



RHONDDA
GEOTECHNICAL
SERVICES

PHASE 2 CONTAMINATED LAND ASSESSMENT

N.P.T. PLANNING PERMISSION P/2016/0499

DEMOLITION OF EXISTING BUILDINGS AND
ERECTION OF 11 RESIDENTIAL PROPERTIES

CHURCH STREET/KENNEL ROW

BRITON FERRY

NEATH

SA11 2JE

24/06/2026

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INTRODUCTION- PURPOSES AND AIMS

Planning permission P/2016/0499 has been granted by Neath Port Talbot C.B.C. to Mr Paul Boyce. The permission is for the demolition of a semi-derelict Chapel and a row of dilapidated commercial buildings. These are to be replaced by eleven residential properties arranged in two terraces. The owner is seeking to discharge the pre-commencement planning conditions. The full granted permission has the following contamination conditions:-

Condition 5

Prior to the commencement of work on site a scheme to assess the nature and extent of any contamination on the site, and confirmation of whether or not it originates on the site shall be submitted to and agreed in writing with the Local Planning Authority. The investigation and risk assessment must be undertaken by competent persons in accordance with the following document:- Land Contamination: A Guide for Developers (WLGA, WAG & EAW, July 2006)* and shall be submitted as a written report which shall include:

- (i) a survey of the extent, scale and nature of contamination;
- (ii) an assessment of the potential risks to: human health, ground waters and surface waters, adjoining land, property (existing or proposed) including buildings, crops, livestock, pets, woodland and service lines and pipes, ecological systems, archaeological sites and ancient monuments;
- (iii) an appraisal of remedial options, and proposal of the preferred remedial option(s).

Condition 6

Prior to the commencement of work on site a remediation scheme to bring the site to a condition suitable for the intended use by removing any unacceptable risks to human health, buildings, other property and the natural and historical environment shall be prepared and submitted to and agreed in writing with the Local Planning Authority. The scheme shall include all works to be undertaken, proposed remediation objectives, remediation criteria and site management procedures. The measures proposed within the remediation scheme shall be implemented in accordance with an agreed programme of works.

This report will follow the guidelines set out in the document Development of Land Affected by Contamination: A Guide for Developers (Version 4). This was produced by the Welsh Land Contamination Working Group in 2023. The

methodology set out in Appendix B with the check list for Phase 2 will be followed. The contaminated land exposure assessment (henceforth CLEA) produced by The Environment Agency will be used in the conceptual model, particularly regarding the source-pathway-receptor concept for pollutant linkages. The entire project will be guided by the 2021 C.L.R.M which has now superseded the withdrawn 2004 Defra/E.A. document CLR11 (Model Procedures for the Management of Land Contamination).

The current definition of contaminated land is “any land which appears to the local authority in whose area it is situated in to be in such a condition, by reason of substances in or under the ground that:-

- a. “Significant harm is being caused, or there is a significant possibility of such harm being caused OR
- b. Pollution of controlled waters is being, or is likely to be caused”

(Section 78A Part 2A Environmental Protection Act)

This act also requires that a risk-based approach should be used for assessing the contamination status of a site. For a site to be designated as contaminated it must be shown that the site is not fit for its current or intended use. Statutory guidance states that a two-stage approach should be adopted for the assessment of contaminated land.

- 1. Identification of potential pollution linkages
- 2. Assessment of the risk to receptors

The first stage of a contaminated land assessment is the Phase 1 desk study report. This is a qualitative assessment of the plausible pollution linkages that exist or may exist on site. This involves the development of a site conceptual model. This may then be refined in Phase 2 after an intrusive investigation, followed by laboratory testing of samples obtained, but only if the Phase 1 deems it necessary. The Phase 1 Report was carried out by Geotechnology in February 2016. It is not known if this has previously been submitted to N.P.T. but it is thought unlikely since the planning conditions are worded in such a way as the desk study is not specifically mentioned. It is intended to submit both reports together to allow the discharge of the conditions in full.

Due to past possibly contaminative uses of the site and the known presence of Made Ground at the site the Phase 1 makes the following recommendations on page 14:-

5.1 Summary and Recommendations

With the available information, the desk study has identified that the past land use at the site could be a source of land contamination, although no site soils have yet been analysed. There may also be a ground gas risk that needs to be evaluated through a programme of ground gas monitoring. As there is uncertainty in the assessment at this stage, Geotechnology recommends that a Phase II Site Investigation to gather specific information is required. The investigation should be specifically aimed at (1) evaluating chemical properties of ground conditions using targeted (around vehicle workshop) and non-targeted grid sampling techniques, (2) monitoring of ground gas, and (3) assessing foundation requirements. The site investigation and subsequent revisions to the risk assessment should be undertaken through consultation with the Local Planning Authority and in accordance with current guidance.

Ground investigation would also allow the suitability of potential SUDS designs to be evaluated.

Gathering additional information will allow the uncertainties in the current conceptual site model

and preliminary risk assessment to be refined and updated.

Based on previous experience, Geotechnology suggests that any grant of planning permission could contain a condition that these Phase II works are undertaken following demolition but prior to commencement of any other development works on site or any construction taking place.

1. AUTHOR CREDENTIALS

The author of this report is Richard Davies. He graduated with a Bachelor of Science honours degree in Geology from Liverpool University in 1979. After starting his career as an engineer in the coal industry, he moved into site investigation in the 1980s and has many years experience working on contaminated land. He is a Fellow of The Geological Society and holds a Masters Degree in Applied Environmental Geology from Cardiff University. He is also a Supporter Member of CL: AIRE (Contaminated Land: Applications in Real Environments).

2. SITE DESCRIPTION

The site is centred on grid reference 272858, 194920 and is at an approximate elevation of 5m A.O.D. The site boundary for planning is irregular polygon, measuring approximately 54m x 36m along its long axes and covering an area of 0.21 Ha. A full

description of the site and its surroundings can be found in the Phase 1 and will not be repeated here. The site location is shown in Figure 1 overleaf. The extent of the proposed redevelopment is shown in Figure 2 with an aerial photo of the present site in 2014 in Figure 3.

3. SITE WALKOVER

A walkover survey of any site is beneficial when planning an investigation and sampling program. The Phase 1 suggested sampling after the demolition of the existing structures. Time constraints meant that this was not possible and so there are areas under the existing buildings which have not been sampled.

4. INFORMATION GAPS AND UNCERTAINTIES

The only conclusive way to check for the possible contamination outlined in the Phase 1 was to carry out an intrusive site investigation involving taking samples and testing them for contaminants. An appropriate sampling spread over the areas that will remain as soft landscaping would be ideal but was not possible for the reasons in the previous section. Since it is the uppermost material that would be likely to contain any contamination and possibly impact above ground receptors, trial pitting with a medium sized excavator would be the preferred method of sampling. If contaminants were detected in the laboratory analysis of the soil samples, leachate tests could then be carried out. These could further quantify any potential risk to controlled waters and the wider environment.

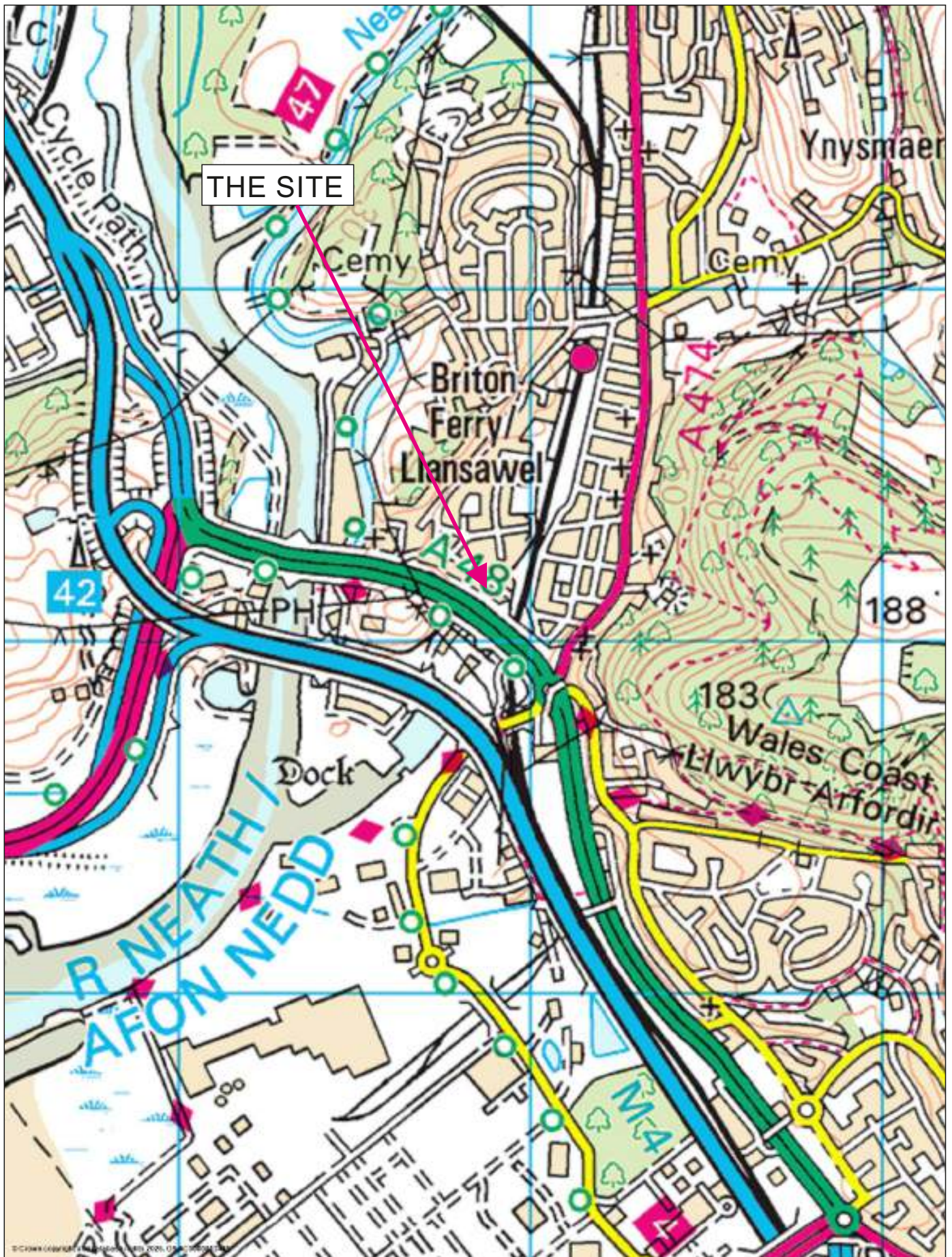


FIGURE 1
SITE LOCATION.

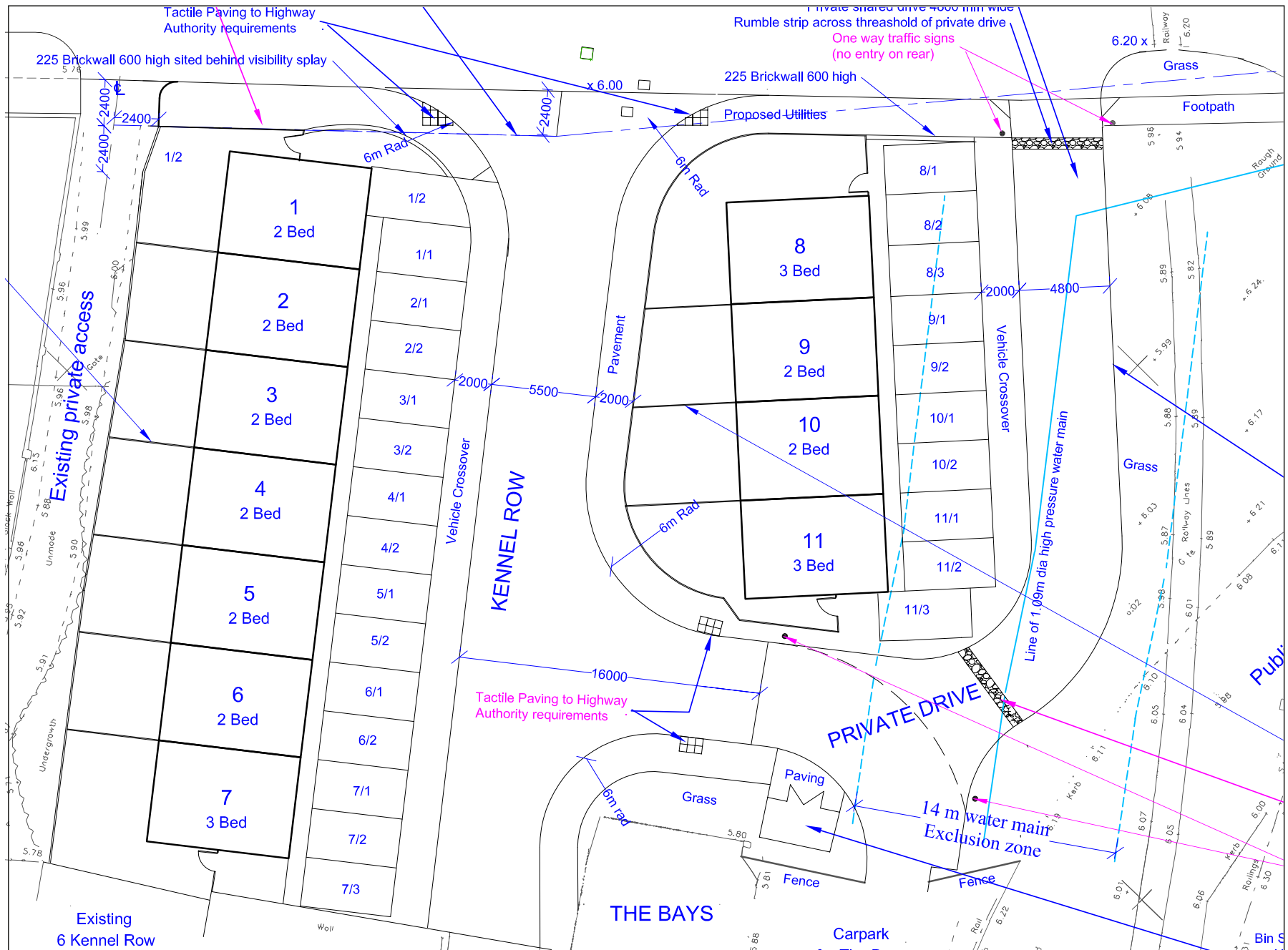


FIGURE 2 PROPOSED SITE LAYOUT AT KENNEL ROAD



FIGURE 3
2014 AERIAL PHOTO OF THE SITE.

5. SITE INVESTIGATION AND SAMPLING METHODOLOGY

Intrusive site investigations were carried out on 5th May 2026 under the supervision of Richard Davies. Works consisted of the digging of eight trial pits with a 5-ton tracked excavator. The trial pit locations are shown in Figure 4 together with the depth of any samples taken. As standard procedure, the trial pitting was concentrated in the proposed garden areas and other areas of soft landscaping wherever this was possible. The trial pits were excavated into natural ground in most locations. A variable thickness of Made Ground was present in all eight of the trial pits. The trial pit locations were selected to represent the best possible spread around the site, given the restrictions imposed by the existing buildings. Ten soil samples were taken in all. This was considered reasonable and proportionate for an initial investigation of a development site of this size. Seven of the soil samples were taken from the Made Ground. Trial pits were excavated to depths of between 0.7m-1.9m. There was no sensory evidence of contamination in any of the pits. Groundwater was not encountered in any of the pits.

Samples of soils were collected, placed in British Standard sealed containers and immediately labelled with depth, location and sample number. Each sampling location had four samples taken. These comprised two one litre plastic tubs, one 60ml. amber glass jar and one 120ml. amber glass jar. This is the recommended quantity required for a broad general suite of testing. The samples were taken with a stainless steel trowel, cleaned between samples to avoid cross contamination. The samples were stored in cool boxes and dispatched by courier to the laboratory the following morning. This meant that the lab was in receipt of the samples within 48 hours of them being taken, and the samples were kept under correct conditions throughout. This is important to ensure the samples are “non-deviating” particularly in the case of testing for organic contaminants.

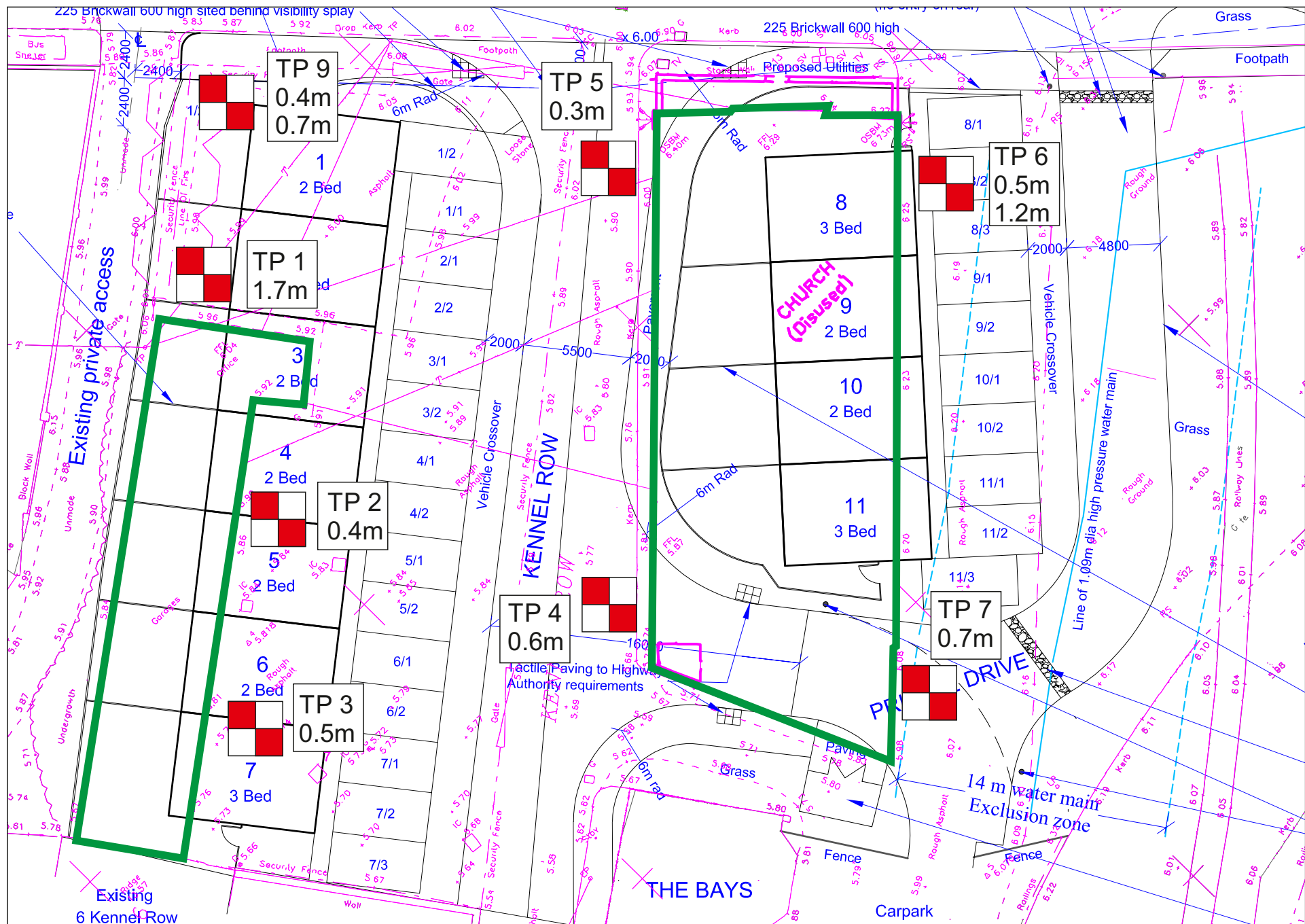


FIGURE 4 TRIAL PIT POSITIONS WITH SAMPLING DEPTHS. EXISTING BUILDINGS ARE OUTLINED IN GREEN. N.B. THERE IS NO TP 8.

6. TESTING STRATEGY

All the samples were tested by Chemtech Ltd at their laboratory in Durham. They hold both MCERTS and UKAS accreditation (UKAS lab no.2531). Their full details can be seen on page 1 of the laboratory reports 26-05371-01 and 26-05371-02. Both complete reports are attached as Appendix B.

The Phase 1 report identified no historical contaminative uses of the site but did mention heavy industry in the surrounding area. It did question the nature of materials used to raise or infill parts of the site. It also raised the recent use of the site for vehicle maintenance and sale. At the time of the site visit by R.G.S. the maintenance usage had ceased although some vehicles were still being stored on the site. Unusually, no specific contaminants of concern are mentioned except for hydrocarbons. In the absence of any other specifically identified contaminants, the testing scheduled was the CLEA 2.1 Suite with the addition of an asbestos screen. The substances tested for could be described as a broad general suite in common use in British contaminated land studies. There was no identified source of Asbestos, but its ubiquitous presence in the urban environment means it should always be tested for. The substances tested for can be split into two main categories. Organic and Inorganic compounds.

The inorganic contaminants tested for were metals:-

Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium and Zinc.

In addition, Free Cyanide was measured, and all samples were screened for Asbestos.

Total Organic Carbon and moisture were both measured. From this, a calculation is used to derive Soil Organic Matter. This is needed to risk assess levels of organic contaminants. The risk assessments for organic contaminants differ with varying S.O.M. values. A wide range of organic contaminants were tested for.

All samples were tested for P.A.H.s (Polycyclic Aromatic Hydrocarbons). Sixteen different compounds were measured. These are the USEPA16. Originating from the U.S.A. they are an internationally recognised, representative and indicative group amongst the huge number of these compounds.

T.P.H. (total petroleum hydrocarbons) analysis was split up by Carbon Banding, along conventionally normal lines (Texas Banding). An aromatic/aliphatic split analysis was also carried out to allow further speciation of any hydrocarbon contamination detected.

Semi-Volatile Organic Contaminants (SVOCs) were also tested for. The analysis for Organic contaminants also included a Phenol Suite. This contained a range of six Monohydric Phenols commonly found on contaminated sites.

7. CHOICE OF SUITABLE FOR USE VALUES (S4ULs) USED IN PHASE 2

Much work has been done in recent years on human health risk assessment for exposure to contaminated land. Originally the E.A. produced figures known as Soil Guidance Values (SGVs). These were later withdrawn, and this has resulted in the production of Generic Assessment Criteria (GACs). These are figures produced for individual substances. If the concentration of a contaminant is above its GAC, there is a potential for harm to human health (or controlled waters). Each contaminant has different levels for different exposure scenarios. For example, for any given contaminant, its GAC is far higher for a commercial development than it would be for Residential Use with consumption of homegrown produce. Many GACs have been published by Contaminated Land: Applications in real environments (CL:AIRE), Land Quality Management Ltd. (LQM) and the Environmental Industries Commission (EIC).

Due to different non-government bodies producing GACS over the years since they were introduced, LQM have produced a complete revision of their figures and renamed them Suitable for Use Levels (S4ULs). The values used in this report are S4ULs except for Lead which has a Category 4 Screening Level (C4SL) produced by the Department for the Environment, Food and Rural Affairs. Cyanide is not assessed in this way, instead it has an acute GAC, rather than one modelled on long term exposure. Asbestos also has its own safety levels governing land use.

The LQM S4ULs have been derived in accordance with the changes in exposure modelling presented within the C4SL framework, whilst still using a set of toxicological criteria that are set within the “minimal risk” range. The LQM/CIEH S4ULs were published to offer a set of collated information on the toxicity and transport properties for numerous common contaminants. They are widely considered to be suitable for use in planning assessments such as this. The most recent update was published in 2017 and reflects changes in UK human health risk assessment since the previous figures were published in 2009. All the data inputs used in the derivation of the S4ULs are presented in full in the publication *LQM/CIEH Suitable 4 Use Levels*, and there is no intention to provide them here. These values are intended for use by professionals who have purchased them. To authenticate this the purchaser is supplied with an individual number to validate the report writer’s entitlement to use the LQM/CIEH S4ULs. This number can be seen on the result summary sheets in Tables 1-6. The author

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The proposed development consists of multiple residential dwellings with small garden areas. Given the nature of the development, S4ULs for residential use with homegrown produce are appropriate to risk assess the site. These values have been used when checking contamination levels at the site.

8. SUMMARY OF GROUND CONDITIONS AND TEST RESULTS

The full trial pit logs to BS5930:2015 together with photographs of the trial pits can be found in Appendix A. N.B. TP8 was not excavated due to the presence of multiple services including live electricity cables. In summary, TPs 1, 2, 3, 5 and 9 were excavated through a variable thickness of Made Ground into the natural ground. In these locations the natural ground was a windblown sand. This material was also probably in the base of TP4, but this was not conclusively proved due to very difficult excavation conditions. These positions are all west of the chapel building. TPs 6 and 7 were east of the chapel. These had identifiable Made Ground from ground level, but a soft silty clay was encountered in the base of both pits. This appeared to be in-situ natural ground. There were no natural organic soils present in any of the trial pits. Seven of the samples were taken from the Made Ground in all locations apart from TP1 where there was no Made Ground. Samples of the sand were taken from TPs 1 and 9 and a sample of the clay from TP6. A summary of the laboratory results from the soil testing contained in Appendix B has been produced overleaf in Tables 1-6. These compare the test results for each substance with its relevant S4UL value (Residential with homegrown produce scenario).

With the organic contaminants, the samples are normally subdivided based on their Soil Organic Matter (S.O.M.) as the S4UL value for each organic contaminant is controlled by the S.O.M. value. The higher the S.O.M. the higher the S4UL value. The three samples of natural ground tested fell into the S.O.M. range $>1\% < 2.5\%$. Of the samples from the Made Ground, one was in the range $>2.5\% < 6\%$ and the remainder were all $>6\%$. For this reason, there are three columns of S4UL values in Tables 1-4.

Table 1 shows that there were no S4UL value exceedances in any of the samples from the natural ground for any of the compounds in the USEPA16 range of Polycyclic Aromatic Hydrocarbons. P.A.H. levels were below the limits of detection (LoD) for all of the USEPA16 substances in all three of the samples. In three of the samples from the Made Ground there were no exceedances for any of the USEPA range and these substances were only present as minute traces where present at all. There were minor

exceedances for Dibenzo[a,h]Anthracene in the samples from TP3 and TP4. The remainder of the USEPA16 range were only present as minute traces. The sample from TP2 showed gross exceedances for Dibenzo[a,h]Anthracene and three of the other USEPA16 range. The exceedances are coloured red in Table 1 for ease of reference.

In Table 2 in all ten samples, all volatile T.P.H. substances (C5-C10) were below levels of detection. In all samples medium/heavy end Aromatic and Aliphatic T.P.H fractions were present in trace amounts. These levels were only a minute fraction of the residential S4ULs ranging from <1%-7% of the relevant S4UL.

In Table 3, all SVOCs are below the LoD in all ten samples. Monohydric Phenols were below the LoD in all ten samples. For this reason, only the Phenol Index is shown in Table 4, without speciation.

With the inorganic substances in Table 5, there was a single minor exceedance for Arsenic in the sample from TP5 0.3m (39.3mg/kg S4UL=37mg/kg). All of the other Heavy/Toxic metals were below the S4UL in both that sample and all the other nine samples.

Cyanide levels were below the LoD in nine of the ten samples. In the tenth (TP3 0.5m) the Cyanide level was 2.6 mg/kg (GAC acute=22mg/kg). No Asbestos was detected in any of the ten samples.

To summarise, there were several exceedances of Residential S4UL values for some common contaminants. Apart from a single minor Arsenic exceedance, all the other exceedances were the P.A.H. substances with the lowest threshold values (four in the sample from 0.4m in TP2) and Dibenzo[a,h]Anthracene in two other samples These were all west of the Chapel.

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ALL VALUES ARE IN mg/kg

S4UL VALUES REFER TO RESIDENTIAL WITH HOMEGROWN PRODUCE SCENARIO

SOIL ORGANIC MATTER(S.O.M.)				>1%		>2.5%				>6%			
CONTAMINANT	TP1 1.5m	TP6 1.2m	TP9 0.7m	S4UL	TP9 0.4m	S4UL	TP2 0.4m	TP3 0.5m	TP4 0.6m	TP5 0.3m	TP6 0.5m	TP7 0.7m	S4UL
NAPHTHALENE	< 0.016	< 0.016	< 0.016	2.3	0.025	5.6	0.045	< 0.016	0.256	0.104	< 0.016	0.080	13
ACENAPHTHYLENE	< 0.015	< 0.015	< 0.015	170	< 0.015	420	0.597	0.092	0.202	0.058	< 0.015	< 0.015	920
ACENAPHTHENE	< 0.013	< 0.013	< 0.013	210	< 0.013	510	0.181	< 0.013	0.031	< 0.013	< 0.013	0.060	1100
FLOURENE	< 0.013	< 0.013	< 0.013	170	< 0.013	400	0.602	0.029	0.123	0.026	< 0.013	0.093	860
PHENANTHRENE	< 0.014	< 0.014	< 0.014	95	0.127	220	6.180	0.116	1.040	0.327	0.048	0.607	440
ANTHRACENE	< 0.017	< 0.017	< 0.017	2400	0.033	5400	2.460	0.144	1.100	0.144	< 0.017	0.201	11000
FLOURANTHENE	< 0.017	< 0.017	< 0.017	280	0.119	560	30.000	0.400	3.320	0.986	0.024	0.815	890
PYRENE	< 0.016	< 0.016	< 0.016	620	0.099	1200	19.900	0.623	2.730	0.952	0.023	0.694	2000
BENZO[a]ANTHRACENE	< 0.012	< 0.012	< 0.012	7.2	0.090	11	20.800	1.160	2.320	0.919	0.025	0.440	13
CHRYSENE	< 0.028	< 0.028	< 0.028	15	0.088	22	23.300	1.780	1.940	0.825	< 0.028	0.387	27
BENZO[b]FLOURANTHENE	< 0.020	< 0.020	< 0.020	2.6	0.116	3.3	27.600	3.310	2.580	1.220	0.027	0.575	3.7
BENZO[k]FLOURANTHENE	< 0.025	< 0.025	< 0.025	77	0.040	93	8.540	0.875	1.040	0.489	< 0.025	0.207	100
BENZO[a]PYRENE	< 0.019	< 0.019	< 0.019	2.2	0.075	2.7	12.600	1.380	2.030	1.030	< 0.019	0.390	3
INDENO[1,2,3-cd]PYRENE	< 0.019	< 0.019	< 0.019	27	0.075	36	14.300	1.920	1.870	0.997	< 0.019	0.383	41
DIBENZO[a,h]ANTHRACENE	< 0.017	< 0.017	< 0.017	0.24	< 0.017	0.28	3.860	0.487	0.307	0.157	< 0.017	0.056	0.3
BENZO[g,h,i]PERYLINE	< 0.019	< 0.019	< 0.019	320	0.047	340	7.510	0.986	1.150	0.619	< 0.019	0.249	350
TOTAL(USEPA 16) PAHs	< 0.280	< 0.280	< 0.280	N/A	0.934	N/A	178.000	13.300	22.000	8.860	< 0.280	5.240	N/A
TABLE 1 POLYCYCLIC AROMATIC HYDROCARBONS (USEPA16)													

SUMMARY OF TEST RESULTS KENNEL ROW, BRITON FERRY

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S4UL VALUES REFER TO RESIDENTIAL WITH HOMEGROWN PRODUCE SCENARIO

SOIL ORGANIC MATTER(S.O.M.)		>1%			>2.5%			>6%						
CARBON BANDING		TP1 1.5m	TP6 1.2m	TP9 0.7m	S4UL	TP9 0.4m	S4UL	TP2 0.4m	TP3 0.5m	TP4 0.6m	TP5 0.3m	TP6 0.5m	TP7 0.7m	S4UL
>C5-C6	ALI	< 0.10	< 0.10	< 0.10	42	< 0.10	78	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	160
>C6-C8	ALI	< 0.10	< 0.10	< 0.10	100	< 0.10	230	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	530
>C8-C10	ALI	< 0.10	< 0.10	< 0.10	27	< 0.10	65	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	150
>C10-C12	ALI	1.7	< 1.0	< 1.0	130	1.8	330	1.2	< 1.0	1.2	1.1	< 1.0	< 1.0	760
>C12-C16	ALI	1.8	0.6	< 0.5	1100	2.1	2400	1.5	1.1	2.1	1.6	1.3	0.7	4300
>C16-C21	ALI	2.2	0.8	0.7	65000	1.9	92000	3.2	1.6	6.1	4.2	1.5	0.8	110000
>C21-C35	ALI	13.7	5.7	< 4.0		19.7		18.1	12.7	17.3	19.5	9.3	6.4	
>C35-C40	ALI	0.7	< 0.5	< 0.5	65000	1.1	92000	1.1	0.8	1.3	1.2	0.5	< 0.5	110000
>C5-C7	ARO	< 0.010	< 0.010	< 0.010	70	< 0.010	140	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	300
>C7-C8	ARO	< 0.010	< 0.010	< 0.010	130	< 0.010	290	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	660
>C8-C10	ARO	< 0.010	< 0.010	< 0.010	34	< 0.010	83	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	190
>C10-C12	ARO	5.5	3.1	2.1	74	7.1	180	6.3	5.7	5.9	6.1	4.2	3.1	380
>C12-C16	ARO	14.3	9.6	7.1	140	20.9	330	22.2	17.9	19.8	19.4	14.8	10.3	660
>C16-C21	ARO	9.0	4.8	2.7	260	12.7	540	16.8	10.7	16.0	12.1	10.4	5.3	930
>C21-C35	ARO	65.8	29.2	21.4	1100	111.0	1500	123.0	82.9	77.8	81.1	54.0	36.7	1700
>C35-C40	ARO	4.6	2.4	1.6	1100	9.8	1500	14.5	9.0	11.8	10.7	5.6	3.1	1700
TOTAL TPH >C5-C10		< 0.10	< 0.10	< 0.10	N/A	< 0.10	N/A	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	N/A
TOTAL TPH >C10-C40		119.0	56.2	39.0	N/A	188.0	N/A	208.0	143.0	159.0	157.0	103.0	66.3	N/A
TABLE 2 TOTAL PETROLEUM HYDROCARBONS WITH TEXAS BANDING AND ALIPHATIC/AROMATIC SPLIT														

SUMMARY OF TEST RESULTS KENNEL ROW, BRITON FERRY

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PHENOL	<0.1	<0.1	<0.1	280	<0.1	550	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1100
CRESOLS	<0.1	<0.1	<0.1		<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
XYLENOLS	<0.1	<0.1	<0.1		<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
NAPTHOLS	<0.1	<0.1	<0.1		<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
TRIMETHYLPHENOLS	<0.1	<0.1	<0.1		<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
TABLE 3 SVOCs													

SOIL ORGANIC MATTER(S.O.M.)				>1%		>2.5%					>6%		
	TP1 1.5m	TP6 1.2m	TP9 0.7m	S4UL	TP9 0.4m	S4UL	TP2 0.4m	TP3 0.5m	TP4 0.6m	TP5 0.3m	TP6 0.5m	TP7 0.7m	S4UL
TOTAL PHENOLS	<0.5	<0.5	<0.5	280	<0.5	550	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1100
TABLE 4 PHENOL INDEX													

SUMMARY OF TEST RESULTS KENNEL ROW, BRITON FERRY

**ALL S4ULs COPYRIGHT LAND QUALITY MANAGEMENT LIMITED. REPRODUCED
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ALL VALUES ARE IN mg/kg

S4UL VALUES REFER TO RESIDENTIAL WITH HOMEGROWN PRODUCE SCENARIO

CONTAMINANT	TP9 0.4m	TP1 1.5m	TP2 0.4m	TP3 0.5m	TP4 0.6m	TP5 0.3m	TP7 0.7m	TP6 0.5m	TP6 1.2m	TP9 0.7m	S4UL	
ARSENIC	11.6	7.2	10.3	18.5	23.7	39.3	13.9	19.3	9.5	7.6	37	
CADMIUM	< 1.1	< 1.1	< 1.1	< 1.1	1.1	< 1.1	< 1.1	1.4	< 1.1	< 1.1	11	
CHROMIUM	10.1	< 1.3	2.4	5.2	49.1	26.0	5.0	136.0	36.6	7.0	910	
COPPER	22.5	< 1.2	21.4	51.7	103.0	427.0	34.2	136.0	22.7	2.4	2400	
LEAD	152.0	7.6	49.9	34.7	170.0	154.0	110.0	111.0	25.9	8.4	200	(C4SL)
MERCURY	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	1.2	0.9	< 0.6	40	
NICKEL	11.0	3.2	9.5	27.5	28.9	34.6	14.6	26.8	26.8	5.1	180	
SELENIUM	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	250	
ZINC	69.4	6.0	421.0	197.0	130.0	237.0	35.9	134.0	84.3	14.0	3700	
CYANIDE	<1	<1	<1	2.6	<1	<1	<1	<1	<1	<1	22	GACacute

TABLE 5 TOXIC/HEAVY METALS AND CYANIDE

	TP9 0.4m	TP1 1.5m	TP2 0.4m	TP3 0.5m	TP4 0.6m	TP5 0.3m	TP7 0.7m	TP6 0.5m	TP6 1.2m	TP9 0.7m	
WEIGHT (g)	0	0	0	0	0	0	0	0	0	0	
% DRY WEIGHT OF SAMPLE	0	0	0	0	0	0	0	0	0	0	

TABLE 6 ASBESTOS ANALYSIS

SUMMARY OF TEST RESULTS KENNEL ROW, BRITON FERRY

CONTAMINANT	GUIDELINE VALUE SOURCE (µg/litre)				SAMPLE VALUE (µg/litre)				
	E.Q.S.	W.F.D.	U.K.D.W.S.	W.H.O.	TP9 0.4m	TP2 0.4m	TP3 0.5m	TP4 0.6m	TP5 0.3m
ARSENIC	50	50	10		4.33	12.10	10.20	5.51	8.27
CADMIUM	0.45	0.25	5		14.2	10.0	7.6	8.5	10.9
BORON	200				< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
CHROMIUM III	4.7				0.91	5.07	0.91	< 0.50	< 0.50
COPPER	1		2000		3.45	5.05	5.39	2.63	2.50
MERCURY	0.07		1		4.82	11.40	3.02	< 0.60	< 0.60
NICKEL	20		20		< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
LEAD	0.5		10		0.45	1.26	1.71	< 0.40	< 0.40
SELENIUM			10	10	< 1.1	< 1.1	< 1.1	1.7	< 1.1
ZINC	11.9		5000		5.2	27.7	16.2	< 3.5	< 3.5
CHROMIUM IV	3.4				< 1.50	< 1.50	< 1.50	< 1.50	< 1.50
CYANIDE	1		50						
PHENOL	7.7								
M,P CRESOL									
O-CRESOL									
3,4 DIMETHYL PHENOL									
2,3 DIMETHYL PHENOL									
2,3,5 TRIMETHYL PHENOL									
TOTAL MONOHYDRIC									
NAPHTHALENE	2					0.38	< 0.10	< 0.10	0.35
ACENAPHTHALENE	5.8					0.28	0.27	< 0.10	< 0.10
ACENAPHTHENE	0.1					0.22	0.26	0.13	< 0.10
FLOURENE						0.31	0.26	0.13	< 0.10
PHENANTHRENE						1.65	0.89	0.51	0.33
ANTHRACENE	0.1					0.73	0.66	0.14	0.10
FLOURANTHENE	0.0063					8.66	5.71	0.30	0.24
PYRENE						5.96	4.01	0.15	0.14
BENZO[a]ANTHRACENE			0.1			5.64	5.74	0.37	0.40
CHRYSENE						6.19	7.01	0.24	0.22
BENZO[b]FLOURANTHENE			0.1			9.07	10.20	0.24	0.48
BENZO[k]FLOURANTHENE			0.1			2.82	3.36	0.14	0.20
BENZO[a]PYRENE	0.1		0.01			4.61	4.83	0.16	0.37
INDENO[1,2,3]PYRENE	0.01					5.07	5.84	0.27	0.65
DIBENZO[a,h]ANTHRACENE						1.60	1.46	< 0.10	0.13
BENZO[g,h]PERYLENE			0.1			2.78	3.20	< 0.10	0.32
TOTAL 16 PAH						55.90	53.70	2.76	3.89
LEACHATE SAMPLING RESULTS FROM SOIL AT KENNEL ROW, BRITON FERRY									

TABLE 7

SOIL SAMPLE LEACHATE TEST RESULTS KENNEL ROW

VALUES IN RED ARE ABOVE THE LOWEST GUIDELINE WHERE TWO GUIDELINES ARE APPLICABLE

9. REVISED RISK ASSESSMENT FOR GROUND GAS

The risk from on-site gas generation was considered unlikely but required quantification. The trial pitting established that there is a <1m thickness of inert Made Ground in some areas of the site. This is largely granular and contains no visible biodegradable material. Levels of Hydrocarbon contamination in the samples taken at the site were very low generally, and for the volatile and semi-volatile spectrum non-existent. There is no potential for vapour production at the site, and this risk has been removed from Table 8.

As anticipated, there was no significant thickness of natural organic soil found in any of the trial pits. A thin (0.15m-0.25m) peaty clay was seen in TP1. The natural ground was blown sand west of the chapel. East of the chapel was a Glacial silty clay. This always has a very low organic content. Therefore, there are no viable sources of ground gas production on the site.

Figure 5 is from the Welsh Government Database. This shows three former landfills north of the site. The closest is Giants Wharf which operated briefly in 1989. Briton Ferry Tip is east of the river. There is no information regarding this landfill. Lastly the tip of the vast Giants Grave tip can be seen. This was operated by Neath Borough Council from 1962-1993. Landfill sites have been found to be sources of gases, particularly methane, caused by the breakdown of organic material contained within them. There have been instances where migration of these gases has caused explosions or asphyxiation at receptors off site. These occurrences are rare and usually outside Britain in completely unregulated circumstances. In contrast, landfills in Britain have been tightly regulated and managed for many years. A sense of perspective is necessary when assessing the threat from a landfill close to a site. At the present time “close” is generally taken to mean less 250m, although there are no specific studies that have arrived at this figure. The figure dates to a 2003 E.A. publication “Building on or within 250m of a Landfill”. The document and 250m figure were subsequently adopted in L.P.A. planning guidance. The original document itself stresses that conditions can vary enormously. In particular, the document acknowledges that there must be viable pathways from any potential source of Landfill gases to a receptor, for there to be any risk. In the case of all three landfills, they are all over 850m from the site with no possible viable pathways to the site. There is no risk of landfill gas migration to the site, and this risk has been removed from Table 8.

This leaves the risk of mine gas migration. Gas production was a constant problem during the coal mining heyday of the South Wales Coalfield. The loss of life through explosion or asphyxiation was huge. However, there were vast differences in the potential for gas production between different areas, and in different seams. As a generalisation, the deep steam coals of the Middle and Lower Coal Measures were the most problematic in the Coalfield. Gas production in coal mines takes two forms. Methane trapped under pressure in the coal is released during mining operations. The production of Methane stops very shortly after the end of mining activity. The production of Carbon Dioxide and Carbon Monoxide is due to oxidation of the remaining coal. If conditions are suitable, this gas production can carry on long after mining ceases.

The site is within a Coal Mining Reporting Area. Because the site is within the C.M.R.A. a Coal Mine Gas Risk Assessment will be required under current legislation. Recently, local authorities have been requesting specific mine gas risk assessments conducted in accordance with 'CL:AIRE - Good Practice for Risk Assessment for Coal Mine Gas Emissions, October 2021' and having regard to current guidance - 'Land Contamination: Risk Management (LCRM; 2020)'. There is usually a demand to follow the decision tree in Figure 13.1 of the Decision support tool for mine gas risk assessment on page 35 of the CL:AIRE document. The CL:AIRE document considers, somewhat unrealistically, that abandoned workings <150m deep pose a potential threat of gas migration. The normal starting point for a C.M.G.R.A. is to purchase a Consultants Report from the Coal Authority. This is done to obtain information on the depth of coal workings beneath the site. Figure 6 is from the Coal Authority Interactive Viewer. This shows all coal mining at whatever depth. There is none beneath the site. This is because of deep water bearing superficial deposits making conditions impossible for mining. Added to this the bedrock is highly faulted with en echelon structures parallel to the massive Vale of Neath Disturbance. Figure 7 shows both suspected and recorded shallow mining on a different dataset on the Interactive Viewer (see below).

IS THE SITE WITHIN A C.A. DEFINED COAL MINING REPORTING AREA

>YES>

ARE ALL THESE STATEMENTS TRUE.

ALL MINE ENTRIES >50m FROM SITE BOUNDARY. >YES> (SEE FIGURE 6)

ALL WORKINGS >150m DEPTH >YES> (NO WORKINGS)

NO FAULTS OR POTENTIAL PATHWAYS CONNECTING THE SURFACE TO DEEPER UNFLOODED WORKINGS. >YES>

OUTSIDE AREA OF PAST OR PROBABLE SHALLOW WORKINGS ON THE COAL AUTHORITY INTERACTIVE VIEWER. >YES> (SEE FIGURE 7)

NEGLIGIBLE RISK ZONE >YES> MITIGATION NOT REQUIRED. NO FURTHER ACTION REQUIRED.

It can now be safely concluded that there is no risk from mine gases at the site.

The Phase 1 Report concluded that the property is not in a Radon Affected Area based on a Groundsure Report and that no Radon Protection Measures would need to be incorporated into the development. All the information on ground gas and mine gas above is reflected in the revised gas risk assessment in Table 8 overleaf. Here all residual ground gas risks from all possible sources have been removed. No gas protection measures will need to be incorporated into the development design.

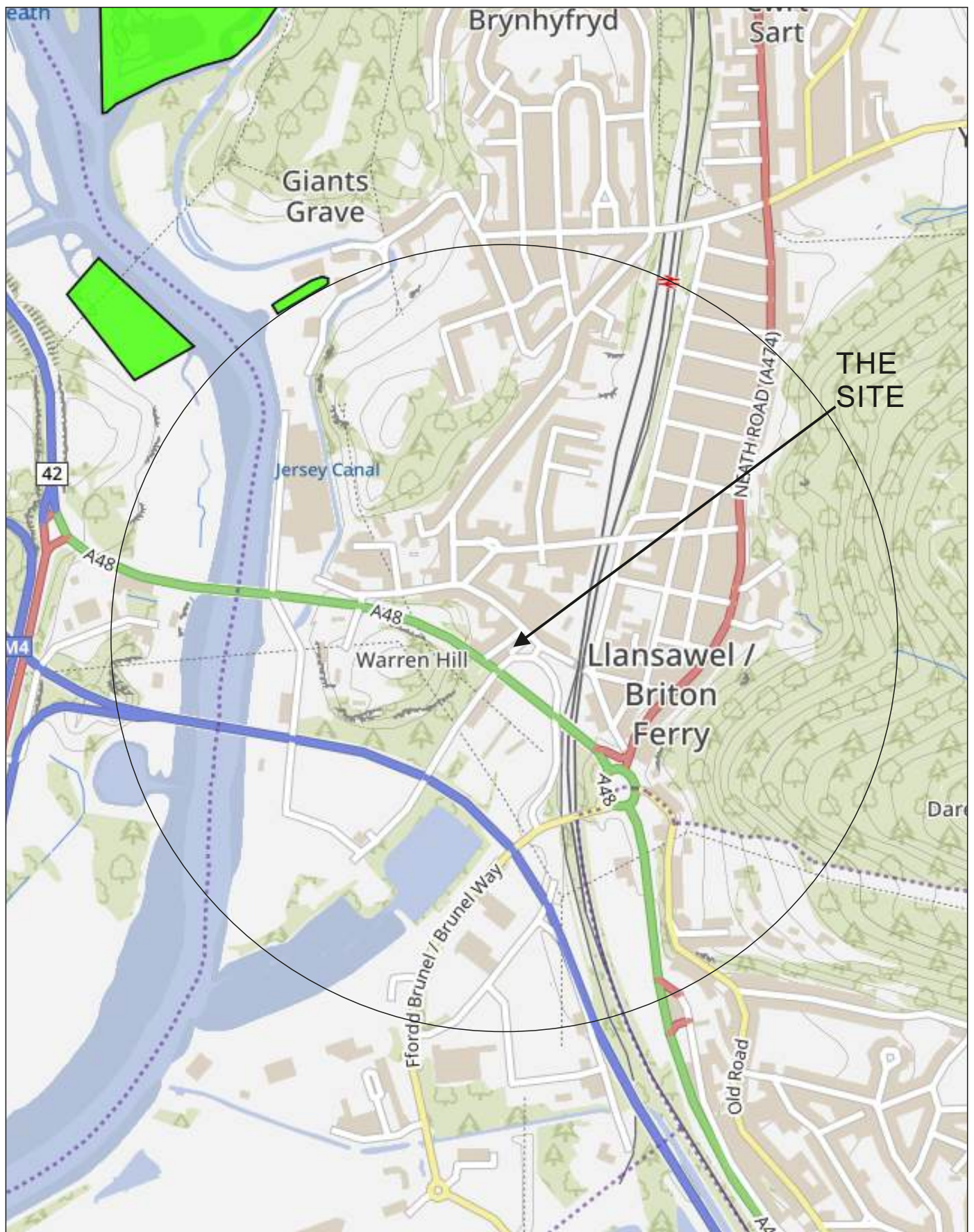


FIGURE 5
DATAMAP WALES MAP OF HISTORIC LANDFILL SITES.
AN 850m RADIUS HAS BEEN DRAWN AROUND THE SITE.

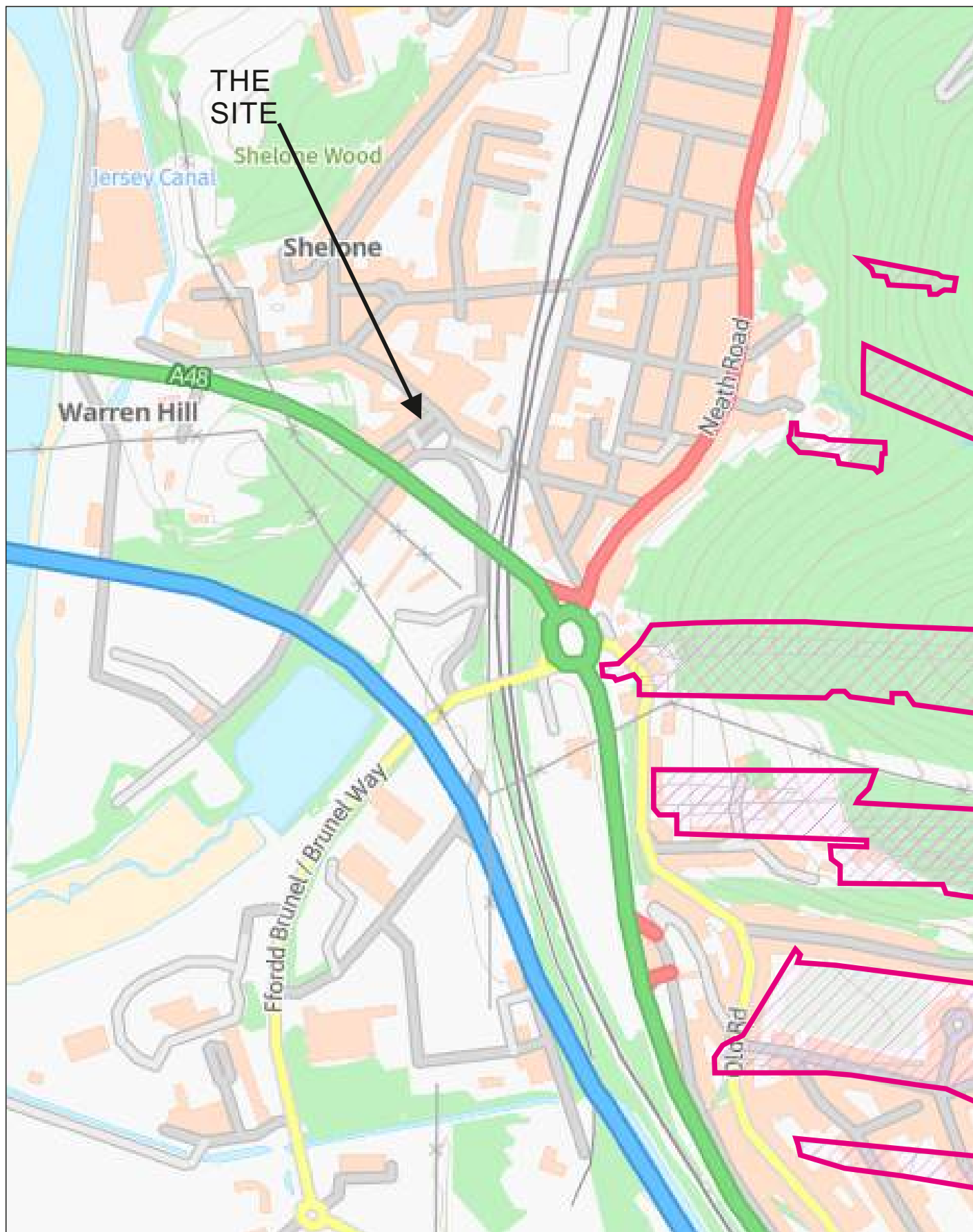


FIGURE 6
COAL AUTHORITY INTERACTIVE VIEWER.
ALL UNDERGROUND WORKINGS AT ANY DEPTH ARE HATCHED

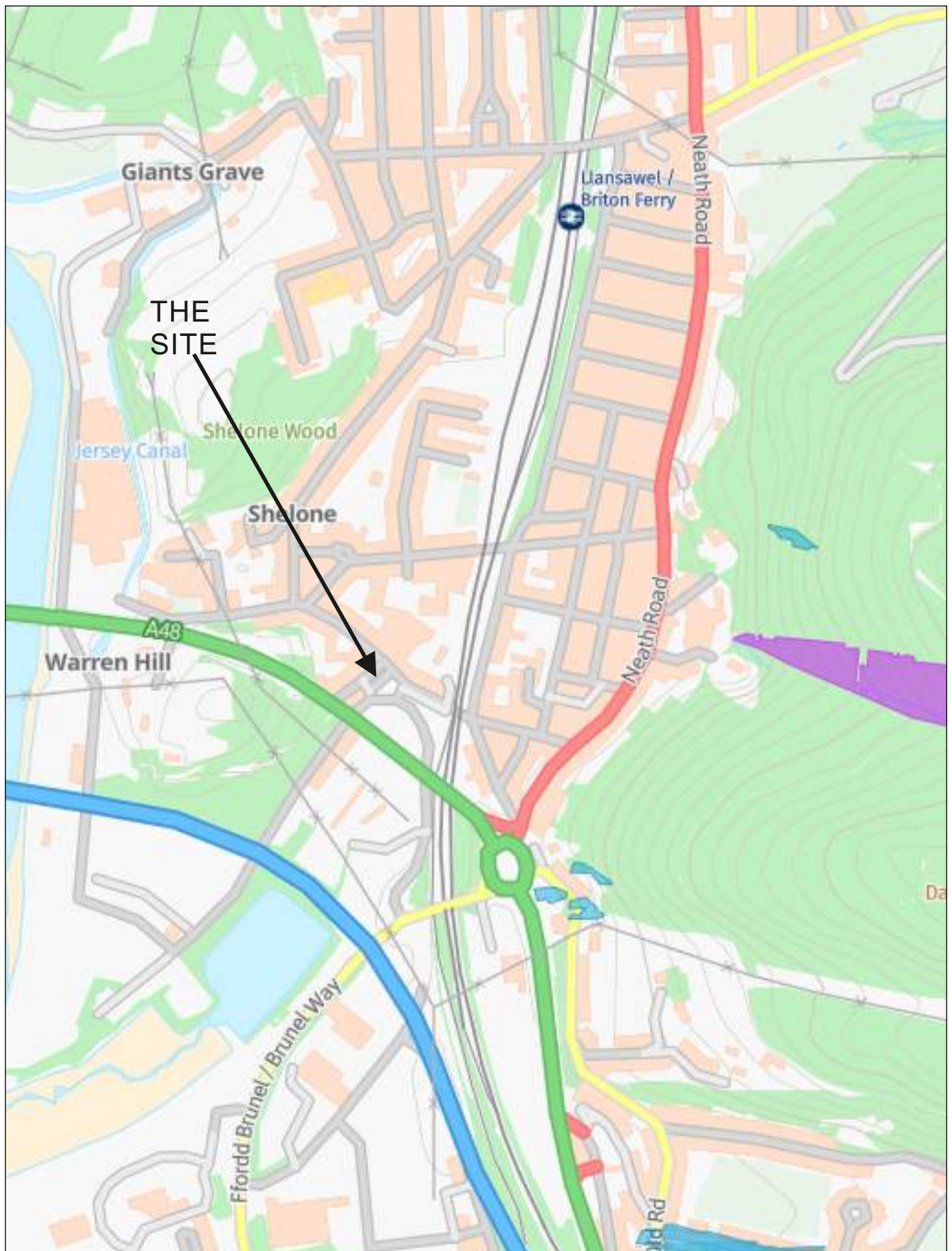


FIGURE 7
C.A. VIEWER. AREAS OF SHALLOW MINING ARE COLOURED
BLUE, SUSPECTED AREAS OF SHALLOW MINING ARE PURPLE.

TABLE 8 FINAL GROUND GAS RISK ASSESSMENT AT KENNEL LANE, BRITON FERRY					
SOURCE	PATHWAY	RECEPTOR	CONSEQUENCE CLASSIFICATION	RISK	FURTHER ACTION
HAZARDOUS GROUND GAS FROM OFF SITE SOURCE	INHALATION, INJURY FROM EXPLOSION	SITE USERS, VISITORS, CONSTRUCTION WORKERS	SEVERE	LOW. NO POSSIBILITY OF OFF SITE GENERATION OF LANDFILL GASES MIGRATING ONTO SITE. NO RISK FROM MINE GAS MIGRATION.	NO FURTHER ACTION REQUIRED
HAZARDOUS GROUND GAS FROM OFF SITE SOURCE	DAMAGE FROM EXPLOSION	BUILDINGS	SEVERE		
HAZARDOUS GROUND GAS FROM ON SITE SOURCE	INHALATION, INJURY FROM EXPLOSION	SITE USERS, VISITORS, CONSTRUCTION WORKERS	SEVERE	LOW. THE SITE INVESTIGATION ESTABLISHED THERE IS NO BIODEGRADABLE MADE GROUND AND NO NATURAL ORGANIC SOILS AT THE SITE.	NO FURTHER ACTION REQUIRED
HAZARDOUS GROUND GAS FROM ON SITE SOURCE	DAMAGE FROM EXPLOSION	BUILDINGS	SEVERE		
RADON GAS	LONG TERM HAZARD FROM INHALATION	SITE USERS	SEVERE	GROUNDSURE RADON REPORT CONCLUDED THERE WAS NO RADON RISK AT THE SITE.	NO RADON PROTECTION MEASURES REQUIRED

10. RISK ASSESSMENT FOR CONTROLLED WATERS

Because of the limited contamination seen at the site, every soil sample with an exceedance was selected for leachate testing. Five samples were prepared for 10:1 Leachate. The resulting solute was then tested. The results are in Table 7. The results have been compared to various standards. Unlike soils, there is no universal standards for risk to human health. In Table 7 the two main standards are the U.K. Drinking Water Standard and the European Quality Standard (EQS). Many of the EQS values have no statutory status. Many EQS values are impossibly low. For example, the EQS for Lead is only 5% of the UK Drinking Water Standard. For this reason, there are multiple exceedances coloured red in Table 7. However, these quantities are minute. 1µg/litre is one part in a million. Since there is only limited, low mobility contamination at the site, when combined with natural attenuation there can be no significant onward pathway to other environmental receptors. The risk to controlled waters has been removed from Table 9 and Figure 8 the C.S.M. for the site at present.

11. REVISED RISK ASSESSMENT FOR SOILS

The made ground at the site was tested for a broad range of common contaminants. The frequency and distribution of sampling and testing was reasonable and proportionate for the size of the site but was somewhat controlled by the existing buildings. It was sufficient to characterise the level and type of contamination in the black, granular Made Ground. The locations with the contaminated Made Ground are mainly going to end up under the access road, parking bays or the houses themselves. In contrast, much of the future garden areas are currently under existing buildings. It is thought highly unlikely there will be any contamination under the chapel when it is demolished. The floors of the existing industrial buildings along the western site margin are all intact and show no signs of contamination. Following site clearance and initial groundworks at the site it is proposed to look more closely at the actual garden areas and retest some sampling areas that are currently hidden. For this reason Table 9 is considered an intermediate assessment prior to demolition based on the information obtained so far.

12. SUMMARY OF REMEDIATION OBJECTIVES, CRITERIA AND OPTIONS

The objective of any remediation strategy is to make the land suitable for its intended use. In this case a development consisting of multiple residential properties with soft landscaping/garden areas. As mentioned in the previous section, much of the site will be under buildings or hard landscaping. The standard procedure for remediation of the remaining soft landscaping is to cap it with 600mm of clean cover over a no-dig

barrier. If any material is imported to the site for any reason, all imports will need to be recorded and all documentation presented in a validation report. This process will need to follow the guidelines contained in L.C.R.M (2020) and the W.L.G.A./ C.L.I.L.C. document *Requirements for the Chemical Testing of Imported Materials for Various End Uses and Validation of Cover Systems*. It is currently unknown how much imported material will be required, and the site will require reassessment following demolition and site clearance. Figure 9 shows a theoretical C.S.M. of the site following construction of the houses and hard landscaping together with capping of areas of soft landscaping.

Richard Davies BSc.(Hons.), MSc., F.G.S.

24/06/2026

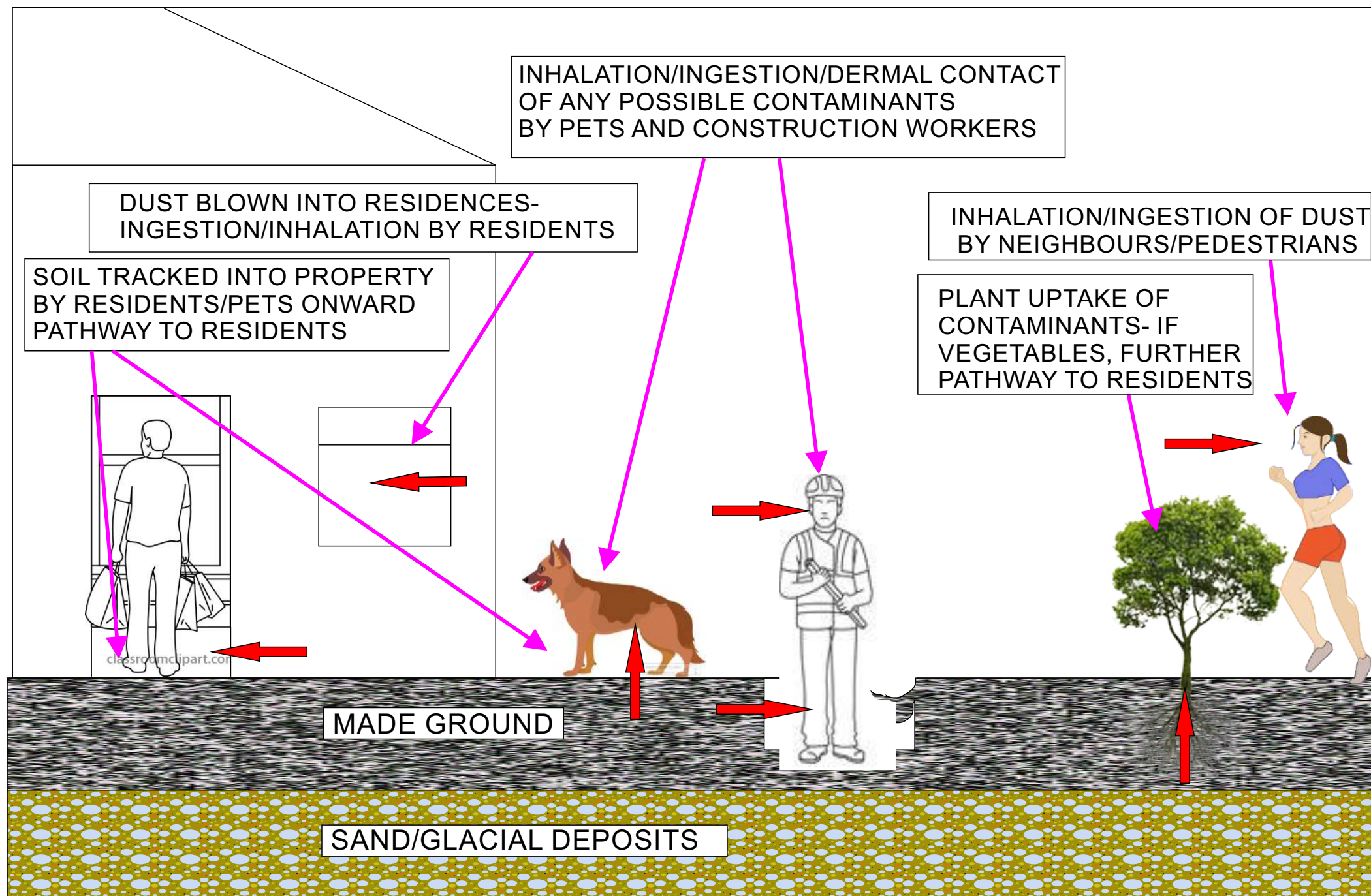


FIGURE 14

INITIAL C.S.M. FROM PHASE 2 WITH GROUND GAS AND RISK TO CONTROLLED WATERS REMOVED.

TABLE 9 PRE-DEMOLITION						
INTERMEDIATE QUANTITATIVE HUMAN HEALTH RISK ASSESSMENT AND ENVIRONMENTAL RISK ASSESSMENT AT KENNEL ROW						
CONTAMINANT SOURCE	PATHWAYS	RECEPTORS	POTENTIAL SEVERITY	PROBABILITY OF RISK	LEVEL OF RISK	FURTHER ACTION REQUIRED
ON SITE: POTENTIAL CONTAMINATION IN SOILS/MADE GROUND. POSSIBLY ELEVATED LEVELS OF METALS, CYANIDE, PHENOLS, HYDROCARBONS AND PAH	INGESTION, DERMAL CONTACT, INHALATION	FUTURE END USERS, VISITORS	MEDIUM	MEDIUM	MEDIUM	P.A.H. AND ARSENIC CONTAMINATION WAS DETECTED IN SOIL AT THE SITE. THERE WILL BE A POTENTIAL PATHWAY TO ABOVE GROUND RECEPTORS. REMEDIATION IN THE FORM OF CAPPING WILL BE REQUIRED. THE SITUATION WILL BE REAPPRAISED FOLLOWING DEMOLITION
	CONTACT WITH CONTAMINATED GROUNDWATER	FUTURE END USERS, VISITORS AND CONSTRUCTION WORKERS	MEDIUM			
	PERMEATION OF WATER PIPES	FUTURE END USERS AND SITE VISITORS	MEDIUM			
	INGESTION OF HOME GROWN PRODUCE	FUTURE END USERS	MEDIUM			
ON SITE: ASBESTOS AT OR NEAR GROUND SURFACE IN SOILS/MADE GROUND	INHALATION OF FIBRES IN AIRBORNE DUST	FUTURE END USERS AND SITE VISITORS	HIGH	LOW	LOW	NO ASBESTOS WAS DETECTED AT THE SITE IN THE LABORATORY ANALYSIS OF THE SOIL SAMPLES. NO FURTHER ACTION REQUIRED.
		CONSTRUCTION WORKERS	HIGH	LOW	LOW	
ON SITE: POTENTIAL CONTAMINATION IN SOILS/MADE GROUND. POSSIBLY ELEVATED LEVELS OF CONTAMINANTS	RUN OFF	SURFACE DRAINAGE	MEDIUM	LOW	LOW	THE P.A.H. CONTAMINATION IN THE MADE GROUND ON SITE MEANT FURTHER QUANTIFICATION OF THE THREAT TO CONTROLLED WATERS WAS DONE BY LEACHATE TESTING. THIS DETERMINED THAT THE CONTAMINANTS WERE IMMOBILE AND THERE WAS NO THREAT OF ONWARD MIGRATION. NO FURTHER ACTION REQUIRED.
	MIGRATION THROUGH SOIL VIA LEACHING	SHALLOW GROUNDWATER				
	ONWARD MIGRATION OF GROUNDWATER	BEDROCK AQUIFER				

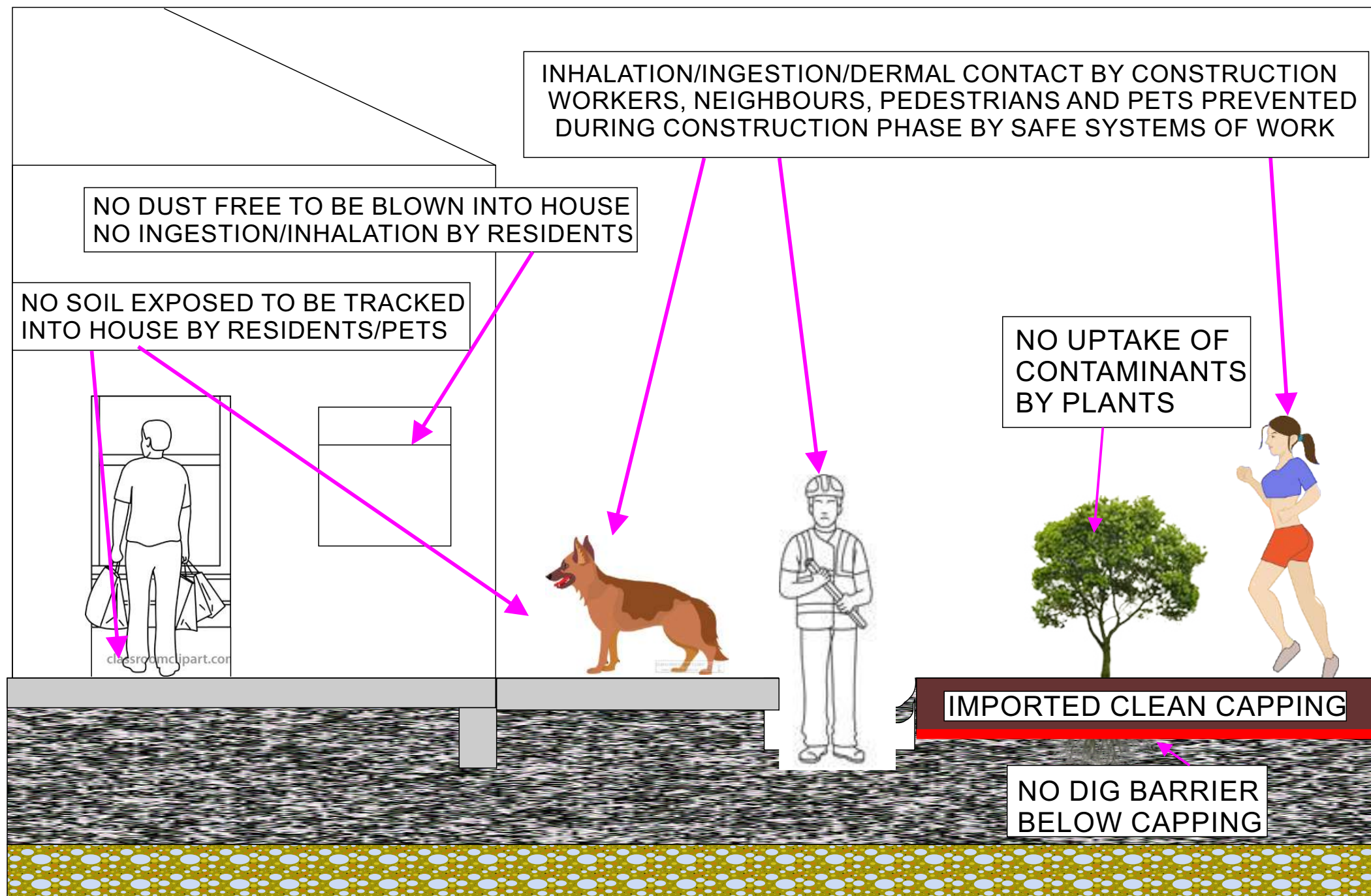


FIGURE 9 REVISED CONCEPTUAL MODEL OF SITE SHOWING ALL POTENTIAL PATHWAYS CUT DURING CONSTRUCTION BY WORK METHODS AND ON COMPLETION BY CAPPING.

APPENDIX A
TRIAL PIT LOGS TO BS5930:2015
WITH PHOTOGRAPHS
KENNEL ROW
BRITON FERRY

Project: KENNEL ROW, BRITON FERRY	Project No: WSM246
Described By: R.DAVIES	Trial Pit No. TP1
Date: 15/05/2026	Sheet: 1 of 1
Method / Plant TRACKED EXCAVATOR	Groundwater Observations: DRY
Stability GOOD	Strike of Face A:
Shoring NONE	Loggers Signature

FACE SKETCHES - INCLUDING ANY SIGNIFICANT FINDINGS WITHIN TRIAL PIT

Samples and Tests		Strata	
Depth (m)	Type (B,D,ES)	Depth (m)	Strata Description
		G.L.-0.1	Thin Tarmac and Subbase
		1.7	Medium dense yellowish brown, fine to medium, wind blown SAND.
1.7	ES2	1.7	
		1.9	Soft grey and brown alluvial CLAY

Notes: ES-Environmental Soil
EW - Environmental Water
B - Bulk Disturbed
D - Small Disturbed

TRIAL PIT NUMBER
TP1

Sheet 1 of 1



TP 1

Project: KENNEL ROW, BRITON FERRY	Project No: WSM246
Described By: R.DAVIES	Trial Pit No. TP2
Date: 15/05/2026	Sheet: 1 of 1
Method / Plant TRACKED EXCAVATOR	Groundwater Observations: DRY
Stability GOOD	Strike of Face A:
Shoring NONE	Loggers Signature

FACE SKETCHES - INCLUDING ANY SIGNIFICANT FINDINGS WITHIN TRIAL PIT

Samples and Tests		Strata	
Depth (m)	Type (B,D,ES)	Depth (m)	Strata Description
		G.L.-0.1	Thin Tarmac and Subbase
		0.45	MADE GROUND. Medium dense black and grey sandy GRAVEL. Gravel is angular, fine to coarse of Sandstone masonry, crushed concrete, ash and clinker. Sand is similar to the natural ground but stained.
ES3	0.4	1.3	Medium dense yellowish brown, fine to medium wind blown SAND.

Notes: ES-Environmental Soil
 EW - Environmental Water
 B - Bulk Disturbed
 D - Small Disturbed

TRIAL PIT NUMBER
TP2

Sheet 1 of 1



TP 2

Project: KENNEL ROW, BRITON FERRY	Project No: WSM246
Described By: R.DAVIES	Trial Pit No. TP3
Date: 15/05/2026	Sheet: 1 of 1
Method / Plant TRACKED EXCAVATOR	Groundwater Observations: DRY
Stability GOOD	Strike of Face A:
Shoring NONE	Loggers Signature

FACE SKETCHES - INCLUDING ANY SIGNIFICANT FINDINGS WITHIN TRIAL PIT

Samples and Tests		Strata	
Depth (m)	Type (B,D,ES)	Depth (m)	Strata Description
		G.L.-0.1	Thin Tarmac and Subbase
		0.65	MADE GROUND. Medium dense black and grey sandy GRAVEL. Gravel is angular, fine to coarse of Sandstone masonry, crushed concrete, ash and clinker. Sand is similar to the natural ground but stained.
ES4	0.5	1.6	Medium dense yellowish brown, fine to medium wind blown SAND.

Notes: ES-Environmental Soil
EW - Environmental Water
B - Bulk Disturbed
D - Small Disturbed

TRIAL PIT NUMBER
TP3

Sheet 1 of 1



TP 3

Project: KENNEL ROW, BRITON FERRY	Project No: WSM246
Described By: R.DAVIES	Trial Pit No. TP4
Date: 15/05/2026	Sheet: 1 of 1
Method / Plant TRACKED EXCAVATOR	Groundwater Observations: DRY
Stability GOOD	Strike of Face A:
Shoring NONE	Loggers Signature

FACE SKETCHES - INCLUDING ANY SIGNIFICANT FINDINGS WITHIN TRIAL PIT

Samples and Tests		Strata	
Depth (m)	Type (B,D,ES)	Depth (m)	Strata Description
		G.L.-0.1	Thin Tarmac and Subbase
			MADE GROUND. Very dense black and grey sandy, GRAVEL. Gravel is angular, fine to coarse of Sandstone masonry,Brick, ash and clinker. made it impossible to Clean sand possibly seen at 1.5m but difficult excavation meant the trial pit could not be deepened further to prove.
		1.5	

Notes: ES-Environmental Soil
EW - Environmental Water
B - Bulk Disturbed
D - Small Disturbed

TRIAL PIT NUMBER
TP4



TP 4

Project: KENNEL ROW, BRITON FERRY	Project No: WSM246
Described By: R.DAVIES	Trial Pit No. TP5
Date: 15/05/2026	Sheet: 1 of 1
Method / Plant TRACKED EXCAVATOR	Groundwater Observations: DRY
Stability GOOD	Strike of Face A:
Shoring NONE	Loggers Signature

FACE SKETCHES - INCLUDING ANY SIGNIFICANT FINDINGS WITHIN TRIAL PIT

Samples and Tests		Strata	
Depth (m)	Type (B,D,ES)	Depth (m)	Strata Description
		G.L.-0.1	Thin Tarmac and Subbase
		0.65	MADE GROUND. Medium dense black and grey sandy GRAVEL. Gravel is angular, fine to coarse of Sandstone masonry, Brick, ash and clinker. Sand is similar to the natural ground but stained.
ES6	0.3		
		1.2	Medium dense yellowish brown, fine to medium wind blown SAND.

Notes: ES-Environmental Soil
EW - Environmental Water
B - Bulk Disturbed
D - Small Disturbed

TRIAL PIT NUMBER
TP5

Sheet 1 of 1



TP 5

Project: KENNEL ROW, BRITON FERRY	Project No: WSM246
Described By: R.DAVIES	Trial Pit No. TP6
Date: 15/05/2026	Sheet: 1 of 1
Method / Plant TRACKED EXCAVATOR	Groundwater Observations: DRY
Stability GOOD	Strike of Face A:
Shoring NONE	Loggers Signature

FACE SKETCHES - INCLUDING ANY SIGNIFICANT FINDINGS WITHIN TRIAL PIT

Samples and Tests		Strata	
Depth (m)	Type (B,D,ES)	Depth (m)	Strata Description
		G.L.-0.1	Thin Tarmac and Subbase
		0.9	MADE GROUND. Medium dense black and grey sandy, GRAVEL. Gravel is angular, fine to coarse of Sandstone masonry, Brick, ash and clinker. Sand is similar to the natural ground but stained.
ES8	0.5		
		1.2	Soft brown and grey silty CLAY. Possibly natural ground.
ES9	1.2		

Notes: ES-Environmental Soil
EW - Environmental Water
B - Bulk Disturbed
D - Small Disturbed

TRIAL PIT NUMBER
TP6

Sheet 1 of 1



TP 6

Project: KENNEL ROW, BRITON FERRY	Project No: WSM246
Described By: R.DAVIES	Trial Pit No. TP7
Date: 15/05/2026	Sheet: 1 of 1
Method / Plant TRACKED EXCAVATOR	Groundwater Observations: DRY
Stability GOOD	Strike of Face A:
Shoring NONE	Loggers Signature

FACE SKETCHES - INCLUDING ANY SIGNIFICANT FINDINGS WITHIN TRIAL PIT

Samples and Tests		Strata	
Depth (m)	Type (B,D,ES)	Depth (m)	Strata Description
		G.L.-0.1	Thin Tarmac and Subbase
			MADE GROUND. Medium dense black and grey sandy, GRAVEL. Gravel is angular, fine to coarse of Sandstone masonry, Brick, ash and clinker. Sand is similar to the natural ground but stained.
		0.55	
ES7	0.7		MADE GROUND. Medium dense brown sandy, clayey GRAVEL. Gravel is angular, fine to coarse of Sandstone masonry with soft brown clay and stained sand
		1.1	
			Soft brown and grey silty CLAY. Possibly natural ground.
		1.6	

Notes: ES-Environmental Soil
 EW - Environmental Water
 B - Bulk Disturbed
 D - Small Disturbed

TRIAL PIT NUMBER
TP7

Sheet 1 of 1



TP 7

Project: KENNEL ROW, BRITON FERRY	Project No: WSM246
Described By: R.DAVIES	Trial Pit No. TP9
Date: 15/05/2026	Sheet: 1 of 1
Method / Plant TRACKED EXCAVATOR	Groundwater Observations: DRY
Stability GOOD	Strike of Face A:
Shoring NONE	Loggers Signature

FACE SKETCHES - INCLUDING ANY SIGNIFICANT FINDINGS WITHIN TRIAL PIT

Samples and Tests		Strata	
Depth (m)	Type (B,D,ES)	Depth (m)	Strata Description
		G.L.-0.1	Thin Tarmac and Subbase
		0.55	MADE GROUND. Medium dense black and grey sandy GRAVEL. Gravel is angular, fine to coarse of Sandstone masonry, crushed concrete and fused steelworks slag.
0.4	ES1		
0.7	ES10	0.7	Medium desnse yellowish brown fine to medium wind blown SAND

Notes: ES-Environmental Soil
 EW - Environmental Water
 B - Bulk Disturbed
 D - Small Disturbed

TRIAL PIT NUMBER
TP9

Sheet 1 of 1



TP 9

APPENDIX B

CHEMTECH LAB REPORTS

26-05371-01

AND

26-05371-02

KENNEL ROW

BRITON FERRY

ANALYTICAL TEST REPORT

Report Number 26-05371, issue number 2

Contract name: WSM246 Kennel row briton ferry

Client reference: WSM246

Clients name: Rhondda Geotechnical Services

Clients address: RHONGEOSER
56 Meyler Street
Thomastown
Porth
CF39 8EA

Samples received: 07/05/2026

Analysis started: 08/05/2026

Analysis completed: 27/05/2026

Report issued: 27/05/2026
2. Replaces Analytical Report number 26-05371; issue no.1

Key

U UKAS accredited test

M MCERTS & UKAS accredited test

(B) Analysis performed at Southampton Site

I/S Insufficient sample to carry out test

U/S Sample not suitable for testing

NAD No Asbestos Detected

Full key available on Information page



Approved by: Sam Rogerson
Receipt and Reporting Manager

Re-Issue Summary

Client: Rhondda Geotechnical Services
Address: 56 Meyler Street, Thomastown, Tonyrefail, Porth, CF39
8EA

Date: 27-May-26

Report No.: 26-05371

Issue: 2

This report replaces 26-05371, issue: 1, issued: 15 May 2026

Reason for Change

1. Client Request- Additional analysis

Cadmium Leachate
Chromium Leachate
Copper Leachate
Mercury Leachate
Nickel Leachate
Lead Leachate
Selenium Leachate
Zinc Leachate
Asbestos Identification

Key

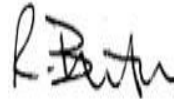
A - Additional Work added
D - Work Deleted
E - Result Edited*
R - Work Repeated*

*If a result changed, please refer to the previous report for the old result. The new result will be shown in this report.

Re-issued by: Sam Rogerson
Receipt and Reporting Manager



Approved by: Rachael Burton
Technical Support Manager



SAMPLE INFORMATION

MCERTS (Soils):

Soil descriptions are only intended to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions. MCERTS accreditation applies for sand, clay and loam/topsoil, or combinations of these whether these are derived from naturally occurring soils or from made ground, as long as these materials constitute the major part of the sample. Other materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.
% Moisture reported as MCERTS drying at 30°C

Lab ref	Sample ID	Depth (m)	Sample description	Material removed	% Removed	% Moisture
104994	TP9-ES1	0.40	Brown Loamy Sand with Gravel.	-	-	10.5
104995	TP1-ES2	1.50	Beige Sand.	-	-	4.0
104996	TP2-ES3	0.40	Brown Loamy Sand with Stones.	-	-	8.9
104997	TP3-ES4	0.50	Brown Loamy Sand with Gravel.	-	-	17.6
104998	TP4-ES5	0.60	Black Loamy Sand with Gravel.	-	-	14.4
104999	TP5-ES6	0.30	Black Loamy Sand with Gravel.	-	-	19.7
105000	TP7-ES7	0.70	Brown Loamy Sand with Gravel.	-	-	12.7
105001	TP6-ES8	0.50	Black Loamy Sand with Gravel and Gravel.	-	-	16.1
105002	TP6-ES9	1.20	Beige Clay.	-	-	27.4
105003	TP9-ES10	0.70	Brown Sand with Gravel.	-	-	4.6

SOILS

Lab Number					104994	104995	104996	104997	104998
Client Reference					SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID					TP9-ES1	TP1-ES2	TP2-ES3	TP3-ES4	TP4-ES5
Depth (m)					0.40	1.50	0.40	0.50	0.60
Sampling Date					05/05/2026	05/05/2026	05/05/2026	05/05/2026	05/05/2026
Test	Method	Accred	LoD	Units					
Asbestos									
Asbestos Identification	SUBCO N	SU	0	-	NAD	NAD	NAD	NAD	NAD
Metals									
Arsenic	CE264	M	2.3	mg/kg	11.6	7.2	10.3	18.5	23.7
Cadmium	CE264	M	1.1	mg/kg	< 1.1	< 1.1	< 1.1	< 1.1	1.1
Chromium	CE264	U	1.3	mg/kg	10.1	< 1.3	2.4	5.2	49.1
Copper	CE264	M	1.2	mg/kg	22.5	< 1.2	21.4	51.7	103
Lead	CE264	U	2.4	mg/kg	152	7.6	49.9	34.7	170
Mercury	CE264	M	0.6	mg/kg	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6
Nickel	CE264	M	1.6	mg/kg	11.0	3.2	9.5	27.5	28.9
Selenium	CE264	M	3	mg/kg	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Zinc	CE264	M	2.4	mg/kg	69.4	6.0	421	197	130
Colourimetric									
Total Monohydric Phenols	CE078	N	0.5	mg/kg	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total Cyanide	CE077	N	1	mg/kg	< 1.0	< 1.0	< 1.0	2.6	< 1.0
Combustion									
Moisture Content	CE001	N	0.1	%	10.5	4.0	8.9	17.6	14.4
Total Organic Carbon	CE197	M	0.1	%	2.45	0.18	4.97	13.7	10.8
Soil Organic Matter	CE192	N	0.1	%	4.22	0.31	8.57	23.7	18.6
Polyaromatic hydrocarbons									
Naphthalene	CE087	M	0.016	mg/kg	0.025	< 0.016	0.045	< 0.016	0.256
Acenaphthylene	CE087	M	0.015	mg/kg	< 0.015	< 0.015	0.597	0.092	0.202
Acenaphthene	CE087	M	0.013	mg/kg	< 0.013	< 0.013	0.181	< 0.013	0.031
Fluorene	CE087	U	0.013	mg/kg	< 0.013	< 0.013	0.602	0.029	0.123
Phenanthrene	CE087	M	0.014	mg/kg	0.127	< 0.014	6.18	0.116	1.04
Anthracene	CE087	U	0.017	mg/kg	0.033	< 0.017	2.46	0.144	1.10
Fluoranthene	CE087	M	0.017	mg/kg	0.119	< 0.017	30.0	0.400	3.32
Pyrene	CE087	M	0.016	mg/kg	0.099	< 0.016	19.9	0.623	2.73
Benzo(a)anthracene	CE087	U	0.012	mg/kg	0.090	< 0.012	20.8	1.16	2.32
Chrysene	CE087	M	0.028	mg/kg	0.088	< 0.028	23.3	1.78	1.94

SOILS

Lab Number					104994	104995	104996	104997	104998
Client Reference					SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID					TP9-ES1	TP1-ES2	TP2-ES3	TP3-ES4	TP4-ES5
Depth (m)					0.40	1.50	0.40	0.50	0.60
Sampling Date					05/05/2026	05/05/2026	05/05/2026	05/05/2026	05/05/2026
Test	Method	Accred	LoD	Units					
Benzo(b)fluoranthene	CE087	M	0.02	mg/kg	0.116	< 0.020	27.6	3.31	2.58
Benzo(k)fluoranthene	CE087	M	0.025	mg/kg	0.040	< 0.025	8.54	0.875	1.04
Benzo(a)pyrene	CE087	U	0.019	mg/kg	0.075	< 0.019	12.6	1.38	2.03
Indeno(1,2,3-cd)pyrene	CE087	M	0.019	mg/kg	0.075	< 0.019	14.3	1.92	1.87
Dibenzo(a,h)anthracene	CE087	M	0.017	mg/kg	< 0.017	< 0.017	3.86	0.487	0.307
Benzo(g,h,i)perylene	CE087	M	0.019	mg/kg	0.047	< 0.019	7.51	0.986	1.15
Total PAH(16)	CE087	N	0.28	mg/kg	0.934	< 0.280	178	13.3	22.0
Total Petroleum Hydrocarbons									
>C5-C6 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C6-C8 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C8-C10 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C10-C12 Aliphatic (EH_2D_AL)	CE250	N	1	mg/kg	1.8	1.7	1.2	< 1.0	1.2
>C12-C16 Aliphatic (EH_2D_AL)	CE250	N	0.5	mg/kg	2.1	1.8	1.5	1.1	2.1
>C16-C21 Aliphatic (EH_2D_AL)	CE250	N	0.7	mg/kg	1.9	2.2	3.2	1.6	6.1
>C21-C35 Aliphatic (EH_2D_AL)	CE250	N	4	mg/kg	19.7	13.7	18.1	12.7	17.3
>C35-C40 Aliphatic (EH_2D_AL)	CE250	N	0.5	mg/kg	1.1	0.7	1.1	0.8	1.3
>C5-C7 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
>C7-C8 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
>C8-C10 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
>C10-C12 Aromatic (EH_2D_AR)	CE250	N	0.6	mg/kg	7.1	5.5	6.3	5.7	5.9
>C12-C16 Aromatic (EH_2D_AR)	CE250	N	1	mg/kg	20.9	14.3	22.2	17.9	19.8
>C16-C21 Aromatic (EH_2D_AR)	CE250	N	2	mg/kg	12.7	9.0	16.8	10.7	16.0
>C21-C35 Aromatic (EH_2D_AR)	CE250	N	4.5	mg/kg	111	65.8	123	82.9	77.8
>C35-C40 Aromatic (EH_2D_AR)	CE250	N	1.5	mg/kg	9.8	4.6	14.5	9.0	11.8
>C5-C10 Total (HS_1D_Total)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C10-C40 Total (EH_2D_Total)	CE250	N	11.5	mg/kg	188	119	208	143	159
Total Hydrocabons C5-C40 (HS_1D+EH_2D_Total)	CE250	N	11.5	mg/kg	188	119	208	143	159
Wet Chem									
pH	CE004	M	0.1	pH units	8.1	8.5	8.8	8.8	8.4

SOILS

Lab Number					104999	105000	105001	105002	105003
Client Reference					SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID					TP5-ES6	TP7-ES7	TP6-ES8	TP6-ES9	TP9-ES10
Depth (m)					0.30	0.70	0.50	1.20	0.70
Sampling Date					05/05/2026	05/05/2026	05/05/2026	05/05/2026	05/05/2026
Test	Method	Accred	LoD	Units					
Asbestos									
Asbestos Identification	SUBCO N	SU	0	-	NAD	NAD	NAD	NAD	NAD
Metals									
Arsenic	CE264	M	2.3	mg/kg	39.3	13.9	19.3	9.5	7.6
Cadmium	CE264	M	1.1	mg/kg	< 1.1	< 1.1	1.4	< 1.1	< 1.1
Chromium	CE264	U	1.3	mg/kg	26.0	5.0	136	36.6	7.0
Copper	CE264	M	1.2	mg/kg	427	34.2	136	22.7	2.4
Lead	CE264	U	2.4	mg/kg	154	110	111	25.9	8.4
Mercury	CE264	M	0.6	mg/kg	< 0.6	< 0.6	1.2	0.9	< 0.6
Nickel	CE264	M	1.6	mg/kg	34.6	14.6	26.8	26.8	5.1
Selenium	CE264	M	3	mg/kg	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Zinc	CE264	M	2.4	mg/kg	237	35.9	134	84.3	14.0
Colourimetric									
Total Monohydric Phenols	CE078	N	0.5	mg/kg	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total Cyanide	CE077	N	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Combustion									
Moisture Content	CE001	N	0.1	%	19.7	12.7	16.1	27.4	4.6
Total Organic Carbon	CE197	M	0.1	%	24.0	5.25	6.07	0.89	0.28
Soil Organic Matter	CE192	N	0.1	%	41.3	9.05	10.5	1.53	0.48
Polyaromatic hydrocarbons									
Naphthalene	CE087	M	0.016	mg/kg	0.104	< 0.016	0.080	< 0.016	< 0.016
Acenaphthylene	CE087	M	0.015	mg/kg	0.058	< 0.015	< 0.015	< 0.015	< 0.015
Acenaphthene	CE087	M	0.013	mg/kg	< 0.013	< 0.013	0.060	< 0.013	< 0.013
Fluorene	CE087	U	0.013	mg/kg	0.026	< 0.013	0.093	< 0.013	< 0.013
Phenanthrene	CE087	M	0.014	mg/kg	0.327	0.048	0.607	< 0.014	< 0.014
Anthracene	CE087	U	0.017	mg/kg	0.144	< 0.017	0.201	< 0.017	< 0.017
Fluoranthene	CE087	M	0.017	mg/kg	0.986	0.024	0.815	< 0.017	< 0.017
Pyrene	CE087	M	0.016	mg/kg	0.952	0.023	0.694	< 0.016	< 0.016
Benzo(a)anthracene	CE087	U	0.012	mg/kg	0.919	0.025	0.440	< 0.012	< 0.012
Chrysene	CE087	M	0.028	mg/kg	0.825	< 0.028	0.387	< 0.028	< 0.028

SOILS

Lab Number					104999	105000	105001	105002	105003
Client Reference					SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID					TP5-ES6	TP7-ES7	TP6-ES8	TP6-ES9	TP9-ES10
Depth (m)					0.30	0.70	0.50	1.20	0.70
Sampling Date					05/05/2026	05/05/2026	05/05/2026	05/05/2026	05/05/2026
Test	Method	Accred	LoD	Units					
Benzo(b)fluoranthene	CE087	M	0.02	mg/kg	1.22	0.027	0.575	< 0.020	< 0.020
Benzo(k)fluoranthene	CE087	M	0.025	mg/kg	0.489	< 0.025	0.207	< 0.025	< 0.025
Benzo(a)pyrene	CE087	U	0.019	mg/kg	1.03	< 0.019	0.390	< 0.019	< 0.019
Indeno(1,2,3-cd)pyrene	CE087	M	0.019	mg/kg	0.997	< 0.019	0.383	< 0.019	< 0.019
Dibenzo(a,h)anthracene	CE087	M	0.017	mg/kg	0.157	< 0.017	0.056	< 0.017	< 0.017
Benzo(g,h,i)perylene	CE087	M	0.019	mg/kg	0.619	< 0.019	0.249	< 0.019	< 0.019
Total PAH(16)	CE087	N	0.28	mg/kg	8.86	< 0.280	5.24	< 0.280	< 0.280
Total Petroleum Hydrocarbons									
>C5-C6 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C6-C8 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C8-C10 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C10-C12 Aliphatic (EH_2D_AL)	CE250	N	1	mg/kg	1.1	< 1.0	< 1.0	< 1.0	< 1.0
>C12-C16 Aliphatic (EH_2D_AL)	CE250	N	0.5	mg/kg	1.6	0.7	1.3	0.6	< 0.5
>C16-C21 Aliphatic (EH_2D_AL)	CE250	N	0.7	mg/kg	4.2	0.8	1.5	0.8	0.7
>C21-C35 Aliphatic (EH_2D_AL)	CE250	N	4	mg/kg	19.5	6.4	9.3	5.7	< 4.0
>C35-C40 Aliphatic (EH_2D_AL)	CE250	N	0.5	mg/kg	1.2	< 0.5	0.5	< 0.5	< 0.5
>C5-C7 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
>C7-C8 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
>C8-C10 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
>C10-C12 Aromatic (EH_2D_AR)	CE250	N	0.6	mg/kg	6.1	3.1	4.2	3.1	2.1
>C12-C16 Aromatic (EH_2D_AR)	CE250	N	1	mg/kg	19.4	10.3	14.8	9.6	7.1
>C16-C21 Aromatic (EH_2D_AR)	CE250	N	2	mg/kg	12.1	5.3	10.4	4.8	2.7
>C21-C35 Aromatic (EH_2D_AR)	CE250	N	4.5	mg/kg	81.1	36.7	54.0	29.2	21.4
>C35-C40 Aromatic (EH_2D_AR)	CE250	N	1.5	mg/kg	10.7	3.1	5.6	2.4	1.6
>C5-C10 Total (HS_1D_Total)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C10-C40 Total (EH_2D_Total)	CE250	N	11.5	mg/kg	157	66.3	103	56.2	39.0
Total Hydrocabons C5-C40 (HS_1D+EH_2D_Total)	CE250	N	11.5	mg/kg	157	66.3	103	56.2	39.0
Wet Chem									
pH	CE004	M	0.1	pH units	8.4	8.5	8.3	8.4	8.8

SOIL SVOCS

Lab Number					104994	104995	104996	104997	104998
Client Reference					SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID					TP9-ES1	TP1-ES2	TP2-ES3	TP3-ES4	TP4-ES5
Depth (m)					0.40	1.50	0.40	0.50	0.60
Sampling Date					05/05/2026	05/05/2026	05/05/2026	05/05/2026	05/05/2026
Test	Method	Accred	LoD	Units					
SVOC									
Phenol	CE189	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Cresols	CE189	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Xylenols	CE189	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Naphthols	CE189	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Trimethylphenols	CE189	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

SOIL SVOCS

Lab Number					104999	105000	105001	105002	105003
Client Reference					SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID					TP5-ES6	TP7-ES7	TP6-ES8	TP6-ES9	TP9-ES10
Depth (m)					0.30	0.70	0.50	1.20	0.70
Sampling Date					05/05/2026	05/05/2026	05/05/2026	05/05/2026	05/05/2026
Test	Method	Accred	LoD	Units					
SVOC									
Phenol	CE189	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Cresols	CE189	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Xylenols	CE189	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Naphthols	CE189	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Trimethylphenols	CE189	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

LEACHATE

Lab Number					104994	104996	104997	104998	104999
Client Reference					SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID					TP9-ES1	TP2-ES3	TP3-ES4	TP4-ES5	TP5-ES6
Depth (m)					0.40	0.40	0.50	0.60	0.30
Sampling Date					05/05/2026	05/05/2026	05/05/2026	05/05/2026	05/05/2026
Test	Method	Accred	LoD	Units					
Metals									
Arsenic Leachate	CE265	U	0.1	µg/l	4.33	12.1	10.2	5.51	8.27
Boron Leachate	CE265	N	4	µg/l	14.2	10.0	7.6	8.5	10.9
Cadmium Leachate	CE265	U	0.1	µg/l	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chromium Leachate	CE265	U	0.5	µg/l	0.91	5.07	0.91	< 0.50	< 0.50
Copper Leachate	CE265	U	0.5	µg/l	3.45	5.05	5.39	2.63	2.50
Lead Leachate	CE265	U	0.6	µg/l	4.82	11.4	3.02	< 0.60	< 0.60
Mercury Leachate	CE265	N	0.05	µg/l	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Nickel Leachate	CE265	U	0.4	µg/l	0.45	1.26	1.71	< 0.40	< 0.40
Selenium Leachate	CE265	U	1.1	µg/l	< 1.1	< 1.1	< 1.1	1.7	< 1.1
Zinc Leachate	CE265	U	3.5	µg/l	5.2	27.7	16.2	< 3.5	< 3.5
Colourimetric									
Chromium VI	CE259	U	1.5	µg/l	< 1.50	< 1.50	< 1.50	< 1.50	< 1.50
Polyaromatic hydrocarbons									
Naphthalene	CE051	N	0.1	µg/l	n/t	0.38	< 0.10	< 0.10	0.35
Acenaphthylene	CE051	N	0.1	µg/l	n/t	0.28	0.27	< 0.10	< 0.10
Acenaphthene	CE051	N	0.1	µg/l	n/t	0.22	0.26	0.13	< 0.10
Fluorene	CE051	N	0.1	µg/l	n/t	0.31	0.26	0.13	< 0.10
Phenanthrene	CE051	N	0.1	µg/l	n/t	1.65	0.89	0.51	0.33
Anthracene	CE051	N	0.1	µg/l	n/t	0.73	0.66	0.14	0.10
Fluoranthene	CE051	N	0.1	µg/l	n/t	8.66	5.71	0.30	0.24
Pyrene	CE051	N	0.1	µg/l	n/t	5.96	4.01	0.15	0.14
Benzo(a)anthracene	CE051	N	0.1	µg/l	n/t	5.64	5.74	0.37	0.40
Chrysene	CE051	N	0.1	µg/l	n/t	6.19	7.01	0.24	0.22
Benzo(b)fluoranthene	CE051	N	0.1	µg/l	n/t	9.07	10.2	0.24	0.48
Benzo(k)fluoranthene	CE051	N	0.1	µg/l	n/t	2.82	3.36	0.14	0.20
Benzo(a)pyrene	CE051	N	0.1	µg/l	n/t	4.61	4.83	0.16	0.37
Indeno(1,2,3-cd)pyrene	CE051	N	0.1	µg/l	n/t	5.07	5.84	0.27	0.65
Dibenzo(a,h)anthracene	CE051	N	0.1	µg/l	n/t	1.60	1.46	< 0.10	0.13
Benzo(g,h,i)perylene	CE051	N	0.1	µg/l	n/t	2.78	3.20	< 0.10	0.32

LEACHATE

Lab Number					104994	104996	104997	104998	104999
Client Reference					SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID					TP9-ES1	TP2-ES3	TP3-ES4	TP4-ES5	TP5-ES6
Depth (m)					0.40	0.40	0.50	0.60	0.30
Sampling Date					05/05/2026	05/05/2026	05/05/2026	05/05/2026	05/05/2026
Test	Method	Accred	LoD	Units					
Total PAH(16)	CE051	N	1.6	µg/l	n/t	55.9	53.7	2.76	3.89

METHOD DETAILS

METHOD	TESTNAME	METHOD SUMMARY	ANALYSIS BASIS
CE267	VPH in Soil	HS-GCFID	As submitted sample
CE250	GCXGC in Soil	DCM Extraction and GCxGC-FID	As submitted sample
SUBCON	Asbestos Soil	HSG248	Air Dried Sample
CE189	SVOC in solids	DCM Extraction and GCMS	As submitted sample
CE265	Dissolved metals by ICP in Leachate	ICPMS	As submitted sample
CE264	Metals by ICP in Soil	ICPOES	Air dried sample
CE259	ChromiumVI by Discrete Analyser in Leach	Gallery	As submitted sample
CE051	PAH in Leachate	DCM Extraction and GCMS	As submitted sample
CE087	PAH in Soil	DCM Extraction and GCMS	As submitted sample
CE078	Phenols in Soil	Continuous Flow Analyser	As submitted sample
CE077	Cyanides in Soils	Continuous Flow Analyser	As submitted sample
CE197	TOC In Soil	PRIMACS Combustion Analyser	Air dried sample

DEVIATING SAMPLE INFORMATION

Comments

Sample deviation is determined in accordance with the UKAS note "Guidance on Deviating Samples" and based on reference standards and laboratory trials.

For samples identified as deviating, test result(s) may be compromised and may not be representative of the sample at the time of sampling.

Chemtech Environmental Ltd cannot be held responsible for the integrity of sample(s) received if Chemtech Environmental Ltd did not undertake the sampling. Such samples may be deviating.

Key

- a Sampling date not provided
- b Sampling time not provided (waters only)
- c Sample not received in appropriate containers
- d Storage Temperature
- e Headspace present in sample container
- f Sample exceeded sampling to receipt
- g Sample exceeded holding time(s)

Lab ref	Sample ID	Depth (m)	Deviating	Tests (Reason for deviation)
104994	TP9-ES1	0.40	N	
104995	TP1-ES2	1.50	N	
104996	TP2-ES3	0.40	N	
104997	TP3-ES4	0.50	N	
104998	TP4-ES5	0.60	N	
104999	TP5-ES6	0.30	N	
105000	TP7-ES7	0.70	N	
105001	TP6-ES8	0.50	N	
105002	TP6-ES9	1.20	N	
105003	TP9-ES10	0.70	N	

REPORT INFORMATION

Report No.:26-05371, issue number 2

Key	
U	ISO17025 Accredited Result
M	ISO17025 and MCERTS Accredited Result
N	Do not currently hold accreditation
^	MCERTS accreditation not applicable for sample matrix
*	ISO17025 accreditation not applicable for sample matrix
S	Subcontracted
I/S	Insufficient Sample
U/S	Unsuitable sample
N/T	Not tested
<	Means "less than"
>	Means "greater than"

LOD refers to limit of detection, except in the case of pH soils and pH waters where it means limit of discrimination.

This report shall not be reproduced except in full, without prior written approval.

Opinions and interpretations expressed herein are outside the UKAS accreditation scope.

All testing carried out at Unit 6 Parkhead, Stanley, DH9 7YB, except for subcontracted testing.

The results relate only to the sample received.

Unless otherwise stated, sample information has been provided by the client. This may affect the validity of the results.

Moisture Content Calculated on a Wet Weight basis (at 30°C)

Unless otherwise stated, Chemtech Environmental Ltd was not responsible for sampling.

Where sampling was undertaken by Chemtech Environmental Limited it is outside the UKAS accreditation scope.

Methods, procedures and performance data are available on request.

Results reported herein relate only to the material supplied to the laboratory.

BTEX compounds are identified by retention time only and may include interference from co-eluting compounds.

For soils and solids, all results are reported on a dry basis (30°C). Samples dried at no more than 30°C in a drying cabinet.

For soils and solids, analytical results are inclusive of stones and 'inert' material, where applicable.

'Client Reference', 'Sample ID', 'Sample Location', 'Sample Type', 'Depth', 'Sample Date' and 'Sample Time' information is provided by the customer

Sample Retention and Disposal

All soil samples will be retained for a period of 4 weeks from the point of receipt

All water samples will be retained for a period of 2 weeks from the point of Reporting

Charges may apply to extended sample storage

TPH Classification - HWOL Acronym System

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
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
2D	GC-GC - Double coil gas chromatography
#1	EH_Total but with humics mathematically subtracted
#2	EH_Total but with fatty acids mathematically subtracted
-	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total
MS	Mass Spectrometry

Unless specifically identified (noted as "(B)" in analyte name) all internal analysis performed at Durham site

ANALYTICAL TEST REPORT

Report Number 26-05371, issue number 1

Contract name: WSM246 Kennel row briton ferry

Client reference: WSM246

Clients name: Rhondda Geotechnical Services

Clients address: RHONGEOSER
56 Meyler Street
Thomastown
Porth
CF39 8EA

Samples received: 07/05/2026

Analysis started: 08/05/2026

Analysis completed: 15/05/2026

Report issued: 15/05/2026

Key

U UKAS accredited test

M MCERTS & UKAS accredited test

(B) Analysis performed at Southampton Site

I/S Insufficient sample to carry out test

U/S Sample not suitable for testing

NAD No Asbestos Detected

Full key available on Information page



Approved by: Rachael Burton
Technical Support Manager

SAMPLE INFORMATION

MCERTS (Soils):

Soil descriptions are only intended to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions. MCERTS accreditation applies for sand, clay and loam/topsoil, or combinations of these whether these are derived from naturally occurring soils or from made ground, as long as these materials constitute the major part of the sample. Other materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.
% Moisture reported as MCERTS drying at 30°C

Lab ref	Sample ID	Depth (m)	Sample description	Material removed	% Removed	% Moisture
104994	TP9-ES1	0.40	Brown Loamy Sand with Gravel.	-	-	10.5
104995	TP1-ES2	1.50	Beige Sand.	-	-	4.0
104996	TP2-ES3	0.40	Brown Loamy Sand with Stones.	-	-	8.9
104997	TP3-ES4	0.50	Brown Loamy Sand with Gravel.	-	-	17.6
104998	TP4-ES5	0.60	Black Loamy Sand with Gravel.	-	-	14.4
104999	TP5-ES6	0.30	Black Loamy Sand with Gravel.	-	-	19.7
105000	TP7-ES7	0.70	Brown Loamy Sand with Gravel.	-	-	12.7
105001	TP6-ES8	0.50	Black Loamy Sand with Gravel and Gravel.	-	-	16.1
105002	TP6-ES9	1.20	Beige Clay.	-	-	27.4
105003	TP9-ES10	0.70	Brown Sand with Gravel.	-	-	4.6

SOILS

Lab Number					104994	104995	104996	104997	104998
Client Reference					SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID					TP9-ES1	TP1-ES2	TP2-ES3	TP3-ES4	TP4-ES5
Depth (m)					0.40	1.50	0.40	0.50	0.60
Sampling Date					05/05/2026	05/05/2026	05/05/2026	05/05/2026	05/05/2026
Test	Method	Accred	LoD	Units					
Asbestos									
Asbestos Identification	SUBCO N	SU	0	-	NAD	NAD	NAD	NAD	NAD
Metals									
Arsenic	CE264	M	2.3	mg/kg	11.6	7.2	10.3	18.5	23.7
Cadmium	CE264	M	1.1	mg/kg	< 1.1	< 1.1	< 1.1	< 1.1	1.1
Chromium	CE264	U	1.3	mg/kg	10.1	< 1.3	2.4	5.2	49.1
Copper	CE264	M	1.2	mg/kg	22.5	< 1.2	21.4	51.7	103
Lead	CE264	U	2.4	mg/kg	152	7.6	49.9	34.7	170
Mercury	CE264	M	0.6	mg/kg	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6
Nickel	CE264	M	1.6	mg/kg	11.0	3.2	9.5	27.5	28.9
Selenium	CE264	M	3	mg/kg	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Zinc	CE264	M	2.4	mg/kg	69.4	6.0	421	197	130
Colourimetric									
Total Monohydric Phenols	CE078	N	0.5	mg/kg	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total Cyanide	CE077	N	1	mg/kg	< 1.0	< 1.0	< 1.0	2.6	< 1.0
Combustion									
Moisture Content	CE001	N	0.1	%	10.5	4.0	8.9	17.6	14.4
Total Organic Carbon	CE197	M	0.1	%	2.45	0.18	4.97	13.7	10.8
Soil Organic Matter	CE192	N	0.1	%	4.22	0.31	8.57	23.7	18.6
Polyaromatic hydrocarbons									
Naphthalene	CE087	M	0.016	mg/kg	0.025	< 0.016	0.045	< 0.016	0.256
Acenaphthylene	CE087	M	0.015	mg/kg	< 0.015	< 0.015	0.597	0.092	0.202
Acenaphthene	CE087	M	0.013	mg/kg	< 0.013	< 0.013	0.181	< 0.013	0.031
Fluorene	CE087	U	0.013	mg/kg	< 0.013	< 0.013	0.602	0.029	0.123
Phenanthrene	CE087	M	0.014	mg/kg	0.127	< 0.014	6.18	0.116	1.04
Anthracene	CE087	U	0.017	mg/kg	0.033	< 0.017	2.46	0.144	1.10
Fluoranthene	CE087	M	0.017	mg/kg	0.119	< 0.017	30.0	0.400	3.32
Pyrene	CE087	M	0.016	mg/kg	0.099	< 0.016	19.9	0.623	2.73
Benzo(a)anthracene	CE087	U	0.012	mg/kg	0.090	< 0.012	20.8	1.16	2.32
Chrysene	CE087	M	0.028	mg/kg	0.088	< 0.028	23.3	1.78	1.94

SOILS

Lab Number					104994	104995	104996	104997	104998
Client Reference					SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID					TP9-ES1	TP1-ES2	TP2-ES3	TP3-ES4	TP4-ES5
Depth (m)					0.40	1.50	0.40	0.50	0.60
Sampling Date					05/05/2026	05/05/2026	05/05/2026	05/05/2026	05/05/2026
Test	Method	Accred	LoD	Units					
Benzo(b)fluoranthene	CE087	M	0.02	mg/kg	0.116	< 0.020	27.6	3.31	2.58
Benzo(k)fluoranthene	CE087	M	0.025	mg/kg	0.040	< 0.025	8.54	0.875	1.04
Benzo(a)pyrene	CE087	U	0.019	mg/kg	0.075	< 0.019	12.6	1.38	2.03
Indeno(1,2,3-cd)pyrene	CE087	M	0.019	mg/kg	0.075	< 0.019	14.3	1.92	1.87
Dibenzo(a,h)anthracene	CE087	M	0.017	mg/kg	< 0.017	< 0.017	3.86	0.487	0.307
Benzo(g,h,i)perylene	CE087	M	0.019	mg/kg	0.047	< 0.019	7.51	0.986	1.15
Total PAH(16)	CE087	N	0.28	mg/kg	0.934	< 0.280	178	13.3	22.0
Total Petroleum Hydrocarbons									
>C5-C6 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C6-C8 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C8-C10 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C10-C12 Aliphatic (EH_2D_AL)	CE250	N	1	mg/kg	1.8	1.7	1.2	< 1.0	1.2
>C12-C16 Aliphatic (EH_2D_AL)	CE250	N	0.5	mg/kg	2.1	1.8	1.5	1.1	2.1
>C16-C21 Aliphatic (EH_2D_AL)	CE250	N	0.7	mg/kg	1.9	2.2	3.2	1.6	6.1
>C21-C35 Aliphatic (EH_2D_AL)	CE250	N	4	mg/kg	19.7	13.7	18.1	12.7	17.3
>C35-C40 Aliphatic (EH_2D_AL)	CE250	N	0.5	mg/kg	1.1	0.7	1.1	0.8	1.3
>C5-C7 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
>C7-C8 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
>C8-C10 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
>C10-C12 Aromatic (EH_2D_AR)	CE250	N	0.6	mg/kg	7.1	5.5	6.3	5.7	5.9
>C12-C16 Aromatic (EH_2D_AR)	CE250	N	1	mg/kg	20.9	14.3	22.2	17.9	19.8
>C16-C21 Aromatic (EH_2D_AR)	CE250	N	2	mg/kg	12.7	9.0	16.8	10.7	16.0
>C21-C35 Aromatic (EH_2D_AR)	CE250	N	4.5	mg/kg	111	65.8	123	82.9	77.8
>C35-C40 Aromatic (EH_2D_AR)	CE250	N	1.5	mg/kg	9.8	4.6	14.5	9.0	11.8
>C5-C10 Total (HS_1D_Total)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C10-C40 Total (EH_2D_Total)	CE250	N	11.5	mg/kg	188	119	208	143	159
Total Hydrocabons C5-C40 (HS_1D+EH_2D_Total)	CE250	N	11.5	mg/kg	188	119	208	143	159
Wet Chem									
pH	CE004	M	0.1	pH units	8.1	8.5	8.8	8.8	8.4

SOILS

Lab Number					104999	105000	105001	105002	105003
Client Reference					SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID					TP5-ES6	TP7-ES7	TP6-ES8	TP6-ES9	TP9-ES10
Depth (m)					0.30	0.70	0.50	1.20	0.70
Sampling Date					05/05/2026	05/05/2026	05/05/2026	05/05/2026	05/05/2026
Test	Method	Accred	LoD	Units					
Asbestos									
Asbestos Identification	SUBCO N	SU	0	-	NAD	NAD	NAD	NAD	NAD
Metals									
Arsenic	CE264	M	2.3	mg/kg	39.3	13.9	19.3	9.5	7.6
Cadmium	CE264	M	1.1	mg/kg	< 1.1	< 1.1	1.4	< 1.1	< 1.1
Chromium	CE264	U	1.3	mg/kg	26.0	5.0	136	36.6	7.0
Copper	CE264	M	1.2	mg/kg	427	34.2	136	22.7	2.4
Lead	CE264	U	2.4	mg/kg	154	110	111	25.9	8.4
Mercury	CE264	M	0.6	mg/kg	< 0.6	< 0.6	1.2	0.9	< 0.6
Nickel	CE264	M	1.6	mg/kg	34.6	14.6	26.8	26.8	5.1
Selenium	CE264	M	3	mg/kg	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Zinc	CE264	M	2.4	mg/kg	237	35.9	134	84.3	14.0
Colourimetric									
Total Monohydric Phenols	CE078	N	0.5	mg/kg	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total Cyanide	CE077	N	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Combustion									
Moisture Content	CE001	N	0.1	%	19.7	12.7	16.1	27.4	4.6
Total Organic Carbon	CE197	M	0.1	%	24.0	5.25	6.07	0.89	0.28
Soil Organic Matter	CE192	N	0.1	%	41.3	9.05	10.5	1.53	0.48
Polyaromatic hydrocarbons									
Naphthalene	CE087	M	0.016	mg/kg	0.104	< 0.016	0.080	< 0.016	< 0.016
Acenaphthylene	CE087	M	0.015	mg/kg	0.058	< 0.015	< 0.015	< 0.015	< 0.015
Acenaphthene	CE087	M	0.013	mg/kg	< 0.013	< 0.013	0.060	< 0.013	< 0.013
Fluorene	CE087	U	0.013	mg/kg	0.026	< 0.013	0.093	< 0.013	< 0.013
Phenanthrene	CE087	M	0.014	mg/kg	0.327	0.048	0.607	< 0.014	< 0.014
Anthracene	CE087	U	0.017	mg/kg	0.144	< 0.017	0.201	< 0.017	< 0.017
Fluoranthene	CE087	M	0.017	mg/kg	0.986	0.024	0.815	< 0.017	< 0.017
Pyrene	CE087	M	0.016	mg/kg	0.952	0.023	0.694	< 0.016	< 0.016
Benzo(a)anthracene	CE087	U	0.012	mg/kg	0.919	0.025	0.440	< 0.012	< 0.012
Chrysene	CE087	M	0.028	mg/kg	0.825	< 0.028	0.387	< 0.028	< 0.028

SOILS

Lab Number					104999	105000	105001	105002	105003
Client Reference					SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID					TP5-ES6	TP7-ES7	TP6-ES8	TP6-ES9	TP9-ES10
Depth (m)					0.30	0.70	0.50	1.20	0.70
Sampling Date					05/05/2026	05/05/2026	05/05/2026	05/05/2026	05/05/2026
Test	Method	Accred	LoD	Units					
Benzo(b)fluoranthene	CE087	M	0.02	mg/kg	1.22	0.027	0.575	< 0.020	< 0.020
Benzo(k)fluoranthene	CE087	M	0.025	mg/kg	0.489	< 0.025	0.207	< 0.025	< 0.025
Benzo(a)pyrene	CE087	U	0.019	mg/kg	1.03	< 0.019	0.390	< 0.019	< 0.019
Indeno(1,2,3-cd)pyrene	CE087	M	0.019	mg/kg	0.997	< 0.019	0.383	< 0.019	< 0.019
Dibenzo(a,h)anthracene	CE087	M	0.017	mg/kg	0.157	< 0.017	0.056	< 0.017	< 0.017
Benzo(g,h,i)perylene	CE087	M	0.019	mg/kg	0.619	< 0.019	0.249	< 0.019	< 0.019
Total PAH(16)	CE087	N	0.28	mg/kg	8.86	< 0.280	5.24	< 0.280	< 0.280
Total Petroleum Hydrocarbons									
>C5-C6 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C6-C8 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C8-C10 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C10-C12 Aliphatic (EH_2D_AL)	CE250	N	1	mg/kg	1.1	< 1.0	< 1.0	< 1.0	< 1.0
>C12-C16 Aliphatic (EH_2D_AL)	CE250	N	0.5	mg/kg	1.6	0.7	1.3	0.6	< 0.5
>C16-C21 Aliphatic (EH_2D_AL)	CE250	N	0.7	mg/kg	4.2	0.8	1.5	0.8	0.7
>C21-C35 Aliphatic (EH_2D_AL)	CE250	N	4	mg/kg	19.5	6.4	9.3	5.7	< 4.0
>C35-C40 Aliphatic (EH_2D_AL)	CE250	N	0.5	mg/kg	1.2	< 0.5	0.5	< 0.5	< 0.5
>C5-C7 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
>C7-C8 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
>C8-C10 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
>C10-C12 Aromatic (EH_2D_AR)	CE250	N	0.6	mg/kg	6.1	3.1	4.2	3.1	2.1
>C12-C16 Aromatic (EH_2D_AR)	CE250	N	1	mg/kg	19.4	10.3	14.8	9.6	7.1
>C16-C21 Aromatic (EH_2D_AR)	CE250	N	2	mg/kg	12.1	5.3	10.4	4.8	2.7
>C21-C35 Aromatic (EH_2D_AR)	CE250	N	4.5	mg/kg	81.1	36.7	54.0	29.2	21.4
>C35-C40 Aromatic (EH_2D_AR)	CE250	N	1.5	mg/kg	10.7	3.1	5.6	2.4	1.6
>C5-C10 Total (HS_1D_Total)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C10-C40 Total (EH_2D_Total)	CE250	N	11.5	mg/kg	157	66.3	103	56.2	39.0
Total Hydrocabons C5-C40 (HS_1D+EH_2D_Total)	CE250	N	11.5	mg/kg	157	66.3	103	56.2	39.0
Wet Chem									
pH	CE004	M	0.1	pH units	8.4	8.5	8.3	8.4	8.8

SOIL SVOCS

Lab Number					104994	104995	104996	104997	104998
Client Reference					SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID					TP9-ES1	TP1-ES2	TP2-ES3	TP3-ES4	TP4-ES5
Depth (m)					0.40	1.50	0.40	0.50	0.60
Sampling Date					05/05/2026	05/05/2026	05/05/2026	05/05/2026	05/05/2026
Test	Method	Accred	LoD	Units					
SVOC									
Phenol	CE189	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Cresols	CE189	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Xylenols	CE189	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Naphthols	CE189	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Trimethylphenols	CE189	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

SOIL SVOCS

Lab Number					104999	105000	105001	105002	105003
Client Reference					SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID					TP5-ES6	TP7-ES7	TP6-ES8	TP6-ES9	TP9-ES10
Depth (m)					0.30	0.70	0.50	1.20	0.70
Sampling Date					05/05/2026	05/05/2026	05/05/2026	05/05/2026	05/05/2026
Test	Method	Accred	LoD	Units					
SVOC									
Phenol	CE189	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Cresols	CE189	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Xylenols	CE189	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Naphthols	CE189	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Trimethylphenols	CE189	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

METHOD DETAILS

METHOD	TESTNAME	METHOD SUMMARY	ANALYSIS BASIS
CE267	VPH in Soil	HS-GCFID	As submitted sample
CE250	GCXGC in Soil	DCM Extraction and GCxGC-FID	As submitted sample
SUBCON	Asbestos Soil	HSG248	Air Dried Sample
CE189	SVOC in solids	DCM Extraction and GCMS	As submitted sample
CE264	Metals by ICP in Soil	ICPOES	Air dried sample
CE087	PAH in Soil	DCM Extraction and GCMS	As submitted sample
CE078	Phenols in Soil	Continuous Flow Analyser	As submitted sample
CE077	Cyanides in Soils	Continuous Flow Analyser	As submitted sample
CE197	TOC In Soil	PRIMACS Combustion Analyser	Air dried sample

DEVIATING SAMPLE INFORMATION

Comments

Sample deviation is determined in accordance with the UKAS note "Guidance on Deviating Samples" and based on reference standards and laboratory trials.

For samples identified as deviating, test result(s) may be compromised and may not be representative of the sample at the time of sampling.

Chemtech Environmental Ltd cannot be held responsible for the integrity of sample(s) received if Chemtech Environmental Ltd did not undertake the sampling. Such samples may be deviating.

Key

- a Sampling date not provided
- b Sampling time not provided (waters only)
- c Sample not received in appropriate containers
- d Storage Temperature
- e Headspace present in sample container
- f Sample exceeded sampling to receipt
- g Sample exceeded holding time(s)

Lab ref	Sample ID	Depth (m)	Deviating	Tests (Reason for deviation)
104994	TP9-ES1	0.40	N	
104995	TP1-ES2	1.50	N	
104996	TP2-ES3	0.40	N	
104997	TP3-ES4	0.50	N	
104998	TP4-ES5	0.60	N	
104999	TP5-ES6	0.30	N	
105000	TP7-ES7	0.70	N	
105001	TP6-ES8	0.50	N	
105002	TP6-ES9	1.20	N	
105003	TP9-ES10	0.70	N	

REPORT INFORMATION

Report No.:26-05371, issue number 1

Key

U	ISO17025 Accredited Result
M	ISO17025 and MCERTS Accredited Result
N	Do not currently hold accreditation
^	MCERTS accreditation not applicable for sample matrix
*	ISO17025 accreditation not applicable for sample matrix
S	Subcontracted
I/S	Insufficient Sample
U/S	Unsuitable sample
N/T	Not tested
<	Means "less than"
>	Means "greater than"

LOD refers to limit of detection, except in the case of pH soils and pH waters where it means limit of discrimination.

This report shall not be reproduced except in full, without prior written approval.

Opinions and interpretations expressed herein are outside the UKAS accreditation scope.

All testing carried out at Unit 6 Parkhead, Stanley, DH9 7YB, except for subcontracted testing.

The results relate only to the sample received.

Unless otherwise stated, sample information has been provided by the client. This may affect the validity of the results.

Moisture Content Calculated on a Wet Weight basis (at 30°C)

Unless otherwise stated, Chemtech Environmental Ltd was not responsible for sampling.

Where sampling was undertaken by Chemtech Environmental Limited it is outside the UKAS accreditation scope.

Methods, procedures and performance data are available on request.

Results reported herein relate only to the material supplied to the laboratory.

BTEX compounds are identified by retention time only and may include interference from co-eluting compounds.

For soils and solids, all results are reported on a dry basis (30°C). Samples dried at no more than 30°C in a drying cabinet.

For soils and solids, analytical results are inclusive of stones and 'inert' material, where applicable.

'Client Reference', 'Sample ID', 'Sample Location', 'Sample Type', 'Depth', 'Sample Date' and 'Sample Time' information is provided by the customer

Sample Retention and Disposal

All soil samples will be retained for a period of 4 weeks from the point of receipt

All water samples will be retained for a period of 2 weeks from the point of Reporting

Charges may apply to extended sample storage

TPH Classification - HWOL Acronym System

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
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
2D	GC-GC - Double coil gas chromatography
#1	EH_Total but with humics mathematically subtracted
#2	EH_Total but with fatty acids mathematically subtracted
-	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total
MS	Mass Spectrometry

Unless specifically identified (noted as "(B)" in analyte name) all internal analysis performed at Durham site