205-893-2	193-39-5		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
35		dibenz[a,h]anthrace	ene 200-181-8	52 70 3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
36	8	benzo[ghi]perylene		53-70-3	+	-0.1	ma/ka		-0.1	malle	<0.00001.0/	H	<lod< td=""></lod<>
30			205-883-8	191-24-2	1	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	Ц	\LUD
37	(1)					<2	mg/kg		<2	mg/kg	<0.0002 %		<lod< td=""></lod<>
										Total:	0.268 %	\Box	



Key

User supplied data

Determinand values ignored for classification, see column 'Conc. Not Used' for reason

Determinand defined or amended by HazWasteOnline (see Appendix A)

₫ <LOD Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration

Below limit of detection

CLP: Note 1 Only the metal concentration has been used for classification



17: Construction and Demolition Wastes (including excavated soil

Classification of sample: BH1-0.80 - 1.00-06/03/2023

Non Hazardous Waste Classified as 17 05 04 in the List of Waste

Sample details

Sample name: LoW Code: BH1-0.80 - 1.00-06/03/2023 Chapter:

Sample Depth: 0.80 - 1.00 m Entry:

from contaminated sites) 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Moisture content:

15.4%

(wet weight correction)

Hazard properties

None identified

Determinands

Moisture content: 15.4% Wet Weight Moisture Correction applied (MC)

#		EU CLP index number	Determinand EC Number	CAS Number	CLP Note	User entere	ed data	Conv. Factor	Compound	conc.	Classification value	MC Applied	Conc. Not Used
1	4		ioxide } 215-481-4	1327-53-3		12	mg/kg	1.32	13.404	mg/kg	0.00134 %	√	
2	æ\$		<mark>m oxide</mark> } 215-146-2	1306-19-0		<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<lod< td=""></lod<>
3	4	chromium in chrom		s { • 1308-38-9		19	mg/kg	1.462	23.493	mg/kg	0.00235 %	√	
4	æ	copper { dicopper o				23	mg/kg	1.126	21.908	mg/kg	0.00219 %	√	
5	æ\$		dichloride } 231-299-8	7487-94-7		<1	mg/kg	1.353	<1.353	mg/kg	<0.000135 %		<lod< td=""></lod<>
6	4	028-003-00-2	kide (nickel monoxi 215-215-7 [1] 234-323-5 [2] - [3]	1313-99-1 [1]		8	mg/kg	1.273	8.613	mg/kg	0.000861 %	✓	
7	4	lead { • lead comp specified elsewhere		ception of those	1	110	mg/kg		93.06	mg/kg	0.00931 %	√	
8	4		lenide and those s			<2	mg/kg	1.405	<2.81	mg/kg	<0.000281 %		<lod< th=""></lod<>
9	4	vanadium {	·			34	mg/kg	1.785	51.349	mg/kg	0.00513 %	✓	
10	4	023-001-00-8 zinc { zinc oxide } 030-013-00-7	215-239-8	1314-62-1		39	mg/kg	1.245	41.068	mg/kg	0.00411 %	√	
11	4	oxide }	. , .	ls { chromium(VI)		<2	mg/kg	1.923	<3.846	mg/kg	<0.000385 %		<lod< th=""></lod<>
12	0	024-001-00-0 pH	215-607-8	1333-82-0 PH	-	6.5	рН		6.5	рН	6.5 pH		
13		naphthalene 601-052-00-2	202-049-5	91-20-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>



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Report created by Peter Dunn on 19 Jun 2023

#		Determinand EU CLP index	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
14	0	acenaphthylene		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<lod< th=""></lod<>
-	0	205-917-1 208-96-8 acenaphthene	+					\dashv	
15		201-469-6 83-32-9	-	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<lod< td=""></lod<>
16	0	fluorene 201-695-5 86-73-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<lod< td=""></lod<>
17	0	phenanthrene 201-581-5 85-01-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<lod< td=""></lod<>
18	0	anthracene 204-371-1 120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<lod< td=""></lod<>
19	0	fluoranthene		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<lod< td=""></lod<>
20	0	205-912-4 206-44-0 pyrene		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<lod< td=""></lod<>
21		204-927-3 129-00-0 benzo[a]anthracene		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %	+	<lod< td=""></lod<>
		601-033-00-9 200-280-6 56-55-3	+					4	
22		chrysene 601-048-00-0 205-923-4 218-01-9	\dashv	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<lod< td=""></lod<>
23		benzo[b]fluoranthene 601-034-00-4 205-911-9 205-99-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<lod< td=""></lod<>
24		benzo[k]fluoranthene		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %	+	<lod< td=""></lod<>
		601-036-00-5 205-916-6 207-08-9	\bot					4	
25		benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 200-028-5 50-32-8	-	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<lod< td=""></lod<>
00	0	indeno[123-cd]pyrene		0.4		0.4	0.00004.0/	+	1.00
26		205-893-2 193-39-5	1	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<lod< td=""></lod<>
27		dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<lod< td=""></lod<>
28	9	benzo[ghi]perylene 205-883-8 191-24-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<lod< td=""></lod<>
		<u> </u>				Total:	0.0263 %		

Kev
,

Determinand values ignored for classification, see column 'Conc. Not Used' for reason

Determinand defined or amended by HazWasteOnline (see Appendix A)

₫ <LOD Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration

Below limit of detection

CLP: Note 1 Only the metal concentration has been used for classification



Classification of sample: TP6-0.60 - 0.80-07/03/2023

Non Hazardous Waste Classified as 17 05 04 in the List of Waste

Sample details

Sample name: LoW Code: Chapter:

TP6-0.60 - 0.80-07/03/2023 Sample Depth: 0.60 - 0.80 m

Entry:

Moisture content:

17.1%

(wet weight correction)

17: Construction and Demolition Wastes (including excavated soil from contaminated sites) 17 05 04 (Soil and stones other than those mentioned in 17 05

03)

Hazard properties

None identified

Determinands

Moisture content: 17.1% Wet Weight Moisture Correction applied (MC)

#		EU CLP index number	Determinand EC Number	CAS Number	CLP Note	User entere	ed data	Conv. Factor	Compound	conc.	Classification value	MC Applied	Conc. Not Used
1	4	arsenic { arsenic tr	ioxide } 215-481-4	1327-53-3		15	mg/kg	1.32	16.418	mg/kg	0.00164 %	√	
2	4	cadmium { cadmiu 048-002-00-0	m oxide } 215-146-2	1306-19-0		<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<lod< td=""></lod<>
3	4	chromium in chrom		s { • 1308-38-9		37	mg/kg	1.462	44.83	mg/kg	0.00448 %	√	
4	4	copper { dicopper o				27	mg/kg	1.126	25.201	mg/kg	0.00252 %	√	
5	4		dichloride } 231-299-8	7487-94-7		<1	mg/kg	1.353	<1.353	mg/kg	<0.000135 %		<lod< td=""></lod<>
6	æ	028-003-00-2	kide (nickel monoxi 215-215-7 [1] 234-323-5 [2] - [3]	1313-99-1 [1]		36	mg/kg	1.273	37.979	mg/kg	0.0038 %	✓	
7	æ \$	lead { • lead compared lead lead lead lead compared lead lead compared lead lead compared lead lead		ception of those	1	44	mg/kg		36.476	mg/kg	0.00365 %	√	
8	æ \$	selenium { selenium cadmium sulphose elsewhere in this A	elenide and those s			<2	mg/kg	1.405	<2.81	mg/kg	<0.000281 %		<lod< th=""></lod<>
9	æ	vanadium {				56	mg/kg	1.785	82.875	mg/kg	0.00829 %	✓	
10	æ\$	023-001-00-8 zinc { zinc oxide } 030-013-00-7	215-239-8	1314-62-1		66	mg/kg	1.245	68.103	mg/kg	0.00681 %	√	
11	æ\$	chromium in chromoxide }	. , ,	ls { chromium(VI)		<2	mg/kg	1.923	<3.846	mg/kg	<0.000385 %		<lod< th=""></lod<>
12	0	024-001-00-0 pH	215-607-8	1333-82-0 PH	-	8.2	рН		8.2	рН	8.2 pH		
13		naphthalene 601-052-00-2	202-049-5	91-20-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>





#			erminand		Note	User enter	ed data	Conv.	Compoun	d conc.	Classification value	MC Applied	Conc. Not
		EU CLP index EC number	Number	CAS Number	CLP			T doloi			value	MC	Oscu
14	0	acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
		205-9	17-1	208-96-8		10					10.00001 /0		1-0-
15	0	acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
		201-40	69-6	83-32-9									
16	0	fluorene 201-69	95-5	86-73-7	-	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
17	0	phenanthrene		1		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
	_	201-58	81-5	85-01-8	\vdash								
18	0	anthracene 204-3	71-1	120-12-7	-	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
19	0	fluoranthene	000 44 0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>	
20	0	pyrene 205-9	12-4	206-44-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
20		204-927-3 129-00-0				<0.1	mg/kg		<0.1	IIIg/kg	20.00001 /6		\LOD
21		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
		601-033-00-9 200-28	80-6	56-55-3		40.1	mg/ng			mg/kg	40.00001 70		1205
22		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
		601-048-00-0 205-92	23-4	218-01-9		40.1	g/kg				40.00001 70		1202
23		benzo[b]fluoranthene 601-034-00-4 205-9	11-0	205-99-2	-	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
24		benzo[k]fluoranthene			T	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
		601-036-00-5 205-9 ⁻		207-08-9									
25		benzo[a]pyrene; benzo[de				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
		601-032-00-3 200-02	28-5	50-32-8									
26	0	indeno[123-cd]pyrene	93-2	193-39-5	-	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
27		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
		601-041-00-2 200-181-8 53-70-3											
28	0	benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
		205-883-8 191-24-2								Total:	0.0322 %		

Key

Determinand values ignored for classification, see column 'Conc. Not Used' for reason

Determinand defined or amended by HazWasteOnline (see Appendix A)

₫ <LOD Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration

Below limit of detection

CLP: Note 1 Only the metal concentration has been used for classification



Classification of sample: TP7-0.45 - 0.65-07/03/2023

Non Hazardous Waste Classified as 17 05 04 in the List of Waste

03)

Sample details

Sample name: LoW Code:

TP7-0.45 - 0.65-07/03/2023 Chapter:

Sample Depth: 0.45 - 0.65 m Moisture content:

Entry:

12.1%

(wet weight correction)

17: Construction and Demolition Wastes (including excavated soil from contaminated sites)17 05 04 (Soil and stones other than those mentioned in 17 05

Hazard properties

None identified

Determinands

Moisture content: 12.1% Wet Weight Moisture Correction applied (MC)

#		EU CLP index number	Determinand EC Number	CAS Number	CLP Note	User enter	ed data	Conv. Factor	Compound	conc.	Classification value	MC Applied	Conc. Not Used
1	æ e		ioxide } 215-481-4	1327-53-3		7	mg/kg	1.32	8.124	mg/kg	0.000812 %	✓	
2	4	cadmium { <mark>cadmiu</mark>		1306-19-0		<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<lod< td=""></lod<>
3	4	chromium(III) oxide		l 1308-38-9		12	mg/kg	1.462	15.416	mg/kg	0.00154 %	√	
4	ď	copper { dicopper o				19	mg/kg	1.126	18.803	mg/kg	0.00188 %	√	
5	ď	mercury { mercury		7487-94-7		<1	mg/kg	1.353	<1.353	mg/kg	<0.000135 %		<lod< td=""></lod<>
6	4		<mark>kide (nickel monoxi</mark> 215-215-7 [1] 234-323-5 [2] - [3]	1313-99-1 [1]		9	mg/kg	1.273	10.067	mg/kg	0.00101 %	✓	
7	ď	lead { lead compospecified elsewher		ception of those	1	78	mg/kg		68.562	mg/kg	0.00686 %	√	
8	4		elenide and those s			<2	mg/kg	1.405	<2.81	mg/kg	<0.000281 %		<lod< td=""></lod<>
9	4	pentoxide }	nadium pentaoxide	; vanadium		21	mg/kg	1.785	32.953	mg/kg	0.0033 %	√	
10	4	zinc { zinc oxide }	215-222-5	1314-13-2		30	mg/kg	1.245	32.823	mg/kg	0.00328 %	√	
11	4	oxide }	. , .	, ,		<2	mg/kg	1.923	<3.846	mg/kg	<0.000385 %		<lod< th=""></lod<>
12	ď	boron { diboron tric	215-607-8 oxide; boric oxide } 215-125-8	1333-82-0		1.1	mg/kg	3.22	3.113	mg/kg	0.000311 %	✓	
13	0	TPH (C6 to C40) p		TPH		<60	mg/kg		<60	mg/kg	<0.006 %		<lod< td=""></lod<>



HazWasteOnline[™]
Report created by Peter Dunn on 19 Jun 2023

U]	RUL									-		
#		EU CLP index	Determinand EC Number	CAS Number	CLP Note	User entere	d data	Conv. Factor	Compound of	conc.	Classification value	MC Applied	Conc. Not Used
		number			0							2	
14		tert-butyl methyl et 2-methoxy-2-methy 603-181-00-X		1634-04-4	-	<0.005	mg/kg		<0.005	mg/kg	<0.000005 %		<lod< td=""></lod<>
15		benzene 601-020-00-8	200-753-7	71-43-2		<0.002	mg/kg		<0.002	mg/kg	<0.0000002 %		<lod< td=""></lod<>
16		toluene 601-021-00-3	203-625-9	108-88-3	-	<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<lod< td=""></lod<>
17	Θ	ethylbenzene 601-023-00-4	202-849-4	100-41-4		<0.002	mg/kg		<0.002	mg/kg	<0.0000002 %		<lod< td=""></lod<>
18		xylene 601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.004	mg/kg		<0.004	mg/kg	<0.0000004 %		<lod< td=""></lod<>
19	4	cyanides { salts exception of completerricyanides and respective elsewhere	lex cyanides such mercuric oxycyanic	as ferrocyanides,		<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<lod< td=""></lod<>
20	0	рН		PH		8.9	рН		8.9	рН	8.9 pH		
21		naphthalene 601-052-00-2	202-049-5	91-20-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
22	0	acenaphthylene	205-917-1	208-96-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
23	0	acenaphthene	201-469-6	83-32-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
24	9	fluorene	201-695-5	86-73-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
25	9	phenanthrene	201-581-5	85-01-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
26	0	anthracene	204-371-1	120-12-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
27	0	fluoranthene	205-912-4	206-44-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
28	0	pyrene	204-927-3	129-00-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
29		benzo[a]anthracen 601-033-00-9	e 200-280-6	56-55-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
30		chrysene 601-048-00-0	205-923-4	218-01-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
31		benzo[b]fluoranthe 601-034-00-4	ne 205-911-9	205-99-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
32		benzo[k]fluoranthe 601-036-00-5	ne 205-916-6	207-08-9	1	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
33		benzo[a]pyrene; be	enzo[def]chrysene 200-028-5	50-32-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
34	0	indeno[123-cd]pyre	ene 205-893-2	193-39-5		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
35		dibenz[a,h]anthrac 601-041-00-2	ene 200-181-8	53-70-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
36	0	benzo[ghi]perylene	1	191-24-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
37	0	monohydric pheno	1	P1186	T	<2	mg/kg		<2	mg/kg	<0.0002 %		<lod< td=""></lod<>
	-	<u> </u>	1	1						Total:	0.0264 %		





Key

User supplied data

Determinand values ignored for classification, see column 'Conc. Not Used' for reason

Determinand defined or amended by HazWasteOnline (see Appendix A)

₫ <LOD Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration

Below limit of detection

CLP: Note 1 Only the metal concentration has been used for classification

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Classification of sample: WS1-1.90 - 2.00-06/03/2023

Non Hazardous Waste Classified as 17 05 04 in the List of Waste

Sample details

 Sample name:
 LoW Code:

 WS1-1.90 - 2.00-06/03/2023
 Chapter:

 Sample Depth:
 Entry:

from contaminated sites)

17 05 04 (Soil and stones other than those mentioned in 17 05 03)

17: Construction and Demolition Wastes (including excavated soil

Moisture content:

19.1%

(wet weight correction)

Hazard properties

None identified

Determinands

Moisture content: 19.1% Wet Weight Moisture Correction applied (MC)

#			number		Note	User entered data	Conv. Factor	Compound conc.	Classification value	Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number	CLP		racion			MC,	Oseu
1	0	рН		PH		7.9 pH		7.9 pH	7.9 pH		
								Total:	0%		

Key

User supplied data

Determinand defined or amended by HazWasteOnline (see Appendix A)





Classification of sample: WS1-3.90 - 4.00-06/03/2023

Non Hazardous Waste Classified as 17 05 04 in the List of Waste

Sample details

Sample name: LoW Code: WS1-3.90 - 4.00-06/03/2023 Chapter: Sample Depth: 3.90 - 4.00 m Entry: Moisture content: 19.7% (wet weight correction)

17: Construction and Demolition Wastes (including excavated soil from contaminated sites)17 05 04 (Soil and stones other than those mentioned in 17 05

03)

Hazard properties

None identified

Determinands

Moisture content: 19.7% Wet Weight Moisture Correction applied (MC)

#			Determinand U CLP index number CAS Number		Note	User entered data	Conv. Factor	Compound	d conc.	Classification value	Applied	Conc. Not Used
		number		CLP		i actor			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		Oseu	
1	0	pH		PH		7.7 pH		7.7	рН	7.7 pH		
									Total:	0%		

Key

User supplied data

Determinand defined or amended by HazWasteOnline (see Appendix A)

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Classification of sample: WS1-5.90 - 6.00-06/03/2023

Non Hazardous Waste Classified as 17 05 04 in the List of Waste

Sample details

 Sample name:
 LoW Code:

 WS1-5.90 - 6.00-06/03/2023
 Chapter:

 Sample Depth:
 Entry:

from contaminated sites)

17 05 04 (Soil and stones other than those mentioned in 17 05 03)

17: Construction and Demolition Wastes (including excavated soil

Moisture content:

18.7%

(wet weight correction)

Hazard properties

None identified

Determinands

Moisture content: 18.7% Wet Weight Moisture Correction applied (MC)

#		EU CLP index	Determinand EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	0	рН		PH		7.6 pH		7.6 pH	7.6 pH		
								Total:	0%	П	

Key

User supplied data

Determinand defined or amended by HazWasteOnline (see Appendix A)





Classification of sample: BH1-4.95-06/03/2023

Non Hazardous Waste Classified as 17 05 04 in the List of Waste

Sample details

Sample name:

BH1-4.95-06/03/2023
Chapter:
Sample Depth:
4.95 m
Entry:
Moisture content:
18.9%
(wet weight correction)

17: Construction and Demolition Wastes (including excavated soil from contaminated sites)

17 05 04 (Soil and stones other than those mentioned in 17 05 03) $\,$

Hazard properties

None identified

Determinands

Moisture content: 18.9% Wet Weight Moisture Correction applied (MC)

#		Determinand			Note	User entered data	Conv.	Compound conc.	Classification value	Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number	CLP		Factor		value	MC,	Oseu
1	0	pH	PH			7.8 pH		7.8 pH	7.8 pH		
Total:											

Key

User supplied data

Determinand defined or amended by HazWasteOnline (see Appendix A)

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Classification of sample: BH1-8.70-06/03/2023

Non Hazardous Waste Classified as 17 05 04 in the List of Waste

Sample details

Sample name: LoW Code: BH1-8.70-06/03/2023 Chapter: Sample Depth: 8.70 m Entry:

Moisture content:

16.8%

(wet weight correction)

17: Construction and Demolition Wastes (including excavated soil from contaminated sites) 17 05 04 (Soil and stones other than those mentioned in 17 05

03)

Hazard properties

None identified

Determinands

Moisture content: 16.8% Wet Weight Moisture Correction applied (MC)

#		ELLCL P index			LP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	9	number								2	
1		P		PH		8.2 pH		8.2 pH	8.2 pH		
Total: 0									0%		

Key

User supplied data

Determinand defined or amended by HazWasteOnline (see Appendix A)



Classification of sample: BH1-14.60-06/03/2023

Non Hazardous Waste Classified as 17 05 04 in the List of Waste

Sample details

Sample name: LoW Code:
BH1-14.60-06/03/2023 Chapter:
Sample Depth:
14.60 m Entry:
Moisture content:
16.7%
(wet weight correction)

17: Construction and Demolition Wastes (including excavated soil from contaminated sites)

17 05 04 (Soil and stones other than those mentioned in 17 05 03) $\,$

Hazard properties

None identified

Determinands

Moisture content: 16.7% Wet Weight Moisture Correction applied (MC)

#		Determinand			Note	User entered data	Conv.	Compound conc.	Classification value	Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number	CLP	Factor		value	MC,	Oseu	
1	0	pH	PH			8.3 pH		8.3 pH	8.3 pH		
Total:											

Key

User supplied data

Determinand defined or amended by HazWasteOnline (see Appendix A)

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Appendix A: Classifier defined and non GB MCL determinands

• chromium(III) oxide (worst case) (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from C&L Inventory Database

Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806

Data source date: 17 Jul 2015

Hazard Statements: Acute Tox. 4; H332 , Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Resp. Sens. 1; H334 , Skin Sens. 1; H317 , Repr. 1B; H360FD , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

lead compounds with the exception of those specified elsewhere in this Annex

GB MCL index number: 082-001-00-6

Description/Comments: Least-worst case: IARC considers lead compounds Group 2A; Probably carcinogenic to humans; Lead REACH Consortium, following MCL protocols, considers many simple lead compounds to be Carcinogenic category 2

Additional Hazard Statement(s): Carc. 2; H351 Reason for additional Hazards Statement(s):

20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2A (Sup 7, 87) 2006; Lead REACH Consortium www.reach-lead.eu/substanceinformation.html. Review date 29/09/2015

divanadium pentaoxide; vanadium pentoxide (EC Number: 215-239-8, CAS Number: 1314-62-1)

GB MCL index number: 023-001-00-8

Description/Comments: Hazard statements H301, H330, H350 added by HazWasteOnline due to ATP 18 (Regulation (EU) 2022/692) considers vanadium pentoxide to be Carc. 1B; H350. The GB MCL Agency has reached the same opinion [but is yet to formerly make this change to the MCL List]. Substance has therefore been self-classified.

Additional Hazard Statement(s): Carc. 1B; H350, Acute Tox. 3; H301, Acute Tox. 2; H330

Reason for additional Hazards Statement(s):

20 Sep 2022 - Carc. 1B; H350 hazard statement sourced from: ATP 18 (Regulation (EU) 2022/692) considers vanadium pentoxide to be Carc. 1B; H350. The GB MCL Agency has reached the same opinion [but is yet to formerly make this change to the MCL List]. Substance has therefore been self-classified.

28 Sep 2022 - Acute Tox. 3; H301 hazard statement sourced from: ATP 18 (Regulation (EU) 2022/692) considers vanadium pentoxide to be "Acute tox 3; H301". The GB MCL Agency has reached the same opinion [but is yet to formerly make this change to the MCL List]. Substance has therefore been self-classified.

28 Sep 2022 - Acute Tox. 2; H330 hazard statement sourced from: ATP 18 (Regulation (EU) 2022/692) considers vanadium pentoxide to be "Acute tox 2; H330". The GB MCL Agency has reached the same opinion [but is yet to formerly make this change to the MCL List]. Substance has therefore been self-classified.

pH (CAS Number: PH)

Description/Comments: Appendix C4 Data source: WM3 1st Edition 2015 Data source date: 25 May 2015 Hazard Statements: None.

acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database

Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database

Data source date: 17 Jul 2015

Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 1; H330 , Acute Tox. 1; H310 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315

acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database

Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database

Data source date: 17 Jul 2015

Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Aquatic Chronic 2; H411

• fluorene (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database

Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database

Data source date: 06 Aug 2015

Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database

 ${\bf Data\ source:\ http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database}$

Data source date: 06 Aug 2015

Hazard Statements: Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Carc. 2; H351 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Skin Irrit. 2; H315



anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database

Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database

Data source date: 17 Jul 2015

Hazard Statements: Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315, Skin Sens. 1; H317, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

• fluoranthene (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database

Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database

Data source date: 21 Aug 2015

Hazard Statements: Acute Tox. 4; H302, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database

Data source date: 21 Aug 2015

Hazard Statements: Skin Irrit. 2; H315, Eye Irrit. 2; H319, STOT SE 3; H335, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

• indeno[123-cd]pyrene (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database

Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database

Data source date: 06 Aug 2015 Hazard Statements: Carc. 2; H351

• benzo[ghi]perylene (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015 Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database

Data source date: 23 Jul 2015

Hazard Statements: Aquatic Acute 1; H400, Aquatic Chronic 1; H410

• TPH (C6 to C40) petroleum group (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013

Data source: WM3 1st Edition 2015 Data source date: 25 May 2015

Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , STOT RE 2; H373 , Muta. 1B; H340 , Carc. 1B; H350 , Repr. 2; H361d , Aquatic Chronic 2;

H411

ethylbenzene (EC Number: 202-849-4, CAS Number: 100-41-4)

GB MCL index number: 601-023-00-4

Description/Comments:

Additional Hazard Statement(s): Carc. 2; H351 Reason for additional Hazards Statement(s):

20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2B (77) 2000

salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex

GB MCL index number: 006-007-00-5

Description/Comments: Conversion factor based on a worst case compound: sodium cyanide

Additional Hazard Statement(s): EUH032 >= 0.2 % Reason for additional Hazards Statement(s):

20 Nov 2021 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

monohydric phenols (CAS Number: P1186)

Description/Comments: Combined hazards statements from harmonised entries in CLP for phenol, cresols and xylenols (604-001-00-2, 604-004-00-9, 604-006-00-X)

Data source: CLP combined data
Data source date: 26 Mar 2019

Hazard Statements: Muta. 2; H341 , Acute Tox. 3; H331 , Acute Tox. 3; H311 , Acute Tox. 3; H301 , STOT RE 2; H373 , Skin Corr. 1B; H314 , Skin Corr. 1B; H314 >= 3% , Skin Irrit. 2; H315 1 £ conc. < 3% , Eye Irrit. 2; H319 1 £ conc. < 3% , Aquatic Chronic 2; H411

Appendix B: Rationale for selection of metal species

arsenic {arsenic trioxide}

Reasonable case CLP species based on hazard statements/molecular weight and most common (stable) oxide of arsenic. Industrial sources include: smelting; main precursor to other arsenic compounds

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cadmium {cadmium oxide}

Reasonable case CLP species based on hazard statements/molecular weight, very low solubility in water. Industrial sources include: electroplating baths, electrodes for storage batteries, catalysts, ceramic glazes, phosphors, pigments and nematocides.

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

Reasonable case species based on hazard statements/molecular weight. Industrial sources include: tanning, pigment in paint, inks and glass

copper {dicopper oxide; copper (I) oxide}

Reasonable case CLP species based on hazard statements/molecular weight and insolubility in water. Industrial sources include: oxidised copper metal, brake pads, pigments, antifouling paints, fungicide. Worse case copper sulphate is very soluble and likely to have been leached away if ever present and/or not enough soluble sulphate detected.

mercury {mercury dichloride}

Worst case CLP species based on hazard statements/molecular weight

nickel (nickel(II) oxide (nickel monoxide))

Worst case compound based on absence of CrVI and assumed metal oxides from a combustion, ash based source.

lead {lead compounds with the exception of those specified elsewhere in this Annex}

Worst case compound based on absence of CrVI and assumed metal oxides from a combustion, ash based source.

selenium (selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex)

Harmonised group entry used as most reasonable case. Pigment cadmium sulphoselenide not likely to be present in this soil. No evidence for the other CLP entries: sodium selenite, nickel II selenite and nickel selenide, to be present in this soil.

vanadium {divanadium pentaoxide; vanadium pentoxide}

Most conservative species.

zinc {zinc oxide}

Worst case compound based on absence of CrVI and assumed metal oxides from a combustion, ash based source.

chromium in chromium(VI) compounds {chromium(VI) oxide}

Worst case CLP species based on hazard statements/molecular weight. Industrial sources include: production stainless steel, electroplating, wood preservation, anti-corrosion agents or coatings, pigments

boron {diboron trioxide; boric oxide}

Reasonable case CLP species based on hazard statements/ molecular weight, physical form and low solubility. Industrial sources include: fluxing agent for glass/enamels; additive for fibre optics, borosilicate glass.

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Harmonised group entry used as most reasonable case as complex cyanides and those specified elsewhere in the annex are not likely to be present in this soil: [Note conversion factor based on a worst case compound: sodium cyanide]

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.2.GB - Oct 2021
HazWasteOnline Classification Engine Version: 2023.111.5569.10274 (13 Jun 2023)

HazWasteOnline Database: 2023.111.5569.10274 (22 Apr 2023)





This classification utilises the following guidance and legislation:

WM3 v1.2.GB - Waste Classification - 1st Edition v1.2.GB - Oct 2021

CLP Regulation - Regulation 1272/2008/EC of 16 December 2008

1st ATP - Regulation 790/2009/EC of 10 August 2009

2nd ATP - Regulation 286/2011/EC of 10 March 2011

3rd ATP - Regulation 618/2012/EU of 10 July 2012

4th ATP - Regulation 487/2013/EU of 8 May 2013

Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013

5th ATP - Regulation 944/2013/EU of 2 October 2013

6th ATP - Regulation 605/2014/EU of 5 June 2014

WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014

Revised List of Waste 2014 - Decision 2014/955/EU of 18 December 2014

7th ATP - Regulation 2015/1221/EU of 24 July 2015

8th ATP - Regulation (EU) 2016/918 of 19 May 2016

9th ATP - Regulation (EU) 2016/1179 of 19 July 2016

10th ATP - Regulation (EU) 2017/776 of 4 May 2017

HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017

13th ATP - Regulation (EU) 2018/1480 of 4 October 2018

14th ATP - Regulation (EU) 2020/217 of 4 October 2019

15th ATP - Regulation (EU) 2020/1182 of 19 May 2020

The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit)

Regulations 2020 - UK: 2020 No. 1567 of 16th December 2020

The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020 - UK:

2020 No. 1540 of 16th December 2020

GB MCL List - version 1.1 of 09 June 2021

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