

BOREHOLE LOG

Project BOREHOLE N													No		
	Hilly	croft											DL	ıno	
	Job No			Date			Ground L	evel (m)	Co-Oı	rdinates ()			ОГ	108	
	23-()87			24-02-2	23									
	Contractor												Sheet		
	Arc !	Enviro	nmen	tal Li	mited								1 0	of 1	
	SAMPLE	ES & T	EST	$\overline{\mathbf{s}}$.					STRA	TA				Ι.	ent/
	Depth	Type No	Tes Res	st N	Reduc Leve	ed Legend	Depth (Thick-ness)			DESCI	RIPTION			Geology	Instrument/ Backfill
	- 0.05-0.15	J/D				XXX		Asphalt (M							
	-	0,15				<u> </u>	0.15	Black grave Light brown				AL SOIL)			
	-							Light blow	ii iiiottica g	gicy CL211	(RESIDO)	il soil)			
	0.40-0.60	J/D					(0.65)								
	-						(0.03)								
	-														
	0.80-1.00	0.80-1.00 B										OIL)			
	-	-					:)		
	1.00-1.45	SPT	N=	12		<u> </u>	<u>†</u>								
	-						(0.80)								
	-						+								
	1.40-1.60	В					<u>.</u>								
	-						1.60								
	-						-	Weak orang COAL ME	gish brown ASURES I	weathered	MUDSTO. DN)	NE (PENNI	NE LOWER		
	1.80-2.00	В					-				Ź				
	_						(0.71)								
	2.00-2.31	SPT	74 Blov				-								
	-		Dio	ws			3.1								
	-						2.31								2407
	-														
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5	-						-								
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	_														
5	Borin	ıg Prog	ress) bservati			Chisellin	g	Water	Added	GENE		
5	Date	Time	Dep	th	Depth Cas	sing Dia. mm	Water Dpt	From	То	Hours	From	То	REMA	RKS	
													Borehole remai	ned dr	у
													during explorat	ory per	riod
	All dimensi	ons in m	etres	Clier		phen Sm	ith	Meth	od/	T 1	- C - 1'		Logged By		
9	Scal	e 1:25			Co	nstructio	n	Plant	usea W	indowles	s Samplii	ng	D(j	



Project											DRILLH	IOLE	No
Hilly Job No	ycroft	Dat	·e		Ground Level (n	n)	Co-Ot	rdinates (<u> </u>		RB	H01	
23-(087	Dat	20-03- 20-03-	$\begin{bmatrix} 23 \\ 23 \end{bmatrix}$	Ground Lever (II	-)	00 0	(diffutes	,				
Contractor											Sheet		
			Limited								0	l - 2	1.
RUN D					T		STRA						Instrument/
Depth (SC	R (SI R) Frac	nuic 1	Red'cd Level Leg	Deptlend (Thick-	Discontinuitie			DESCR Detail	IPTION	Main		Geology	strur
ŘQ	D Spa	cing		ness) 0.20	2	.		Detail	Grass overly	ing dark bro	wn topsoil. DE /	9	11 1
				==				\	GROUND) Dark grey co	olliery spoil	ill. Drillers		
				(1.90)					description (Light brown description (CLAY. Dri	lers		
				2.4					description (KESIDUAL	(SOIL)		
									Dark grey M shale. Driller	s description	recovered as 1 (LOWER		
				(1.90)					COAL MEA	SUKES)			
				4.30									
				4.70					Reddish brov recovered as	shale. Drille	ers description		
									\(LOWER CO BROKEN G	ROUND wi	th small		
			(1.90) VOIDS Drillers				VOIDS noted Drillers descri	d. No flush i ription.	eturns.				
			6.60										
									SOLID DRII Drillers desc		flush returns.		
Drilling Progress and Water Observati						Rota	ary Flush		GENE				
Date	Time	Depth	Casing	Core Dia mm	Strike Stan	ding	From 0	To 4.7	Type Water	Returns 100	REMA All descriptions		on
							4.7 6.6	6.6	Water Water	0 100	drillers interpre cuttings brough and drilling rate maintained	tations at to sur	of
	Il dimensions in metres Scale 1:81.25 Client Stephen Smith Construction					Meth		Onan L	Hole Rotary		Logged By D	Γ	



Project									DRILLE	IOLE	No	
	croft	ъ.		C 17	1.7.	10.0	1'			RB	H01	
Job No 23-0	07	Date 20-	-03-23 -03-23	Ground Level	l (m)	Co-Or	dinates ()					
Contractor	<i>1</i> 87	20-	-03-23							Sheet		
	Environme	ntal Limit	ted								2	
	ETAILS					STRAT	 Γ A			0	2	nt/
		Red'cd	De	pth				PTION			Geology	Instrument/
Depth (SC)	R) Fractur D Spacing	Red'cd Level	Legend (Thic ness)	k- Discontinu	ities		Detail		Main		Geo	Instr
		ogress and	l Water Ob	.00 servations	tanding	From		ry Flush Type	Returns	GENE REMA	RAL	
			50 100mr	n				7,92		All description drillers interpre cuttings brough and drilling rat maintained	s based	οf
All dimensi Scale	ons in metres 1:81.25	Client	Stephen Stephe	mith on	Meth- Plant	od/ Used (Open H	ole Rotary		Logged By D	Γ	



	Project											DRILLH	OLE	No
		Hillycr	oft									RBI	H02	
	Job No	22 005	_	Date 20	-03-23	Ground L	evel (m)	Co-C	Ordinates (0			102	
-	Contrac	23-087	/	21-	-03-23							Sheet		
			vironme	ntal Limit	ted							Sheet	1	
L [FAILS					STRA	Т Л			0:		<u>-</u>
ŀ			(SPT)	D 11 1	De	epth				LIPTION)gy	ımen
	Depth	TCR (SCR) RQD	Fracture Spacing	Red'cd Level	Legend (Thiness	ck-	inuities		Detail	an more	Main		Geology	Instrument/
l		1142	- Spuring	'	XXX	0.50				Grass overly Drillers desc	ing dark bro	wn topsoil.		
										\GROUND)		/		
						1.00				Dark grey C. RESIDUAI)	LAY. Drille: LSOIL)	rs description		
										Light brown description (CLAY. Dril RESIDUAI	lers SOIL)		
					(1.8	30)						, s = 12)		
						2.80								
						2.00				Dark grey ar	nd brown M	JDSTONE ers description		
										(LOWER CO	DAL MEAS	URES)		
						-0.								
					(3.7	(0)								
						6.50								
										BROKEN G VOIDS note	ROUND wi	th small eturns		
										Drillers desc	ription.	cturis.		
					(2.4	10)								
						8.90								
						3.50				SOLID DRI Drillers desc		flush returns.		
										Difficis desc	ripuon.			
_														
31/3/2														
3DT														
ALL.														
AGS3														
.GPJ		Dril	lling Pro			servations			Rota	ary Flush		GENE	RAL	
ROFI	Date	Tin	ne De	pth Cas	sing Core I	Oia Strike	ater Standing	11	То	Type	Returns	REMA		
AGS3 UK DH BH LOGS 23-087 HILLYCROFT, GPJ AGS3 ALL.GDT 31/3/23								0 6.5 8.9	6.5 8.9 20	Water Water Water	100 0 100	All descriptions drillers interpre cuttings brough and drilling rate maintained	tations t to sur	of
BH LOGS 2												manitanicu		
된	A 11 -1:	norai	in mater	Client	Stanhan	Smith	Ma	thod/				Logged By		
AGS3	All din S	dimensions in metres Scale 1:81.25 Client Stephen Sm Construction						nt Used	Open I	Hole Rotary		D	Γ	



Project		_										DRILLE	HOLE	No
Job No	illycro		Date 20			Ground Level (n	n)	Co-Oı	rdinates	0		RB	H02	l I
	3-087		∠∪.	-03-23 -03-23	3	Ground Lever (n	.1)	000	dilacos	O				
Contracto												Sheet		
		rironmen	tal Limit	ted								0	2 • 2	
	DET			1	T D 4	T		STRA						nent/
Depth	TCR SCR)	(SPT) Fracture	Red'cd Level	Legen	Depth d (Thick-	Discontinuitie			DESCR Detail	<u>AIPTION</u>	Main		Geology	Instrument/ Backfill
1	RQD	Spacing		XXX	ness)	Discontinuitie	<u> </u>		Detail	SOLID DR	ILLING. No	flush returns.		II B
					20.00						scription. (co.	шинси)		
Date 20-03-23 All dime Sca	Drill	ing Prog		l Wat	er Obse	rvations			Rot	ary Flush		GENE	RAL	
Date	Tim				Core Dia	Water Strike Stan	ding	From	То	Туре	Returns	REMA		
20-03-23	0.00	0 20.0	00 1.:	50	100mm							All description drillers interpre cuttings brough and drilling rat maintained	etations	of
All dime	dimensions in metres Scale 1:81.25 Client Stephen Smith Construction				th	Meth	nod/ t Used	Open I	Hole Rotar	v	Logged By D'	Γ		

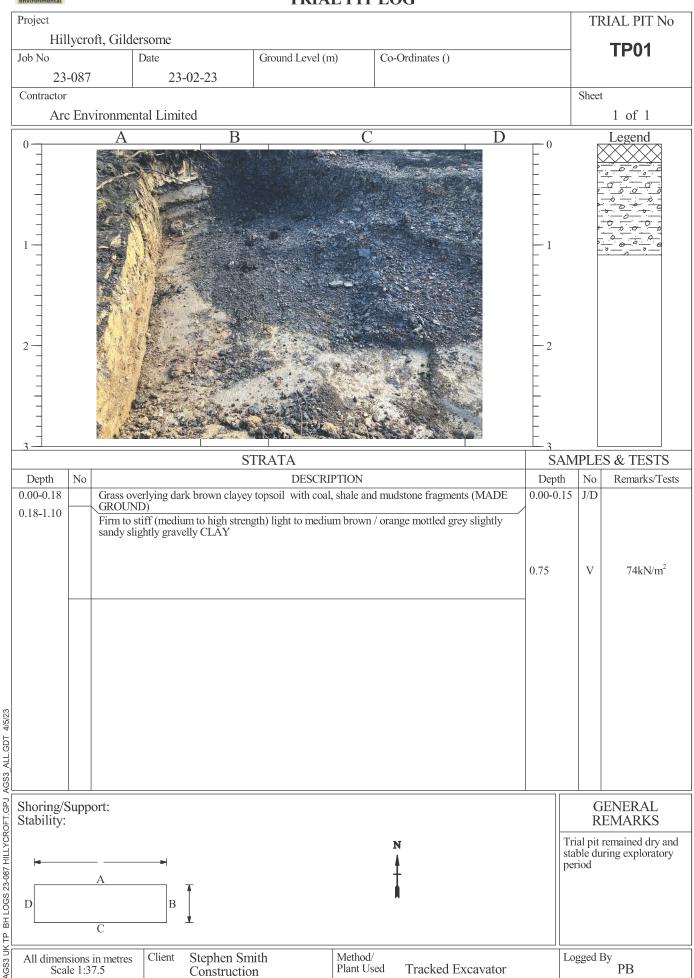


Project												DRILLE	HOLE	No
Job No	Hillyere	oft	Date 2			Ground Level (r	n)	Co-O	rdinates ()		RB	H03	
	23-087	1		1-03-23 1-03-23	}	Ground Lever (1	,		ramates (,				
Contract			1									Sheet		
			ental Lim	ited								0	1	
		TAILS			T 75 d	T		STRA						Instrument/ Backfill
Depth	TCR (SCR)	(SPT) Fractur	e Kuuci	Legen	Depth d (Thick-	Discontinuitie		I		IPTION	Main		Geology	strur ackfi
	RQD	Spacin	g		ness) 0.10		:S		Detail	Black aspha	Main lt. Drillers d	escription		면관
					0.30				N	\(MADE GR \Black ashy g		ase. Drillers		
					(1.50)				\	\description (MADE GR	OUND) ers description		
										(RESIDUAI	L SOIL)	-		
					2.00	<u>)</u>				Light brown description (RESIDUAI	SOIL)	_	
					<u>‡</u>					Dark grey ar recovered as	shale. Drill	ers description		
					<u>‡</u>					(LOWER CO	OAL MEAS	SURES)		
														
					<u> </u>									
					(4.90)									
					<u> </u>									
					<u>‡</u>									
				<u> </u>										
														
					6.90	<u>)</u>				BROKEN G	ROUND w	ith emall		
										VOIDS note Drillers desc	d. No flush			
					(2.30)					Difficis desc	ription.			
					(2.30)									
					9.20	<u>)</u>			-	SOLID DRI	LLING. No	flush returns.		
					}					Drillers desc	cription.			
					F									
Drilling Progress and Water Observation				rvations			Rota	ary Flush		GENE	RAL			
Date	Tin	ne D	epth C	asing	Core Dia mm	Water Strike Star	ding	From	То	Type	Returns	REMA		
								0 6.9 9.2	6.9 9.2 20	Water Water Water	100 0 100	All description drillers interpre cuttings brough and drilling rat maintained	etations	of
All dim	All dimensions in metres Client Stephen Smit				th	Meth					Logged By			
							Plan	t Used	Open F	Iole Rotary	=	D'	Γ	



Project DRILLHOLI													OLE	No		
		Hillycr	oft											RBI	⊓U3	Į.
	Job No			Date	21-0)3-23		Ground Le	evel (m)	Co-O	rdinates	0		KDI	103	,
		23-087	7		21-0)3-23								CI .		
	Contrac		vironme	ntol I i	imita	A								Sheet	,	
				mai L	шие	a				GTTD 4.5				0		T _S
			(SPT)				Depth			STRA		IDTION			şs	Instrument/ Backfill
	Depth	TCR (SCR) RQD	(SPT) Fracture	Rec	d'ed vel	.egend (Thick-	Disconti	nuitios		Detail	<u>AIPTION</u>	Main		Geology	nstru ackf
		RQD	Spacing			r V	ness)	Disconti	nuities		Detail	SOLID DR		flush returns.	9	H M
ALL: GD 31/3/23						20.00					cription. (con	ntinued)				
		D'1	lin ~ D::	<u> </u>	010.4.7	Water	Olaca	m voti a			D = 4	ow , El1-			<u> </u>	
5 -	Date	Drilling Progress and Water Observations Date Time Depth Casing Core Dia Water Strike Stand		ater	From	To	ary Flush	Returns	GENE REMA	KAL RKS						
1 DIT LOGO 20-001 1 IILL 1 01101	Date 21-03-23	+		.00				Strike	Standing	From	То	Туре	Keturns	All descriptions drillers interpre cuttings brough and drilling rate maintained	s based	d on s of
All dimensions in metres Client Stephen Smith Method/ Plant Used Or Or Or Plant Used Or Or Or Or Or Or Or O							Open I	Hole Rotary	<u> </u> V	Logged By D	<u> </u>					







environmental				IMA	LFII	LUG				
Project									TI	RIAL PIT No
	roft, Gilder			17 1/	`	G 0 1' + /	`			TP02
Job No 23-08		Date 23-02-		ound Level (n	1)	Co-Ordinates ()			
Contractor	07	23-02-	23						Shee	
	nvironment	al Limited								1 of 1
	A		В		С		D			Legend
1 —										
3 —								<u> </u>		
			STRA							ES & TESTS
		wking dowlet -	own / block of-			ale and mydate:	na fragmants	Dept		Remarks/Tests
0.22-1.20	Depth No DESCRIPTION 0.00-0.22 0.22-1.20 Grass overlying dark brown / black clayey topsoil with coal, shale and mudstone fragments (MADE GROUND) Firm dark brown / grey very clayey fragmented shale, mudstone and coal with occasional sandstone (colliery spoil) (MADE GROUND)									NEWIED A L
Shoring/Sup Stability:	pport: A C	B				N + +			R Trial pit	GENERAL EMARKS remained dry and uring exploratory
All dimension Scale 1	ns in metres :37.5	Client Ste	ephen Smith		Method/ Plant Use	d Tracked	l Excavator		Logged 1	By PB



Project If fillycroft, Gildersome John No 23-02-23 Contractor Are Environmental Limited A B C D Legend 1 of 1 Legend 2 - 2 Shorting Support: Consistence In makes no early ing dute, brown shade slight some laif bricks and shale, mudstone, and consistent limber fragments (MADE GROUND) 0.80-1.90 Elmi (medium strength) medium brown / orange motified grey slightly sandy slightly gravelly CAY Shorting/Support: Stability: Firm (medium strength) medium brown / orange motified grey slightly sandy slightly gravelly CAY All dimensions in metres Scale 137.5 Cheen Stephen Smith Construction Plant Level (n) Co-Ordinates () Co-Ordinates () Co-Ordinates () Co-Ordinates () Co-Ordinates () Co-Ordinates () Short 1 of 1 Legend 1 of 1 Legend 0.80-1.0 JD 0.	environmental				IMA		LOG				
Job No 23-087	-									T	RIAL PIT No
23-087 23-02-23 Are Environmental Limited Tof 1 B C D Legend Legend Depth No Grass overlying dark brown / black slightly sarady rapsoil with some coal, maddone and cocasional limber fragments (MADE GROUND) D.20-0.80 D.80-1.00 Firm (medium strength) medium brown / orange mottled grey slightly sarady slightly gravelty CLAY Shorting/Support: Stability: Shorting/Support: Stability: GENERAL REMARKS Trial pir remained day are stable during exploratory period GENERAL REMARKS Trial pir remained and stable during exploratory period GENERAL REMARKS Trial pir remained day are stable during exploratory period Logged By					Ground Laval (n	n)	Co Ordinates ()				TP03
Contractor Are Environmental Limited A B C D Legend STRATA STRATA				2-23	Oround Lever (II		Co-Ordinates ()				
STRATA Depth No Grass overlying dark brown / black slightly sandy (speed) with some coal, mudstone and occasional brick fragments (MADE (GROUND)) Dark brown / black soily saly very sundy (shy with some holf bricks and shale, mudstone, coal and occasional brick fragments (MADE (GROUND)) Dark brown / black soily saly very sundy (shy with some holf bricks and shale, mudstone, coal and occasional brink fragments (MADE (GROUND)) Firm (medium strength) medium brown / orange motited grey slightly sandy slightly gravelly CIAY Shoring/Support: Shoring/Support: Shoring/Support: Shoring/Support: Shoring/Support: Shoring/Support: A A B C D		,,,	25 0.	2 23						Shee	et
STRATA SAMPLES & TESTS Depth No DESCRIPTION Depth No Gross overlying dark frown. Sheek slightly sandy topsoil with some coal, madstone and coasinous black fragments (MADE GROUND) Dark brown / black soily asly very sandy clay with some half bricks and shale, madstone, coal and occasional inher fragments (MADE GROUND) Firm (medium strength) medium brown / orange motified grey slightly sandy slightly gravelly CLAY All dimensions in metres Client Stephen Smith Method/ Logged By	Arc E	nvironmen	al Limited	i							1 of 1
STRATA Depth No Gress overlying dark brown / black slightly sandy topsoil with some coal, mudstone and cocasional brick fragments (MADE GROUND) Durk brown / black soily asly very sandy clay with some half bricks and shale, mudstone, coal and occusional timber fragments (MADE GROUND) Firm (medium strength) medium brown / orange mottled grey slightly sandy slightly gravelly CLAY All dimensions in metres Client Stephen Smith Method/ Logged By	0 —	A		В		С		D	0		Legend
STRATA SAMPLES & TESTS Depth No DESCRIPTION Depth No Grass overlying dark brown / black slightly sandy topsoil with some coal, mudstone and occasional brick fragments (MADE GROUND) Dark brown / black soily ashy very sandy clay with some half bricks and shale, mudstone, coal and occasional timber fragments (MADE GROUND) Shoring/Support: Stability: Firm (medium strength) medium brown / orange mottled grey slightly sandy slightly gravelly CLAY CLAY	1 -								- 1		
Depth No DESCRIPTION Depth No Grass overlying dark brown / black slightly sandy topsoil with some coal, mudstone and occasional brick fragments (MADE GROUND) Dark brown / black soily ashy very sandy clay with some half bricks and shale, mudstone, coal and occasional timber fragments (MADE GROUND) Firm (medium strength) medium brown / orange mottled grey slightly sandy slightly gravelly CLAY Shorting/Support: Stability: A D A D A A D B A C AII dimensions in metres Client Stephen Smitth Method/ Logged By	3 =			CT	TD A TE A				F ₃	A ADI I	
Grass overlying dark brown / black slightly sandy topsoil with some coal, mudstone and occasional brick fragments (MADE GROUND) Dark brown / black soil gash very sandy clay with some half bricks and shale, mudstone, coal and occasional timber fragments (MADE GROUND) Firm (medium strength) medium brown / orange mottled grey slightly sandy slightly gravelly CLAY GENERAL REMARKS Trial pit remained dry and stable during exploratory period All dimensions in metres Client Stephen Smith Method/ Logged By	Denth No	2		51		PTION					
Dark brown / black soily ashy very sandy clay with some half bricks and shake, mudstone, coal and occasional timber fragments (MADE GROUND) Firm (medium strength) medium brown / orange mottled grey slightly sandy slightly gravelly CLAY Shoring/Support: Stability: Clay			rlying dark	brown / black			ome coal, mudstone	e and			
Stability: REMARKS Trial pit remained dry and stable during exploratory period All dimensions in metres Client Stephen Smith Method/ Logged By		Dark broand occas	wn / black so sional timber	oily ashy very s fragments (M	sandy clay with s ADE GROUND	ome half bi	icks and shale, mu	dstone, coal	0.40-0.	55 J/D	
All dimensions in metres Client Stephen Smith Method/ Logged By	Stability:	A					N Å			Trial pit stable d	REMARKS t remained dry and
	All dimensior Scale 1		Client S	Stephen Smi Construction	th	Method/ Plant Use	1 Tracked Ex	xcavator		Logged	By PB



Project							TR	LIAL PIT No
-	oft, Gildersome							
Job No	Date	Ground Lev	vel (m)	Co-Ordinates ()				TP04
23-087	23-02	-23						
Contractor							Sheet	
Arc En	vironmental Limited							1 of 1
	A	В	C		D			Legend
_						F .		
3—		STRATA				— 3 SA	MPLE	S & TESTS
Depth No		DES	SCRIPTION			Depth	n No	Remarks/Tests
0.00-0.15 0.15-0.45 0.45-0.55 0.55-1.40	shale fragments (MAD) Dark brown / grey sligl coal fragments (MAD) Soft to firm orange / br Loose black / grey / br and coal (colliery spoil	ntly ashy soily clay / clayo E GROUND) own silty sandy clay (MA own locally white and but	ey soil with som	e sandstone, brick,	shale and	0.60-0.	70 J/D	ENIED A I
Shoring/Supp Stability:	ort: A B C			N †			Ri Trial pit i	ENERAL EMARKS remained dry sploratory period le wall collapse 80m
All dimensions Scale 1:3	in metres Client St 7.5 Client St	ephen Smith	Method/ Plant Use	1 Tracked Ex	cavator		Logged F	By PB



environmental	opriorio. O i	91 370 0300		TRIA	L PIT	LOG					
Project										-	TRIAL PIT No
Hillyero Job No	oft, Gilders			11 1/	`	C 0 1	4 0				TP05
23-087		23-02-2		round Level (m	1)	Co-Ordin	iates ()				
Contractor		23-02-2	<i>3</i>							Sh	eet
Arc Env	vironmenta	al Limited									1 of 1
0 —	A		В		С			D	0		Legend
1											
_									F _a		
3—			STR	ATA					S_{λ}	AMPI	LES & TESTS
Depth No 0.00-0.15 0.15-0.35 0.35-1.22	brick fragr Firm dark GROUND	lying dark brov ments (MADE of grey / brown fr) lark grey clayey y clay with num	GROUND) iable soily cla	ay with numero	th some co	nd coal fr	agments (I	MADE /	0.00-0 0.30-0	.10 J/	D
1.22-1.40	Firm olive	/ brown mottle	d grey slightl	y sandy silty C	ELAY						
Shoring/Supp Stability:	ort: A	B <u></u>				N +				Trial p	GENERAL REMARKS oit remained dry and during exploratory
All dimensions Scale 1:3	in metres 7.5	Client Step Con	ohen Smith struction		Method/ Plant Use	ed Tra	acked Ex	cavator		Logge	d By PB



environmental	IRIA	L PH LOG		
Project				TRIAL PIT No
Hillycroft, Gildersome				TP06
Job No Date	Ground Level (r	n) Co-Ordinates ()		11 00
23-087 23-02	-23			CI .
Contractor				Sheet 1 of 1
Arc Environmental Limited	D			1 of 1
0 A	В	С	$D \longrightarrow 0$	Legend
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1 7			F	
1 7			F	
1 —			<u> </u>	
1 7			F	
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1 7			F	
1 -			F	
2 —			_2	
-			F	
-			F	
7			F	
-			F	
3-				
	STRATA			AMPLES & TESTS
Depth No 0.00-0.20 Grass / vegetation over	DESCRI		Dept	
0.20-0.45 October 19 O	E GROUND)	ey topsoil with coal, shale, mud	stone and 0.05-0 0.20-0	
(colliery spoil) (MADE	/ clayey fragmented shale, mu E GROUND)	dstone and coal with occasional	sandstone 0.20-0	.TO 3/D
0.45-0.75 Firm (medium strength) light to medium brown / oran	nge mottled grey slightly sandy	0.50 0.50	CBR 2% 64kN/m²
			0.60-0	
3				
Shoring/Support:				GENERAL
Stability:				REMARKS
2		N		Trial pit remained dry and stable during exploratory
		‡		period
A A				
B		••		
C				
All dimensions in metres Client St	tenhen Smith	Method/		Logged By
Scale 1:37.5	tephen Smith onstruction	Plant Used Tracked Exc	cavator	PB



environmental					00				
Project	2 5 4 4							TI	RIAL PIT No
Hillyer Job No	oft, Gildersome Date		Ground Level (m)	Ca	-Ordinates ()				TP07
23-087		02-23	orouna Levei (m)		-Ordinates ()				
Contractor	25-	02-23						Shee	<u> </u>
	vironmental Limit	ed							1 of 1
0 —	A	В		С		D	0		Legend
1									
3 -		CTI) A T A				<u>+</u> 3	MDI E	EC 9- TECTO
Depth No		511	RATA DESCRIP	TION			Deptl		ES & TESTS Remarks/Tests
0.00-0.22	Black soil with coal	, shale, mudstone			ional small sands	tone cobble	Бера	1 110	Terrarks/ Tests
0.22-0.60	Firm (medium stren CLAY	gth) medium brov	vn / orange mottle	ed grey sligh	tly sandy slightly	gravelly	0.30 0.40-0. 0.50	V	68kN/m ²
Shoring/Supp Stability:	A				N + 			R Trial pit	GENERAL EMARKS remained dry and uring exploratory
All dimensions Scale 1:3	s in metres Client	Stephen Smit Construction	h	Method/ Plant Used	Tracked Ex	cavator		Logged	By PB

Arc Environmental Ground Gas & Groundwater Monitoring Certificate

Site: Hillycroft, Gildersome, Leeds Ref: 23-087

		<u></u>)		5	1		4	•			ယ)			2				_				Visit
Motor:								28/04/2023				11/04/2023				20/03/2023				03/03/2023				Date
								12:00				13:12				09:40				09:00				Time
								GFM430				GFM430				GFM430				GFM430				Equipment
								CVERCASI / LIGHT				Dry/sunny				OVERCAST				LIGHT RAIN				Weather
								TMCL				Z				TMCL				TMCL				Initials
																								Comments
								o	4	_		o	4	_		o	4	_		6	4	_		Borehole
								6.1	<0.1	6 0.1		<0.1	<u>6</u> .1	6 .1		<u>6.1</u>	<0.1	<0.1		<0.1	6.1	6.1	(l/hr) A	Gas
								994	994	994		991	989	989		996	996	996		1014	1014	1014	Atmospheric Pressure (mb)	
									Z)				П				П				П		R/F/S	Trend
																							Initial	Methane (% v/v)
								0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	Steady	(% v/v)
																							Initial	Methane (%
								0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	Steady I	(% LEL) Ca
								7	(4)			4	N			N)	N			0	N		Initial Ste	Carbon Dioxide (%
								7.2	3.9	1.7		4.6	2.5	1.9		2.3	2.3	1.9		0.0	2.3	1.9	Steady Initial	
								12.4	18.5	19.4		12.6	16.1	16.9		16.5	16.6	16.7		17.9	15.9	17.0	ial Steady	Oxygen (% v/v)
								-		-		0,				01	<i>6,</i>						dy Hex%	
																							PID Cf	(GFM 435 only)
																							(Isobutylene)	Othe
								0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	H ₂ S	Other Gases (PPM)
								0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	8	
								1.52	DRY	2.91		1.26	DRY	1.62		1.66	DRY	2.89		DRY	DRY	DRY	Water (m bgi	Depth to



Denotion limits - Mehane = 0,0%, Carbon Doodse = 0,0%, (EE, = 0,0%, Oxygen = 0,0%, Flow = 0,1 fibr Monitoring order is from Laft to Right across table Monitoring order is from Laft to Right across table Monitoring should be for Not Loss than 3 minutes However, if high concentrations of gasses initially recorded, monitoring should be for Not Loss than 3 minutes However, if high concentrations of gasses initially recorded, monitoring should be for up to 10 minutes Note = 0.0ff the scale

CI = PD compensation Factor (1-10) - Must be used to multiply the PD reading to give an accusite measure of the total hydrocarbons in the borehole when methane is present.

Hex = Hexarie (Valid and in range up to 2.000%) - Recorded when abnormally high methane is present.

PD = Photo brisistion Detector (Calibrated to Isobutyleine)



Appendix C -

LKC Profile Logs



Trial Dit Log

					I ſ	ıaı	PIL LC	<i>y</i> g				
Project: Ap	oject No. : LKC 23 1535				ll Brown ar	nd Le	anne	Date:	20/10/2023			
Project No.	: LKC 2	23 1535	(Contracto	r: LKC			Equip	oment:			
Location N	umbor	Location T	vno.	Lev	(ol	1.4	ogged By	Equip	Scale	D ₂	ge Nur	mbor
HD10		TP	ype	Lev	/CI	L	CD		1:25		heet 1	
Depth		ples / Tests	Depth (m)	Legend			Stratum De	escriptio		•		Level (m)
					MADE GROU	JND: Ta	ırmac.					
0.15 - 0.50	PII	D=0.2ppm ES	0.15						D and GRAVEL wi astic and metal wa		- - -	
0.50 - 0.80	PII	D=0.1ppm ES	0.50		fragments. G	ravel is	ark grey gravelly fine to coarse, a odour present.	CLAY v	with occasional br to subrounded, co	ick omprising	0.5	
			0.80	***********			End of Trial F	Pit at 0.8	30m		†	
											- 1.0	
											-	
											4.5	
											- 1.5 - -	
											- 2.0	
											-	
											- - 2.5 -	
											- - 3.0 -	
											- - - 3.5	
											-	
											-4.0 -	
											- 4.5 -	
											- -5.0	
No.			S				Pit Dimensio	ne		Die	t Stabi	lity
	Jr.		4.		Length (m)	Width (m)	,,,,3	Depth (m)			
					0.50		0.50		0.80	1 ;	Stable	÷



Remarks:

Pit filled with rainwater up to 0.4mbgl.



Trial Pit Log

CONSUL					
Project: Appletree (•	Client: Will Brown	and Leanne	Date: 20/10/2023	
D 1 4N 140 00 4505		Megson		_	
Project No. : LKC 2	23 1535	Contractor: LKC		Equipment:	
Location Number	Location Type	Level	Logged By	Scale	Page Number
HD102	TP		CD	1.25	Sheet 1 of 1

Depth Samples / Tosts Depth (n) Legend Stratum Description Legend (2000) MADE GROUND: Light greyish brown SAND and GRAVEL with request brick fragments, occasional plastic and metal waste. Sand is fine to coarse, grave its fine to coarse, subangular to angular comprising imentions and sandations. Sight organic odour. Depth (n) Legend Stratum Description (10 coarse) and the coarse, grave its fine to coarse, subangular to angular to subtrounded, comprising sandations. Sight organic odour. End of Trial Pit at 0.90m 1.5 1.5 -2.0 -3.5 -4.0	HD102	TP	"	LOV		CD	1:25	Sheet 1	
D.30 - 0.50 PID=0.1ppm ES PID=0.1ppm DS PID=		-	Depth (m)	Legend			•		Level (m)
ES PID=0.1ppm ES PID=0.1ppm D.50 -0.90 PID=0.1ppm ES PID=0.1ppm D.50 -0.90 PID=0.1ppm D.					MADE GR	OUND: Tarmac		-	
MADE GROUND Dark grey slightly gravelly CLAY with rare brick fragments. Gravel is fine to medium, angular to subrounded, comprising sandstone. Slight organic odour. 1.5 2.6 2.5 3.5	0.30 - 0.50	ES	0.30		frequent bi	rick fragments, occasional r	plastic and metal waste.	Sand is	
-1.0 -1.5 -1.5 -2.0 -2.5 -3.0 -4.0	0.50 - 0.90	PID=0.1ppm ES	0.50		fine to coa comprising MADE GR fragments.	rse, gravel is fine to coarse I limestone and sandstone. OUND: Dark grey slightly Gravel is fine to medium, a	, subangular to angular,	brick - 0.5	
-2.0 -2.5 -3.0 -3.5 -4.0 -4.5			0.90			End of Trial P	it at 0.90m	-1.0	
-2.0 -2.5 -3.0 -3.5 -4.0 -4.5								-	
-2.5								- - 1.5 -	
-3.0 -3.5 -4.0 -4.5								- - - 2.0	
-3.0 -3.5 -4.0 -4.5								-	
-4.0								- - 2.5 -	
-4.0								-3.0	
-4.0									
4.5								- - 3.5 -	
- 4.5								-10	
								-4.0	
								- - 4.5	
								- 5.0	



	Pit Dimensions		Pit	Stabi	lity
Length (m)	Width (m)	Depth (m)		Stable	
0.50	0.50	0.90	· `	Stable	,

Remarks:

Pit filled with rainwater up to 0.35mbgl.



Trial Dit Log

					l f	lai	PIL L	<i>y</i> g				
CONSI Project: App		Cottage		Client: Wi Megson	II Brown a	nd Le	anne	Date	: 20/10/2023			
Project No.	: LKC 2	23 1535		Contracto	r: LKC							
					1			Equi	pment:			
Location No HD10		Location T	ype	Lev	/el	L	ogged By CD		Scale 1:25		ge Nur neet 1	
Depth		nples / Tests	Depth (m)	Legend			Stratum De	escripti				Level (m)
					MADE GRO	UND: Ta	ırmac					
0.15 - 0.45	PI	D=0.2ppm ES	0.15		frequent brid	ck fragm vel is fin	ents and occasio e to coarse, angu	onal pla	ID and GRAVEL wastic and ash. Sand subangular, compr	d is fine to	-	
0.45 - 0.80	PI	D=0.3ppm ES	0.45		MADE GRO fragments. (UND: D Gravel is	ark grey very gra	avelly C angula	CLAY with occasion or to subrounded, c	nal brick comprising	- 0.5 -	
			0.80				End of Trial F	Pit at 0.	80m		- - - 1.0	
											- -	
											- - 1.5 -	
											- - -2.0	
											-	
											- 2.5 -	
											- - -3.0	
											- - - 3.5	
											- - -	
											- 4.0 -	
											- - - 4.5	
											- -	
											-5.0	
* 7	1				J =41	(m)	Pit Dimensio		Donth (re)	Pit	Stabi	lity
3.	A STATE OF	CALL S	dia.		Length	(111)	Width (m)		Depth (m)		Stable	2



	Pit Dimensions		Pit Stability
Length (m)	Width (m)	Depth (m)	Stable
0.50	0.50	0.80	Stable

Remarks:

Pit filled with rainwater up to 0.45mbgl.

Appendix D -

Contamination Results & Generic Soil Assessment Criteria





Kris Rodway 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: 23-13250

Site Reference: LKC 23 1535

Project / Job Ref: Appletree Cottage, Morley

Order No: LKC231535KR

Sample Receipt Date: 25/10/2023

Sample Scheduled Date: 25/10/2023

Report Issue Number: 1

Reporting Date: 31/10/2023

Authorised by:

Kevin Old Operations Director

100 C

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

Opinions and interpretations are outside the laboratory's scope of 150 1/025 accreditation. Inis 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: 23-13250	Date Sampled	20/10/23	20/10/23	20/10/23	
LK Consult Limited	Time Sampled	None Supplied	None Supplied	None Supplied	
Site Reference: LKC 23 1535	TP / BH No	HD101	HD102	HD103	
Project / Job Ref: Appletree Cottage, Morley	Additional Refs	None Supplied	None Supplied	None Supplied	
Order No: LKC231535KR	Depth (m)	0.15 - 0.50	0.50 - 0.90	0.45 - 0.80	
Reporting Date: 31/10/2023	DETS Sample No	682229	682230	682231	

Determinand	Unit	RL	Accreditation	(n)			
Asbestos Screen (S)	N/a	N/a	ISO17025	Not Detected	Not Detected	Not Detected	
pH	pH Units	N/a	MCERTS	8.2	6.1	6.9	
W/S Sulphate as SO ₄ (2:1)	mg/l	< 10	MCERTS	48	39	19	
W/S Sulphate as SO ₄ (2:1)	g/l	< 0.01	MCERTS	0.05	0.04	0.02	
Organic Matter (SOM)	%	< 0.1	MCERTS	5.3	1.6	11.5	
Arsenic (As)	mg/kg	< 2	MCERTS	8	4	18	
Cadmium (Cd)	mg/kg	< 0.2	MCERTS	0.5	< 0.2	0.2	
Chromium (Cr)	mg/kg	< 2	MCERTS	9	16	23	
Chromium (hexavalent)	mg/kg	< 2	NONE	< 2	< 2	< 2	
Copper (Cu)	mg/kg	< 4	MCERTS	41	28	38	
Lead (Pb)	mg/kg	< 3	MCERTS	58	18	54	
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	
Nickel (Ni)	mg/kg	< 3	MCERTS	7	22	14	
Selenium (Se)	mg/kg	< 2	MCERTS	< 2	< 2	< 2	
Vanadium (V)	mg/kg	< 1	MCERTS	15	15	24	
Zinc (Zn)	mg/kg	< 3	MCERTS	67	83	77	

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)

⁽n) Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation





Soil Analysis Certificate - Speciated PAHs					
DETS Report No: 23-13250	Date Sampled	20/10/23	20/10/23	20/10/23	
LK Consult Limited	Time Sampled	None Supplied	None Supplied	None Supplied	
Site Reference: LKC 23 1535	TP / BH No	HD101	HD102	HD103	
Project / Job Ref: Appletree Cottage, Morley	Additional Refs	None Supplied	None Supplied	None Supplied	
Order No: LKC231535KR	Depth (m)	0.15 - 0.50	0.50 - 0.90	0.45 - 0.80	
Reporting Date: 31/10/2023	DETS Sample No	682229	682230	682231	

Determinand	Unit	RL	Accreditation	(n)			
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	0.15	
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6	< 1.6	

⁽n) Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation





Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 23-13250	
LK Consult Limited	
Site Reference: LKC 23 1535	
Project / Job Ref: Appletree Cottage, Morley	
Order No: LKC231535KR	
Reporting Date: 31/10/2023	

DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Sample Matrix Description	
682229	HD101	None Supplied	0.15 - 0.50	9.3 Brov	wn clayey gravel with stones and brick
682230	HD102	None Supplied	0.50 - 0.90	18 Brov	own sandy clay
682231	HD103	None Supplied	0.45 - 0.80	27.8 Brov	wn sandy clay

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





Soil Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 23-13250
LK Consult Limited
Site Reference: LKC 23 1535
Project / Job Ref: Appletree Cottage, Morley
Order No: LKC231535KR
Reporting Date: 31/10/2023

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
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of	E016
3011	AK	Chromium - nexavalent	1,5 diphenylcarbazide followed by colorimetry	
Soil	AR		Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR		Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR		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		Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR		Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR		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		Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of TOC by combustion analyser.	E027
Soil	D		Determination of TOC by combustion analyser.	E027
Soil	D		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		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	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D		Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR	pH	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	Phosphate - Water Soluble (2:1)	Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D		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		Determination of sulphide by distillation followed by colorimetry	E018
Soil	D	Sulphur - Total	Determination of total sulphur by extraction with aqua-regia followed by ICP-OES	E024
Soil	AR	SVOC	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
		TPH CWG (ali: C5- C6, C6-C8, C8-C10,		
Soil	AR	C10-C12, C12-C16, C16-C21, C21-C34,	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE	E004
JUII	AK	aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	cartridge for C8 to C35. C5 to C8 by headspace GC-MS	EUUH
, ,		TPH LQM (ali: C5-C6, C6-C8, C8-C10,	Determination of hoverne/acctone outractable budges where he CC FID fractionation with CDF	
Soil	AR		Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE	E004
3011	7111		cartridge for C8 to C44. C5 to C8 by headspace GC-MS	
3011	,		cardiage for control of the control	
3011	7.ux	C12-C16, C16-C21, C21-C35, C35-C44)		
Soil Soil	AR AR	C12-C16, C16-C21, C21-C35, C35-C44) VOCs	Determination of volatile organic compounds by headspace GC-MS Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001 E001

D Dried **AR As Received**





List of HWOL Acronyms and Operators
DETS Report No: 23-13250
LK Consult Limited
Site Reference: LKC 23 1535
Project / Job Ref: Appletree Cottage, Morley
Order No: LKC231535KR
Beneving Date: 21/10/2022

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	

GAC Threshold by Location

Appletree Cottage LKC 23 1535 Residential w/ Homegrown Produc Job Name Job Number

Assessment Threshold Used

SOIL TYPE SAMPLE LOCATION	HD101	HD102	HD103
DEPTH (m)	0.15 - 0.50	0.50 - 0.90	0.45 - 0.80
Arsenic	37	37	37
Beyllium	1.7	1.7	1.7
Boron	290	290	290
Cadmium	11	11	11
Copper	2400	2400	2400
Chromium (III)	910	910	910
Chromium (VI)	6	6	6
Cyanide, Free	140	140	140
Cyanide, total	140	140	140
Lead	200	200	200
Mercury, Elemental	58	58	58
Mercury, inorganic Mercury, Methyl	1100 320	1100 320	1100 320
Nickel	180	180	180
Selenium	250	250	250
Vanadium	410	410	410
Zinc	3700	3700	3700
Monohydric Phenol	-	-	-
Asbestos Quantication	0.01	0.01	0.01
Organic matter	5.30	1.60	11.50
Acenaphthene	1100	510	1100
Acenaphthylene	920	420	920
Anthracene	11000	5400	11000
Benzo(a)anthracene	13	11	13
Benzo(a)pyrene	5	5	5
Benzo(b)fluoranthene	3.7	3.3	3.7
Benzo(ghi)perylene	350	340	350
Benzo(k)fluoranthene	100	93	100
Chrysene	27	22	27
Dibenzo(ah)anthracene	0.3	0.28	0.3
Fluoranthene	890	560	890
Fluorene	860	400	860
Indeno(123-cd)pyrene	41	36	41
Naphthalene Phenanthrene	13	5.6	13
Pyrene	2000	220 1200	2000
*			
Ali > C5-C6	160	78	160
Ali >C6-C8 Ali >C8-C10	530	230	530
Ali >C10-C12	150	65	150
Ali >C10-C12 Ali >C12-C16	760 4300	330 2400	760 4300
Ali >C16-C21			
Ali >C21-C35	110000	92000 92000	110000 110000
Ali >C35-C44	110000	92000	110000
Total Aliphatics	-	-	-
Aro >C5-C7	300	140	300
Aro >C7-C8	660	290	660
Aro >C8-C10	190	83	190
Aro >C10-C12	380	180	380
Aro >C12-C16	660	330	660
Aro >C16-C21	930	540	930
Aro >C21-C35	1700	1500	1700
Aro >C35-C44	1700	1500	1700
Total Aromatics	-	-	-
TPH (Ali & Aro)	-	-	-
BTEX - Benzene	870	870	870
BTEX - Toluene	660	290	660
BTEX - Ethyl Benzene	260	110	260
BTEX - o Xylene	330	140	330
BTEX - m Xylene	320	140	320
BTEX - p Xylene	310	130	310
BTEX - m&p Xylene	310000	130000	310000

Appendix E -

UK HSA Radon Report



Report of address search for radon risk



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Address searched: Appletree Cottage, Gildersome Lane, Gildersome, Morley, Leeds, LS27 7BJ

Date of report: 12 October 2023

Guidance for existing properties

Is this property in a radon Affected Area? - No

A radon Affected Area is defined as where the radon level in at least one property in every hundred is estimated to exceed the Action Level.

The estimated probability of the property being above the Action Level for radon is: 0-1%

The probability result is only valid for properties above ground. All basement and cellar areas are considered to be at additional risk from high radon levels.

The result may not be valid for buildings larger than 25 metres.

If this site if for redevelopment, you should undertake a GeoReport provided by the British Geological Survey.

This report informs you of the estimated probability that this particular property is above the Action Level for radon. This does not necessarily mean there is a radon problem in the property; the only way to find out whether it is above or below the Action Level is to carry out a radon measurement in an existing property.

Radon Affected Areas are designated by the UK Health Security Agency. UKHSA advises that radon gas should be measured in all properties within Radon Affected Areas.

If you are buying a currently occupied property in a Radon Affected Area, you should ask the present owner whether radon levels have been measured in the property. If they have, ask whether the results were above the Radon Action Level and if so, whether remedial measures were installed, radon levels were re-tested, and the results of re-testing confirmed the effectiveness of the measures.

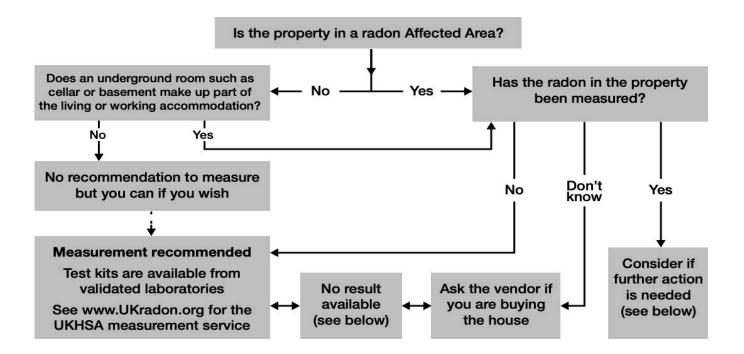
Further information is available from UKHSA or https://www.ukradon.org

Guidance for new buildings and extensions to existing properties What is the requirement under Building Regulations for radon protection in new buildings and extensions at the property location? - None

If you are buying a new property in a Radon Affected Area, you should ask the builder whether radon protective measures were incorporated in the construction of the property.

See the Radon and Building Regulations for more details.

UKHSA guidance for occupiers and prospective purchases



Existing radon test results: There is no public record of individual radon measurements. Results of previous tests can only be obtained from the seller. Radon levels can be significantly affected by changes to the building or its use, particularly by alterations to the heating and ventilation which can also be affected by changes in occupier. If in doubt, test again for reassurance.

Radon Bond: This is simply a retained fund, the terms of which are negotiated between the purchaser and the vendor. It allows the conveyance of the property to proceed without undue delay. The purchaser is protected against the possible cost of radon reduction work and the seller does not lose sale proceeds if the result is low. Make sure the agreement allows enough time to complete the test, get the result and arrange the work if needed.

High Results: Exposure to high levels of radon increases the risk of developing lung cancer. If a test in a home gives a result at or above the Action Level of 200 Becquerels per cubic metre of air (Bq/m3), formal advice will be given to lower the level. Radon reduction will also be recommended if the occupants include smokers or ex-smokers when the radon level is at or above the Target Level of 100 Bq/m3; these groups have a higher risk. Information on health risks and radon reduction work is available from UKHSA. Guidance about radon reduction work is also available from some Local Authorities, the Building Research Establishment and specialist contractors.

UKHSA designated radon website: https://www.ukradon.org

Building Research Establishment: http://www.bre.co.uk/page.jsp?id=3137

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Appendix F -

Report References

ⁱ Environment Agency, 2000, "Technical Aspects of Site Investigation", Technical Report P5-065/TR, Volumes I and II, Text Supplements.

[&]quot;CIRIA, December 2007, "Assessing risks posed by hazardous ground gases to buildings", C665.

iii DEFRA, December 2014, "Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination", SP1010, Policy Companion Document.

^{iv} CL:AIRE, September 2014, "Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination", SP1010, Final Project Report (Revision 2).

^v Environment Agency, January 2009, "Updated technical background to the CLEA model", Science Report SC050021/SR3.

vi Environment Agency, January 2009, "Human health toxicological assessment of contaminants in soil", Science Report - Final SC050021/SR2.

vii Environment Agency, January 2009, "A review of body weight and height data used within the Contaminated Land Exposure Assessment model (CLEA)", Project SC050021/Final Technical Review 1.

viii Environment Agency, November 2008, "Compilation of data for priority organic pollutants for derivation of Soil Guideline Values", Science Report SC050021/SR7.

ix CL:AIRE, January 2010, "Soil Generic Assessment Criteria for Human Health Risk Assessment".

^x Environment Agency, September 2009, "CLEA Software (Version 1.05) Handbook", Science Report SC050021/SR4.

xi CL:AIRE, October 2021, "Good Practice for Risk Assessment for Coal Mine Gas Emissions. CL:AIRE, Buckinghamshire.

xii CIRIA, January 2001, "Contaminated land risk assessment. A guide to good practice", C552.