nationalgrid

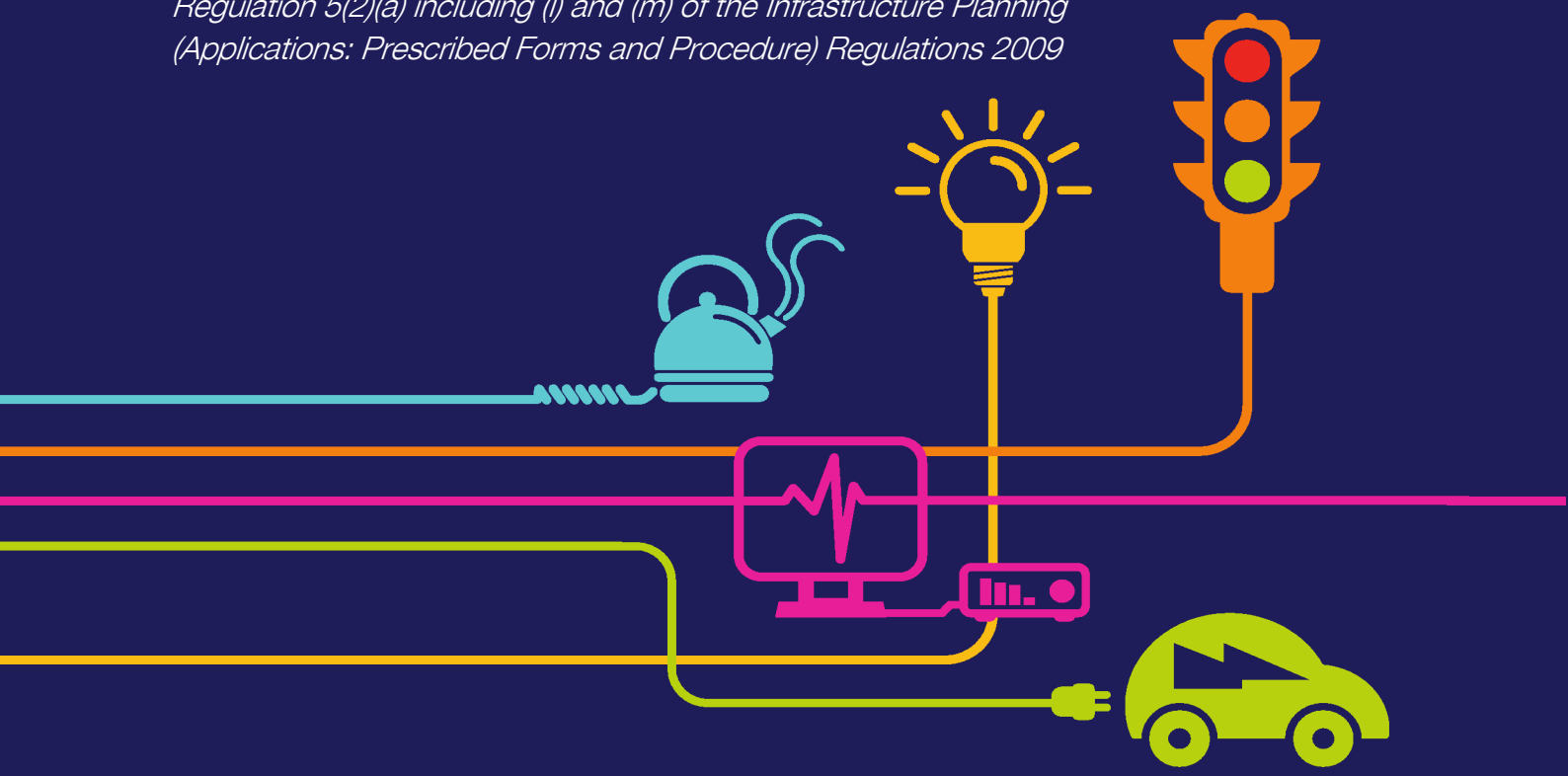
DOCUMENT 5.11.2.3

Regulator Correspondence

Chapter 11 – Appendix 3

National Grid (North Wales Connection Project)

Regulation 5(2)(a) including (l) and (m) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009



nationalgrid

North Wales Connection Project

Volume 5

Document 5.11.2.3 Appendix 11.3 Regulator Correspondence

National Grid
National Grid House
Warwick Technology Park
Gallows Hill
Warwick
CV34 6DA

Final September 2018

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Organisation		AECOM	
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Contents

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1 Regulator Correspondence

1.1 NATURAL RESOURCES WALES

Dear [redacted]

In response to your email that was sent to my colleague [redacted] on the 26th February 2016 and following consultation, I have the following comments regarding the main points raised.

Because the routes in question cover a relatively widespread area it is difficult to narrow down the search to check our workflow database for specific submissions that may have come in within these areas over the years. Our search facility does not really allow for this.

Our GeoScience Team have advised that the local authority is the lead regulator for land contamination and should be able to advise more fully on what data it holds. The local authority has produced a strategy for inspection of potentially contaminated land under Part 2A of the Environmental Protection Act, and hence should be able to advise further on the land falling within the route corridors.
The local authority is also responsible for maintaining a database of private water abstractions, which would be of interest to you.

Natural Resources Wales recommends that developers should:
Follow the risk management framework provided in CLR11, Model Procedures for the Management of Land Contamination, when dealing with land affected by contamination.
Refer to Environment Agency document 'Guiding Principles for Land Contamination' for the type of information that we require in order to assess risks to controlled waters from the site. The Local Authority can advise on risk to other receptors, such as human health.
Refer to and follow the guidance in the 'Development of Land affected by Contamination: A Developers Guide, produced by WLGA and Environment Agency Wales'.
Refer to Groundwater protection: Principles and practice (GP3).

Current waste management activities (permitted sites and exempt) are freely accessible to National Grid through the public register.

http://naturalresources.wales/how-we-regulate-you/find-out-if-a-site-has-a-permit-licence-or-exemption/?lang=en

As far as enforcements are concerned and to perform a more specific search I would need more information, as the data we hold is more specific to an individual/company and address. For a more thorough search we would need the postcode and grid references of the areas concerned.

I have attached a list of current valid abstraction licences within 2km of the corridor requested and a Standard Notice for your information.

Kind Regards
[redacted]

[redacted]
Swyddog Cymorth Busnes/Business Support Officer
Cyfoeth Naturiol Cymru/Natural Resources Wales

Llwyn Brain
Parc Menai
Bangor
LL57 4DE

[redacted]
E bost/E-mail:
[redacted]

Gwefan/Website:

www.cyfoethnaturiolcymru.gov.uk/ www.naturalresourceswales.gov.uk

Ein pwrpas yn sicrhau fod adnoddau naturiol Cymru yn cael eu cynnal, gwella a'u defnyddio yn cynnal, gwella a'u defnyddio yn gynaliadwy, yn awr ac I'r dyfodol.

Our purpose is to ensure that the natural resources of Wales are sustainably maintained, used and enhanced, now and in the future

From: [redacted]
Sent: 26 February 2016 13:40
To: [redacted]
Cc: [redacted]
Subject: Request for Environmental Information - Natural Resources Wales

Hello [redacted]

As discussed,

National Grid Electricity Transmission plc (National Grid) is developing a new 400,000 volt (400kV) connection between the proposed extension to the existing Horizon Nuclear Power Station at Wylfa on Anglesey and the existing electricity transmission network in North Wales.

Following consultation, and subsequent feedback, and taking into account considerations including the environment and technical factors, and public consultation, National Grid has developed its proposals which were consulted on in late 2015. Those proposals will be the subject of an Environmental Impact Assessment (EIA) Scoping Report, and will be taken forward to the next stage of Project development and consultation.

National Grid is proposing to use a combination of overhead line and underground cables for the connection. Cable sealing end compounds are proposed at the interface points between the overhead and underground connections. The proposals (which remain subject to further development and consultation) include: substation extension works at Wylfa and Pentir; approximately 30km of new overhead line (OHL) between Wylfa and the existing substation at Pentir; underground section across the Menai Strait; two new sealing end compounds (SECs) and potentially Tunnel Head Houses either side of the Menai Strait.

As part of the Geology, Hydrogeology and Ground Conditions Chapter we would be very grateful if you could provide any data you hold with regards to the following:

1. Records of land contamination within the Scoping Corridor.
2. Records of land contamination in the environs within the Scoping Corridor.
3. Records of sites or locations within the Scoping Corridor which could be classified as waste management sites including landfilling operations.
4. Any enforcements or prosecutions under control of Water Resources Act within the Scoping Corridor.
5. Information regarding any other relevant legislation such as IPPC, IRR etc.
6. Details on the nature and locations of groundwater and surface water abstractions and records of Private Water Supplies that fall within 2km of the Scoping Corridor.

Details of the scoping corridor are provided in the figures attached.

Please could you detail any costs or charges applied to the data in addition to giving us some information on what format the data will arrive in (GIS etc) before starting your investigation.

Your help in this matter is much appreciated.

Best Regards,

[redacted]

[redacted] BSc AEnvSc
Environmental Scientist, Remediation Services, UK & Ireland
[redacted]

AECOM
AECOM House
179 Moss Lane
Altrincham, United Kingdom
T [redacted]
aecom.com

National Grid – Abstraction request – Anglesey

The following table is a list of current valid abstraction licences within 2km of the corridor requested.

PLEASE NOTE: Abstractions of less than 20 cubic metres per day do not require an abstraction licence – consequently we do not hold records of abstractions of less than 20 cubic metres per day. **ALSO**, groundwater abstractions are currently exempted from the requirement of a licence in this area IRRESPECTIVE OF QUANTITY – we therefore hold no information on groundwater abstractions in this area. The Local Authority's Environmental Health Department MAY hold information on those abstractions that we do not.

Licence Number	Licence holder (LH)	L.H. Address	Abstraction point NGR	Source	Purpose	m^3/annum	m^3/day	m^3/hr (if specified)	l/s (if specified)
23/102/1/0008	[redacted]	Gwydryn Hir, Brynsiencyn, Ynys Mon, LL61 6HQ	SH 488 686	Afon Braint	Spray Irrigation	4,546 (seasonal – 1st April to 30th Sept only)	227.3	9.092	
23/102/2/0007	Dwr Cymru Cyfyngedig	Pentwyn Road, Nelson, Treharris, CF46 6LY	SH 446 772	Llyn Cefni	Water undertaking (Public water supply)	5,475,000	15,000		
23/102/6/0006	Dwr Cymru Cyfyngedig	As above	SH 3743 8539	Llyn Alaw	Water undertaking (Public water supply)	8,637,400	34,095		
23/65/17/0015	Hogan Group	Hogan House, Tai'r Ffynnon Works, Cyttir Lane, Bangor, Gwynedd, LL57 4DA	SH 566 699	Un-named trib of Afon Heulyn	a) Plant/Asphalt washing b) Concrete manufacture	a) 2,500 b) 8,500	a) 8 b) 18	a) 2.16 b) 5.04	a) 0.6 b) 1.4

Good Morning [redacted]

Apologies. You should be able to access it now as attached as a pdf

Kind Regards
[redacted]

[redacted]
Swyddog Cymorth Busnes/Business Support Officer
Cyfoeth Naturiol Cymru/Natural Resources Wales
Maes y Ffynnon
Penrhosgarnedd
Bangor
LL57 2DW

Ffon/Tel:[redacted]
E bost/E-mail:
[redacted]

Gwefan/Website:

www.cyfoethnaturiolcymru.gov.uk/ www.naturalresourceswales.gov.uk

Ein pwrpas yn sicrhau fod adnoddau naturiol Cymru yn cael eu cynnal, gwella a'u defnyddio yn cynnal, gwella a'u defnyddio yn gynaliadwy, yn awr ac I'r dyfodol.

Our purpose is to ensure that the natural resources of Wales are sustainably maintained, used and enhanced, now and in the future

From: Hartas, William [redacted]
Sent: 02 May 2017 08:16
To: Thomas, Colin [redacted]
Subject: RE: ATI-12747a-North Wales Connection Project - Nant Y Garth Landfill

Hi [redacted]

Unfortunately I need some kind of authorised account with NRW to access the PDF. Please can you download it and email across?

Much appreciated,

[redacted]

From: [redacted]
Sent: 27 April 2017 14:53
To: Hartas, William
Subject: RE: ATI-12747a-North Wales Connection Project - Nant Y Garth Landfill

Dear [redacted]

Details about the licence are below:

Permit number WP3432Sc (EAWML210025)
Permit issued in April 1993 in the name of Morrice Carlton Limited
Transferred to Treborth Leisure Limited in October 2000
Site is active
Total capacity of installation 445,000 cubic meters
Limits: The disposal of up to 75,000 tonnes per year
Director: [redacted]
Company address: The Old Barn, Treborth Hall Farm, Treborth Road, Bangor, Gwynedd, LL57 2RX
Site address: Nant y Garth Landfill Site, Vaynol Woodlands, Coed Nant y Garth, Portdinorwic, Gwynedd, LL56 2RX
Contact number: [redacted]
Copy of Permit showing lists of wastes accepted at the site is attached

Link to the October – December 2016 waste returns:
https://cyfoethnaturiolcymru.sharepoint.com/teams/Regulatory/Permitting/North%20EPR%20Waste%20Operations/EPR-WP3432SC/WP3432SC_L05_4_2016.pdf

They have until 30th April 2017 to submit the next set of returns

I hope this is sufficient

Kind Regards
[redacted]

[redacted]
Swyddog Cymorth Busnes/Business Support Officer
Cyfoeth Naturiol Cymru/Natural Resources Wales
Maes y Ffynnon
Penrhosgarnedd
Bangor
LL57 2DW

[redacted]

Gwefan/Website:

www.cyfoethnaturiolcymru.gov.uk/ www.naturalresourceswales.gov.uk

[redacted]

[redacted]

Subject: ATI-12747a-North Wales Connection Project - Nant Y Garth Landfill

Good Morning [redacted]

I was hoping you would be able to help us with information regarding a landfill adjacent to the project boundary of the North Wales Connection Project. It is called Nant Y Garth landfill, located off the B4547 approximately 3km south of Bangor, Gwynedd and is centered on 53°11'25.4"N 4°10'36.3"W. Gwynedd County Council held no licences for the site and indicated that it was very likely handled by the EA from approximately 1991 and subsequently NRW.

We would be interested in the nature of deposited wastes and how long the site has been in operation, it appears that is currently active although we were unable to visit any site operatives during our site surveys. A possible licence number and indication that the site handles inert waste is included as the attached photograph but we would be grateful if you could provide confirmation that this is the case.

All the best,

[redacted] BSc AEnvSc
Environmental Scientist, Remediation Services, UK & Ireland
[redacted]
AECOM
AECOM House
179 Moss Lane
Altrincham, United Kingdom
[redacted]
aecom.com

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Cyfoeth Naturiol Cymru
Natural Resources Wales

Waste & Material Facility Return

The Environmental Permitting (England and Wales) Regulations 2007 and

1 Return Period

Period name: Qtr Oct-Dec

Year: 2016

2 Operator and site details

Site Operator: Treborth Leisure Ltd

Permit Number: WP343250

Site Name: Nant Y Garth

2.2 Waste management facility/operation

L05 : Inert Landfill

2.3 Was a weighbridge used?

Yes/No: No

Percentage weighed: %

Mandatory fields are highlighted:

Optional fields are highlighted:

If you need guidance in filling in this form please contact the Natural Resources Wales Returns team on 0300 065 3000.

When completed please email to:

waste.returns@naturalresourceswales.gov.uk

2.4 Landfill sites only this section must be completed by landfill sites in the January return

Remaining void space covered by this permit: 64,778.41 Cubic metres

Method of calculating void space: Planning Application

Date last surveyed or estimated (DD/MM/YYYY): Apr-16

3 Declaration Please ensure you fill in the declaration below

I certify that the information in this return is correct to the best of my knowledge and belief.

Name [redacted]

Position

Phone number

Null return

Date 31/01/2017

5 Disclosure and data protection

The information you provide will be used by Natural Resources Wales to enable it to fulfil its regulatory and waste management planning responsibilities. For full information on how the data in this form will be used please see the waste return guidance notes.

E-Waste and MF Return Form Version 7.2 Version date: 7/7/2015

Official use only: Date Received Paper Return

5 Waste received on site **Continuation sheet**

*Local Authority where the waste came from	*EWC waste code	*Description	*Disposal and recovery code	*Waste Collection Authority	*Bio-degradable (Y/N)	*Amount in tonnes
Anglesey	170504	Soil & stones.	D01 · 02	NO	NO	2523½
Conwy	170504	"	D01 - 02	NO	NO	645
Gwynedd	170504	"	D01 - 02	NO	NO	4624½
Conwy	19.12.12	Recyled Mixed	D01 - 02	NO	NO	544
Gwynedd	19.12.12	"	D01 - 02	NO	NO	3198
Conwy	17.01.07	Concrete/Bricks	D01 · 02	NO	NO	1½
Gwynedd	17.01.07	Concrete/Bricks	D01 · 02	NO	NO	151
Conwy	17.01.01	Concrete	D01 - 02	NO	NO	45

total tonnage 11,732½

= 5,866.25 cubes.

7 Declaration

Please make sure you have filled in all the sections that apply to you before signing this declaration.

I certify that the information in this return is correct to the best of my knowledge and belief.

I enclose _____ continuation sheets

Title [redacted]

First name [redacted]

Last name [redacted]

Position office manager

Phone [redacted]

Date (DD/MM/YYYY) 31 . 1 . 2017

Signature [redacted]

The information you provide will be used by Natural Resources Wales to enable it to fulfill its regulatory and waste management planning responsibilities

8 The Data Protection Act 1998

We, Natural Resources Wales, will process the information you provide so that we can deal with your application, make sure you keep to the conditions of the license, permit or registration, process renewals and keep the public registers up to date.

- offer you documents or services relating to environmental matters
- consult the public, public organisations and other organisations (for example, the Health and Safety Executive, local authorities, the emergency services, the Department for Environment, Food and Rural Affairs) on environmental issues
- carry out research and development work on environmental issues
- provide information from the public register to anyone who asks
- prevent anyone from breaking environmental law, investigate cases where environmental law may have been broken, and take any action that is needed
- assess whether customers are satisfied with our service, and to improve our service, and
- respond to requests for information under the Freedom of Information Act 2000 and the Environmental Information Regulations 2004 (if the Data Protection Act allows).

We may pass the information on to our agents or representatives to do these things for us.

Standard Notice

(not for use with Special Data, Personal Data or unlicensed 3rd party rights)

Cyfoeth Naturiol Cymru
Natural Resources Wales

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1.2 GWYNEDD COUNTY COUNCIL

[redacted]

Following our conversation please find our response attached.

Regards.

[redacted]
Swyddog Amgylchedd | Environment Officer

[redacted] | www.gwynedd.gov.uk

Cyngor Gwynedd Council | Swyddfa Ardal Dwyfor | Pwllheli | Gwynedd | LL53 5AA

From: [redacted]
Sent: 05 May 2016 14:48
To: [redacted]
Subject: RE: North Wales Connection - Request for Environmental Information - Local Authorities

[redacted]

I'll have a response for you regarding contaminated and private water supplies by next week. I'm still awaiting a response from our Support Unit Manager regarding notices served within the area outlined on your map.

Regards.

[redacted]

[redacted] | www.gwynedd.gov.uk

Cyngor Gwynedd Council | Swyddfa Ardal Dwyfor | Pwllheli | Gwynedd | LL53 5AA

From: Hartas, William [mailto:William.Hartas@aecom.com]
Sent: 28 April 2016 13:53
To: [redacted]
Subject: RE: North Wales Connection - Request for Environmental Information - Local Authorities

Hi [redacted]

Hope your annual leave went well. How is your team getting on with this request?

Regards,

[redacted]

From: [redacted]
Sent: 10 March 2016 10:31

To: [redacted]
Subject: RE: North Wales Connection - Request for Environmental Information - Local Authorities

[redacted]

Yes, I have version 10.1 but it does not give me the option to open the files using this program.

Regards.

[redacted]

[redacted] www.gwynedd.gov.uk

Cyngor Gwynedd Council | Swyddfa Ardal Dwyfor | Pwllheli | Gwynedd | LL53 5AA

From: [redacted]
Sent: 04 March 2016 09:36
To: [redacted]
Subject: RE: North Wales Connection - Request for Environmental Information - Local Authorities

[redacted]

Do you have ArcGIS? Seems to be working fine over here.

Regards,

[redacted]

From: [redacted]
Sent: 03 March 2016 15:58
To: [redacted]
Subject: FW: North Wales Connection - Request for Environmental Information - Local Authorities

[redacted]

I'm unable to open any of the files within the zip folder.

[redacted]

[redacted] | www.gwynedd.gov.uk

Cyngor Gwynedd Council | Swyddfa Ardal Dwyfor | Pwllheli | Gwynedd | LL53 5AA

From: [redacted]
Sent: 29 February 2016 13:18
To: [redacted]
Cc: [redacted]
Subject: North Wales Connection - Request for Environmental Information - Local Authorities

Dear [redacted]

I understand that you both are responsible for issues relating to Contaminated Land and pollution within your respective councils and would be best placed to direct the following information request to you.

National Grid Electricity Transmission plc (National Grid) is developing a new 400,000 volt (400kV) connection between the proposed extension to the existing Horizon Nuclear Power Station at Wylfa on Anglesey and the existing electricity transmission network in North Wales.

Following consultation, and subsequent feedback, and taking into account considerations including the environment and technical factors, and public consultation, National Grid has developed its proposals which were consulted on in late 2015. Those proposals will be the subject of an Environmental Impact Assessment (EIA) Scoping Report, and will be taken forward to the next stage of Project development and consultation.

National Grid is proposing to use a combination of overhead line and underground cables for the connection. Cable sealing end compounds are proposed at the interface points between the overhead and underground connections. The proposals (which remain subject to further development and consultation) include: substation extension works at Wylfa and Pentir; approximately 30km of new overhead line (OHL) between Wylfa and the existing substation at Pentir; underground section across the Menai Strait; two new sealing end compounds (SECs) and potentially Tunnel Head Houses either side of the Menai Strait.

As part of the Geology, Hydrogeology and Ground Conditions Chapter we would be very grateful if you could provide any data you hold with regards to the following:

1. Status of land within the scoping corridor including any Enforcement Notices, under Part IIA EPA
2. Any known records of landfilling, waste management sites or remediation on or in the vicinity of the scoping corridor
3. Any correspondence or Enforcement Notices connected to the land or site within the scoping corridor with regard to nuisance issues (odours, dust, smoke, vermin etc.)
4. Records on the nature and locations of groundwater and surface water abstractions and records of Private Water Supplies covered by your jurisdiction that fall within 2km of the scoping corridor.
5. Any other information with regards to Contaminated Land or ground conditions within the scoping corridor.

Details of the scoping corridor are provided in the figures attached with a shapefile to make GIS enquiries easier.

Please could you detail any costs or charges applied to the data before starting your investigation.

Your help in this matter is much appreciated.

Best Regards,

[redacted]

[redacted] BSc AEnvSc
Environmental Scientist, Remediation Services, UK & Ireland
[redacted]

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AECOM House
179 Moss Lane
Altrincham, United Kingdom
[redacted]
aecom.com

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CYNGOR GWYNEDD COUNCIL

Cyfadran Adnoddau/Resources Directorate
Gweinyddol a Gwarchod y Cyhoedd/Administration and Public Protection
Adain Iechyd yr Amgylchedd/Environmental Health Section
Uned Llygredd/Pollution Unit

Record of the Determination that Land is "Contaminated Land". Made under the Provisions of Part IIA of the Environmental Protection Act 1990.

Gwynedd Council, having undertaken an appropriate investigation, determine that land at 10 and 12 Bangor Street, Y Felinheli, Gwynedd, LL56 4JD is Contaminated Land, as outlined in red on the attached plan (Appendix 1).

The Grounds for this determination is namely that;

- ***There is the significant possibility of significant harm being caused to human health due to the presence of naphthalene in the ground.***

1.Background

Following complaints of hydrocarbon odours within number 12 Bangor Street, Y Felinheli Officers from this service were called out to investigate in February 2005. The source of the odour was discovered to be a spill of fuel oil at the location of a former oil fired boiler at the rear of the adjoining property, number 10 Bangor Street.

The current proprietor of no. 10 employed 'ExCal Limited' to carry out a 'Site Investigation' (report ref. ES1560/KKE – June 2005). This involved excavating a series of hand dug trial pits and collecting soil samples for analysis for Total Petroleum Hydrocarbon (TPH) concentrations.

During September 2005 the current proprietor of no. 10 employed another company, 'Smith Grant LLP' to carry out a further 'Contamination Assessment', which included an environmental risk assessment and remediation strategy (report ref. R845-R01). This report used the results from the previous ExCal report and a further 4 soil samples were taken and analyzed for a suite of Volatile Organic Compounds (VOCs).

This Service employed Smith Grant LLP to carry out an, 'Indoor Air Quality Assessment' at both numbers 10 and 12 Bangor Street (report ref. R908-R01 – June 2006). The purpose of this report was to determine the concentration of VOC vapours associated with the fuel oil spill within both properties. The results were compared to

threshold concentrations, using a qualitative risk assessment procedure, in accordance with U.K best practice for the assessment of contaminated land, to determine whether they present an unacceptable risk to human health through inhalation.

2.Significant Pollutant Linkage

In making a determination that land is contaminated land the local authority has to define the particular pollutant linkage or linkages on which the determination is based. A pollutant linkage that forms the basis for determination is a "significant pollutant linkage". There can be more than one significant pollutant linkage.

Source	Pathway	Receptor
Naphthalene within the upper 1 metre of soil	Inhalation of naphthalene vapour inside properties.	Residents (critical receptor – female child 0 to 6 years old)

3. Summary of the Evidence on which the Determination is based

The local authority has sole responsibility for the determination although it can choose to rely on information provided by others such as the Environment Agency or Consultants.

- Report R908-R01 – Indoor Air Quality Assessment 10/12 Bangor Street – June 2006 by Smith Grant LLP details the airborne levels of VOCs inside numbers 10 and 12 using thermal desorption 'Tenax Tubes'. Full details of these air samples and their analysis are given in the report.

- Acceptable (threshold) indoor air concentrations in $\mu g/m^3$ for the suite of VOCs analyzed and the justification for obtaining these figures is outlined in section 3.2 of the above report.

- The table in section 4.1.2 (R908-R01) compares the results to threshold levels and highlights any exceedances.

- Section 5.2 (R908-R01) concludes by outlining the potential harm to human health of the inhalation of any of the VOCs at levels above the respective threshold concentration.

Report R908-R01 is available from; Environmental Health Section, Cyngor Gwynedd, Arfon Area Office, Penrallt, Caernarfon, LL55 1BN. All further references are to this report.

4. Summary of the Relevant Assessment of the Evidence

The local authority has to carry out an "appropriate scientific and technical assessment" of all available, relevant information.

- Of all the VOCs analyzed, only airborne concentrations of naphthalene appeared above its calculated threshold concentration.

- The threshold concentration of 2.44 μg/m^3 for naphthalene was calculated using Contaminated Land Exposure Assessment (CLEA) methodology from *'R & D Publication CLR 10'* (DEFRA and EA) and *'R & D Tox 20 – Contaminants in soil: Collation of Toxicological Data and Intake Value for Humans. Naphthalene'* (DEFRA & EA).

- Naphthalene concentrations were above this threshold level at all 4 sampling points (2 at each property). This is shown graphically in section 4.1.3, page 11 of the report.

- The highest exceedance of 19.21μg/m^3 was within the kitchen of number 12.

- Because airborne concentrations of naphthalene, in both upstairs and downstairs locations within both properties, are elevated beyond the calculated threshold concentration, there is the significant possibility of significant harm being caused to the health of the residents resulting from the presence of naphthalene in the ground.

5. Declaration and Determination

Cyngor Gwynedd Council consider that the requirements, as laid out in chapter 2 of the Welsh Statutory Guidance (*'Remediation of Contaminated Land – November 2001'*) are satisfied and the land meets the definition as defined by Section 78A(2) of the Environmental Protection Act 1990.

- There is sufficient evidence to suggest that there is the significant possibility of significant harm being caused to human health.

- Evidence that there is the significant possibility of significant harm being caused is found in report R908-R01, where a human health risk assessment was carried out by Smith Grant LLP, resulting in obtaining a threshold concentration for naphthalene inhalation, which was compared to airborne levels within the properties. The outcome of this report was the identification of the significant pollutant linkage (see section 2 of this record).

Cyngor Gwynedd Council having considered and assessed all available, relevant evidence is satisfied that the land, as outlined on the attached plan (Appendix 1) is **Contaminated Land as defined under the provisions of the Environmental Protection Act 1990, Part IIA.**

Date:

Signed:_____

[redacted]
Pennaeth Gweinyddol a Gwarchod y Cyhoedd/Head of Administration and Public Protection

Uned Llygredd/Pollution Unit
Adain Iechyd yr Amgylchedd/Environmental Health Section
Gweinyddol a Gwarchod y Cyhoedd/Administration and Public Protection
Cyfadran Adnoddau/Resources Directorate
Cyngor Gwynedd Council.

Swyddfa Ardal Arfon/Arfon Area Office
Penrallt
Caernarfon
LL55 1BN.

Swyddog Cyswllt/Contact Officer**:** [redacted]

North Wales Connection – Request for Environmental Information from AECOM
Response from Gwynedd Council Public Protection Service

Contaminated Land

Within the area outlined on the Provisional Survey GIS layer you provided there is one area of land which is Designated as Contaminated Land under the provision of the Environmental Protection Act 1990 s. 78R (1).
10 & 12 Bangor Street, Y Felinheli, LL56 4JD was designated in 2006 due to a domestic fuel oil leak. Please find attached a copy of the Record of Determination (ref: AECOM_Det_120516) and a copy of the Verification Report (ref: AECOM_VR_120516) on separate pdf files. At present electronic copies of the Remediation Notices served are unavailable but can be supplied at a later date if required.

No other land within the boundary on your plan is currently on the contaminated land register but from our GIS database on **potentially** contaminated sites within the county the following sites exist. Please see a plan on a separate JPEG files (refs: AECOM_BM_120516 & AECOM_SP_120516).

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_06474
CURRENT_USE <null>
CONTAMINATIVE_USE Unknown Filled Ground (Pond, marsh, river, stream,dock etc)
USE_COMMENTS Unknown Filled Ground (Pond, marsh, river, stream,dock etc) (MAPS:1963)
USDL1 Y Felinheli
USDL2 Arfon
Mapsheet_id BNG
X 252276
Y 367388

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_06472
CURRENT_USE Address Point within 25m
CONTAMINATIVE_USE Unknown Filled Ground (Pond, marsh, river, stream,dock etc)
USE_COMMENTS Unknown Filled Ground (Pond, marsh, river, stream,dock etc) (MAPS:1963)
USDL1 Y Felinheli
USDL2 Arfon
Mapsheet_id BNG
X 252353
Y 367518

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_03226
CURRENT_USE Address Point within 25m
CONTAMINATIVE_USE Gas works, coke works, coal carbonisation plants
USE_COMMENTS Gas manufacture & distribution (MAPS:1891,1901,1920,1953)
USDL1 Y Felinheli
USDL2 Arfon
Mapsheet_id BNG
X 252367

Y 367597

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_04108
CURRENT_USE Address Point within 25m
CONTAMINATIVE_USE Factory or works - use not specified
USE_COMMENTS Factory or works - use not specified (MAPS:1963)
USDL1 Y Felinheli
USDL2 Arfon
Mapsheet_id BNG
X 252358
Y 367598

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_03546
CURRENT_USE Address Point within 25m
CONTAMINATIVE_USE Road Vehicles: Transport and haulage centres
USE_COMMENTS Road haulage (MAPS:1990)
USDL1 Y Felinheli
USDL2 Arfon
Mapsheet_id BNG
X 252689
Y 367684

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_01513
CURRENT_USE Address Point within 25m
CONTAMINATIVE_USE Mineral railway
USE_COMMENTS Mineral railway (MAPS:1891,1901,1920,1953,1963)
USDL1 Y Felinheli
USDL2 Arfon
Mapsheet_id BNG
X 253547
Y 367740

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_03542
CURRENT_USE Address Point within 25m
CONTAMINATIVE_USE Transport support & cargo handling
USE_COMMENTS Transport support & cargo handling
(MAPS:1891,1901,1920,1953,1963,1990)
USDL1 Y Felinheli
USDL2 Arfon
Mapsheet_id BNG
X 252473
Y 367782

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_01514
CURRENT_USE <null>
CONTAMINATIVE_USE Mineral railway

USE_COMMENTS Mineral railway (MAPS:1891,1901)
USDL1 Y Felinheli
USDL2 Arfon
Mapsheet_id BNG
X 252696
Y 367840

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_01516
CURRENT_USE Address Point within 25m
CONTAMINATIVE_USE Heap, unknown constituents
USE_COMMENTS Heap, unknown constituents (MAPS:1891)
USDL1 Y Felinheli
USDL2 Arfon
Mapsheet_id BNG
X 252540
Y 367947

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_03543
CURRENT_USE <null>
CONTAMINATIVE_USE Transport support & cargo handling
USE_COMMENTS Transport support & cargo handling (MAPS:1891,1901)
USDL1 Y Felinheli
USDL2 Arfon
Mapsheet_id BNG
X 252788
Y 367927

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_03545
CURRENT_USE <null>
CONTAMINATIVE_USE Railway land
USE_COMMENTS Railways (MAPS:1891,1901)
USDL1 Y Felinheli
USDL2 Arfon
Mapsheet_id BNG
X 252883
Y 367936

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_03536
CURRENT_USE <null>
CONTAMINATIVE_USE Railway land
USE_COMMENTS Railways (MAPS:1891,1901,1920,1953,1963)
USDL1 Y Felinheli
USDL2 Arfon
Mapsheet_id BNG
X 253067
Y 367967

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_01515
CURRENT_USE Address Point within 25m
CONTAMINATIVE_USE Mining & quarrying general
USE_COMMENTS General quarrying (MAPS:1891)
USDL1 Y Felinheli
USDL2 Arfon
Mapsheet_id BNG
X 252521
Y 368066

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_04963
CURRENT_USE Address Point within 25m
CONTAMINATIVE_USE Unknown Filled Ground (Pit, quarry etc)
USE_COMMENTS Unknown Filled Ground (Pit, quarry etc) (MAPS:1990)
USDL1 Y Felinheli
USDL2 Arfon
Mapsheet_id BNG
X 252521
Y 368066

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_03544
CURRENT_USE <null>
CONTAMINATIVE_USE Railway land
USE_COMMENTS Railways (MAPS:1891,1901,1920,1953,1963)
USDL1 Y Felinheli
USDL2 Arfon
Mapsheet_id BNG
X 253197
Y 368090

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_03539
CURRENT_USE <null>
CONTAMINATIVE_USE Railway land
USE_COMMENTS Railways (MAPS:1891,1901,1920,1953,1963)
USDL1 Y Felinheli
USDL2 Arfon
Mapsheet_id BNG
X 253606
Y 368196

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_02910
CURRENT_USE <null>
CONTAMINATIVE_USE Mining & quarrying general
USE_COMMENTS General quarrying (MAPS:1901,1920,1953)
USDL1 Penisarwaun
USDL2 Arfon

Mapsheet_id BNG
X 254595
Y 368119

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_05462
CURRENT_USE <null>
CONTAMINATIVE_USE Unknown Filled Ground (Pit, quarry etc)
USE_COMMENTS Unknown Filled Ground (Pit, quarry etc) (MAPS:1990)
USDL1 Penisarwaun
USDL2 Arfon
Mapsheet_id BNG
X 254595
Y 368119

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_04106
CURRENT_USE Address Point within 25m
CONTAMINATIVE_USE Dry-cleaners
USE_COMMENTS Laundries & dry cleaning (MAPS:1920,1953,1963)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 252896
Y 368396

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_01512
CURRENT_USE <null>
CONTAMINATIVE_USE Mining & quarrying general
USE_COMMENTS General quarrying (MAPS:1891)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 252763
Y 368428

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_03750
CURRENT_USE <null>
CONTAMINATIVE_USE Railway land
USE_COMMENTS Railways (MAPS:1891,1901,1920,1953,1963)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 254372
Y 368783

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_06476
CURRENT_USE <null>

CONTAMINATIVE_USE Unknown Filled Ground (Pond, marsh, river, stream,dock etc)
USE_COMMENTS Unknown Filled Ground (Pond, marsh, river, stream,dock etc) (MAPS:1963)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 254291
Y 368791

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_01510
CURRENT_USE <null>
CONTAMINATIVE_USE Mining & quarrying general
USE_COMMENTS General quarrying (MAPS:1891,1901)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 253457
Y 368868

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_04962
CURRENT_USE <null>
CONTAMINATIVE_USE Unknown Filled Ground (Pit, quarry etc)
USE_COMMENTS Unknown Filled Ground (Pit, quarry etc) (MAPS:1990)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 253457
Y 368868

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_01511
CURRENT_USE <null>
CONTAMINATIVE_USE Mining & quarrying general
USE_COMMENTS General quarrying (MAPS:1891)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 252604
Y 368961

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_06479
CURRENT_USE <null>
CONTAMINATIVE_USE Unknown Filled Ground (Pond, marsh, river, stream,dock etc)
USE_COMMENTS Unknown Filled Ground (Pond, marsh, river, stream,dock etc) (MAPS:1963)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 256488
Y 367324

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_06477
CURRENT_USE <null>
CONTAMINATIVE_USE Unknown Filled Ground (Pond, marsh, river, stream,dock etc)
USE_COMMENTS Unknown Filled Ground (Pond, marsh, river, stream,dock etc) (MAPS:1963)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 256503
Y 367469

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_06480
CURRENT_USE <null>
CONTAMINATIVE_USE Unknown Filled Ground (Pond, marsh, river, stream,dock etc)
USE_COMMENTS Unknown Filled Ground (Pond, marsh, river, stream,dock etc) (MAPS:1901)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 256522
Y 367666

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_03250
CURRENT_USE <null>
CONTAMINATIVE_USE Electricity production & distribution [inc large transformer
USE_COMMENTS Electricity production & distribution [inc large transformers] (MAPS:1990)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 255894
Y 367759

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_01508
CURRENT_USE <null>
CONTAMINATIVE_USE Mining & quarrying general
USE_COMMENTS Quarrying of sand & clay, operation of sand & gravel pits (MAPS:1891)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 252575
Y 369201

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_04960
CURRENT_USE <null>
CONTAMINATIVE_USE Unknown Filled Ground (Pit, quarry etc)
USE_COMMENTS Unknown Filled Ground (Pit, quarry etc) (MAPS:1990)
USDL1 Pentir

USDL2 Arfon
Mapsheet_id BNG
X 252575
Y 369201

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_03535
CURRENT_USE Address Point within 25m
CONTAMINATIVE_USE Transport support & cargo handling
USE_COMMENTS Transport support & cargo handling
(MAPS:1891,1901,1920,1953,1963,1990)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 252536
Y 369465

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_04254
CURRENT_USE <null>
CONTAMINATIVE_USE Air Shafts
USE_COMMENTS Air Shafts (MAPS:1891,1901,1920,1953,1963,1990)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 254416
Y 369357

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_03751
CURRENT_USE <null>
CONTAMINATIVE_USE Railway land
USE_COMMENTS Railways (MAPS:1891,1901,1920,1953,1963)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 254422
Y 369644

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_03305
CURRENT_USE <null>
CONTAMINATIVE_USE Oil refineries & bulk storage of crude oil and pet.products
USE_COMMENTS Oil, petroleum & gas refining & storage (MAPS:1920,1953)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 253612
Y 369842

SITE_TYPE Potentially Cont. Land

SITE_NAME Site_01713
CURRENT_USE Address Point within 25m
CONTAMINATIVE_USE Mining & quarrying general
USE_COMMENTS General quarrying (MAPS:1920,1938)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 255064
Y 369981

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_05037
CURRENT_USE Address Point within 25m
CONTAMINATIVE_USE Unknown Filled Ground (Pit, quarry etc)
USE_COMMENTS Unknown Filled Ground (Pit, quarry etc) (MAPS:1990)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 255064
Y 369981

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_06233
CURRENT_USE <null>
CONTAMINATIVE_USE Unknown Filled Ground (Pond, marsh, river, stream,dock etc)
USE_COMMENTS Unknown Filled Ground (Pond, marsh, river, stream,dock etc) (MAPS:1963)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 255089
Y 369991

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_04223
CURRENT_USE Address Point within 25m
CONTAMINATIVE_USE Hospitals
USE_COMMENTS Hospitals (MAPS:1989)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 255862
Y 370191

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_01712
CURRENT_USE <null>
CONTAMINATIVE_USE Mining & quarrying general
USE_COMMENTS General quarrying (MAPS:1891,1901,1920,1938,1963)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG

X 254634
Y 370058

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_03233
CURRENT_USE <null>
CONTAMINATIVE_USE Electricity production & distribution [inc large transformer
USE_COMMENTS Electricity production & distribution [inc large transformers] (MAPS:1987)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 254480
Y 370220

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_03893
CURRENT_USE <null>
CONTAMINATIVE_USE Sewage works and sewage farms
USE_COMMENTS Sewage (MAPS:1987)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 254356
Y 370295

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_03603
CURRENT_USE <null>
CONTAMINATIVE_USE Railway land
USE_COMMENTS Railways (MAPS:1891,1901,1920,1938,1963)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 254442
Y 370318

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_01709
CURRENT_USE <null>
CONTAMINATIVE_USE Mining & quarrying general
USE_COMMENTS General quarrying (MAPS:1901,1920,1938,1963)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 255358
Y 370378

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_05036
CURRENT_USE <null>
CONTAMINATIVE_USE Unknown Filled Ground (Pit, quarry etc)

USE_COMMENTS Unknown Filled Ground (Pit, quarry etc) (MAPS:1989)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 255358
Y 370378

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_03498
CURRENT_USE <null>
CONTAMINATIVE_USE Railway land
USE_COMMENTS Railways (MAPS:1891,1901,1920,1953,1963)
USDL1 <null>
USDL2 <null>
Mapsheet_id BNG
X 253988
Y 371211

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_03359
CURRENT_USE <null>
CONTAMINATIVE_USE Ceramics, cement and asphalt manufacturing works
USE_COMMENTS Cement, lime & plaster products [manufacture] (MAPS:1891)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 254152
Y 370728

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_03601
CURRENT_USE <null>
CONTAMINATIVE_USE Railway land
USE_COMMENTS Railways (MAPS:1891,1901,1920,1938,1963)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 254347
Y 370761

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_03599
CURRENT_USE <null>
CONTAMINATIVE_USE Railway land
USE_COMMENTS Railways (MAPS:1891,1901,1920,1938,1963,1987)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 254509
Y 370694

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_03362
CURRENT_USE <null>
CONTAMINATIVE_USE Ceramics, cement and asphalt manufacturing works
USE_COMMENTS Cement, lime & plaster products [manufacture] (MAPS:1891)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 254836
Y 370514

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_06492
CURRENT_USE <null>
CONTAMINATIVE_USE Unknown Filled Ground (Pond, marsh, river, stream,dock etc)
USE_COMMENTS Unknown Filled Ground (Pond, marsh, river, stream,dock etc) (MAPS:1963)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 255184
Y 370574

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_06493
CURRENT_USE <null>
CONTAMINATIVE_USE Unknown Filled Ground (Pond, marsh, river, stream,dock etc)
USE_COMMENTS Unknown Filled Ground (Pond, marsh, river, stream,dock etc) (MAPS:1963)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 255230
Y 370625

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_06494
CURRENT_USE Address Point within 25m
CONTAMINATIVE_USE Unknown Filled Ground (Pond, marsh, river, stream,dock etc)
USE_COMMENTS Unknown Filled Ground (Pond, marsh, river, stream,dock etc) (MAPS:1963)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 255216
Y 370779

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_03310
CURRENT_USE <null>
CONTAMINATIVE_USE Oil refineries & bulk storage of crude oil and pet.products
USE_COMMENTS Oil, petroleum & gas refining & storage (MAPS:1891,1901,1920)
USDL1 Pentir

USDL2 Arfon
Mapsheet_id BNG
X 255203
Y 370844

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_03891
CURRENT_USE <null>
CONTAMINATIVE_USE Sewage works and sewage farms
USE_COMMENTS Sewage (MAPS:1989)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 255193
Y 370919

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_03602
CURRENT_USE <null>
CONTAMINATIVE_USE Railway land
USE_COMMENTS Railways (MAPS:1891,1901,1920,1938,1963)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 255367
Y 371042

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_04115
CURRENT_USE <null>
CONTAMINATIVE_USE Factory or works - use not specified
USE_COMMENTS Factory or works - use not specified (MAPS:1989)
USDL1 Pentir
USDL2 Arfon
Mapsheet_id BNG
X 255658
Y 371136

SITE_TYPE Potentially Cont. Land
SITE_NAME Site_03598
CURRENT_USE <null>
CONTAMINATIVE_USE Railway land
USE_COMMENTS Railways (MAPS:1891,1901,1920,1938,1963,1987)
USDL1 Glyder
USDL2 Arfon
Mapsheet_id BNG
X 255826
Y 371182

We obtained this information from point data purchased from Landmark on all potentially contaminated sites in Gwynedd from historical mapping. This layer of data was incorporated into our

ArcView GIS software. At present we are in the process of converting all these point sources into shapes (polygons), therefore I must stress that the points themselves represent larger areas.

The Contaminated Land Regime was implemented in Wales on 01/07/01. A Contaminated Land Inspection Strategy for Gwynedd as Required under part IIA of the Environmental Protection Act 1990 was published during September 2002. Any information provided is based on such information as is currently available to this Department and is provided without prejudice to the Local Authority.

Private Water Supplies

The following properties extract water and are located within a 3km radius of NGR 25498 368789 which would cover the area within the boundary on your map:

- Tan Y Wylfa, Seion, Caernarfon, LL55 3AB has a single domestic supply from a well.
- Ynys Llechorddian, Llanddeiniolen, Caernarfon, LL55 3AW has a single domestic supply. The source is unknown.
- Oak Tree Lodge, Faenol (Vaynol) Estate, Y Felinheli, LL57 4BD has a single domestic supply from a well.
- Faenol Festival, Bangor, LL57 4BD had a private ditribution system for a festival that was last held in 2014.
- Glanrhyd, Pentir, Bangor, LL57 4EB has a single domestic supply from a borehole.

There may be other properties that abstract water privately in this area that we are unaware of and are not on our private water supply register.

Historic Landfill Sites

We hold one record of a historic landfill site within the area marked on your map. Please see separate JPEG file (ref: AECOM_LS_120516).

Known as the old Bangor municipal solid waste tip, no waste disposal licences exist for the site in Gwynedd Council archives, therefore it is probable that site closed pre 1976. The site was developed firstly into a Rugby Club comprising of a club house, car park and 3 rugby pitches, secondary development gave rise to a Tesco store and adjoining car park and petrol station, during which 5 monitoring boreholes were installed on site. Monitoring in 1993 revealed the site was not giving off significant quantities of landfill gas. Further monitoring in 2000 as part of an MSc dissertation showed no evidence of significant gas generation.

We have no electronic copies of the remediation documents relating to the construction of the Tesco store but hard copies may be available in our archived files and viewed by you upon request, if needed.

REPORT TITLE:	**REMEDIAL WORKS SUMMARY & VALIDATION**
At:	**10 & 12 Bangor Street** **Y Felinheli** **Gwynedd** **LL56 4JD**
Performed By:	**Randall & Walsh Associates Ltd** **1st Floor Offices** **Michael Ward** **Lynstock Way** **Lostock** **Bolton** **BL6 4SA**
Project Reference:	**07RB239**
On Behalf of:	**Quest Gates Ltd** **3rd Floor Sussex House** **21-25 Lower Stone Street** **Maidstone** **ME15 6YT**
Written by:	[redacted] Environmental Geologist
Signature	[redacted] _____
Approved by:	[redacted] Technical Director
Signature:	[redacted] _____
Issue Status:	**Final**
Date:	**10 August 2009**

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1 INTRODUCTION

1.1 General

Randall & Walsh Associates (RAW Group) were instructed by Quest Gates Ltd to proceed with remedial works and site validation at No's 10 & 12 Bangor Street, Y Felinheli, Gwynedd (Appendix A, Figure 1). Remedial works were required in order to address the release of an unknown quantity of domestic heating oil (kerosene) from the boiler or feed line at No. 10.

The householder of No. 10 moved into the property during January 2005 and during February 2005 the boiler (located against the rear kitchen wall) was removed and the householder noticed contaminated soils in this area. The occupant of No. 12 commented they had noticed hydrocarbon odours since 1998 and had reported it to Gwynedd County Council in 2005.

Due to the elevated concentrations of naphthalene within the ambient air of No. 10 the council recommended the occupants were moved out of the property due to young children living in the property. Whereas the residents of No. 12 remained in occupancy.

Previous reports made available to RAW were: '10 & 12 Bangor Street, Remediation Strategy' by Smith Grant LLP and 'Gwynedd Council Environmental Protection Act (EPA) 1990 Part IIA Section 78E Remediation Notice' dated 7 August 2007. The investigation conducted by Smith Grant LLP identified a potential risk to human health of the residents of No's 10 & 12 Bangor Street, through inhalation of hydrocarbon vapours, with the primary risk driver being naphthalene with a threshold concentration of 2.44µg/m^3. Further details of the targets for contaminants of concern are presented in the table in section 1.2. Gwynedd County Council (GCC) issued a remediation notice to the owner of No. 10 Bangor Street (Mr Nelmes) under Part IIA of the Environmental Protection Act 1990 and Smith Grant have also provided a remediation strategy document for the site.

1.2 Objective

The objective of the remedial works was to mitigate the risks identified in the RAW Spill Investigation Report dated 16th November 2007 (primarily risks to human health and also property structures and third party property), thereby restoring residential amenity to the property. The principal objective with respect to addressing the risks posed to human health was to achieve concentrations of hydrocarbons in the ambient air in the properties below the relevant threshold concentrations. The table below confirms the threshold concentrations for the contaminants of concern.

Contaminant of concern	Threshold Concentration µg/m^3	Threshold Concentration mg/m^3
Benzene	2.81	0.00281
Toluene	219	0.219
Ethylbenzene	770	0.770
Total Xylenes	185	0.185
Naphthalene	**2.44**	**0.00244**
Aromatic C8-C10	200	0.200
Aliphatic C8-C10	1000	1
Aliphatic C10-C12	1000	1
Aliphatic C12-C16	1000	1

This report provides a summary of remedial and validation works undertaken at the property. Supporting information is provided within the appendices.

2 CONTAMINANT IMPACT

Site investigation activities undertaken by RAW Group confirmed the presence of hydrocarbon contamination within the area of the spill origin and along the foundations of the boundary kitchen wall. Evidence of hydrocarbon impact to masonry, specifically within the lime mortar, was identified via penetrative PID testing. The analysis of the ambient air within the kitchens of both properties identified the presence of TPH contamination with a TPH concentration of 2.95mg/m^3 in property No. 12 and 0.76 mg/m^3 in property No. 10. Further details of the RAW investigation works and the air sample results obtained are presented in the RAW report dated 16th November 2007.

3 REMEDIAL WORKS

In line with RAW's recommendations, remedial works were undertaken between January and October 2008 and included the following:

- The excavation of the grossly impacted soils at the spill origin and impacted soils within the kitchen of both properties. Within property No. 10 the excavation was advanced to a maximum depth of 0.70mBGL (metres below ground level) and within property No. 12 to a maximum depth of 0.80mBGL. Validation soil samples were collected from the sides of the excavation prior to reinstatement;

- The internal foundations and masonry was treated with a bio-remedial solution which was washed onto the impacted masonry;

- Removal of impacted masonry from the kitchen of No.10 Bangor Street; and

- An SVE system was installed within impacted soils at depth beneath the excavations in both kitchens and at depth externally beneath the spill origin. During the treatment period, additional SVE treatment points were installed into the cavity of the kitchen walls above ground to remove hydrocarbon vapours being emitted from the lime mortar.

Please refer to Figure 2: Remedial works and Figure 3: SVE location points within Appendix A, which depict the area of excavation and the locations of all validation soil samples collected. Details of the works are reported below and photographs showing the remedial works are provided within Appendix C.

3.1 Physical Works

In line with RAW's recommendations, hydrocarbon contaminated soils internally and externally, located adjacent to the foundations of the house at No. 10 and No. 12 Bangor Street, were excavated to a maximum depth of 0.80mBGL to the base of the property foundations.

Following the excavations, the external and internal foundation masonry was treated with a bio-remedial solution to address any residual hydrocarbon contamination impacting the structures. Following the recommendations of the structural engineer, it was recommended that the replacement of the wall was not appropriate given the structural condition of the wall, therefore an SVE system was installed to treat impacted soils and

the cavity wall bounding the two kitchens in-situ which is discussed further in section3.3 below.

All hydrocarbon contaminated soils were collected from site by a licensed waste contractor for disposal at a suitable waste facility in accordance with good waste management practice and duty of care. Copies of waste transfer documentation are available on request.

3.2 Re-instatement

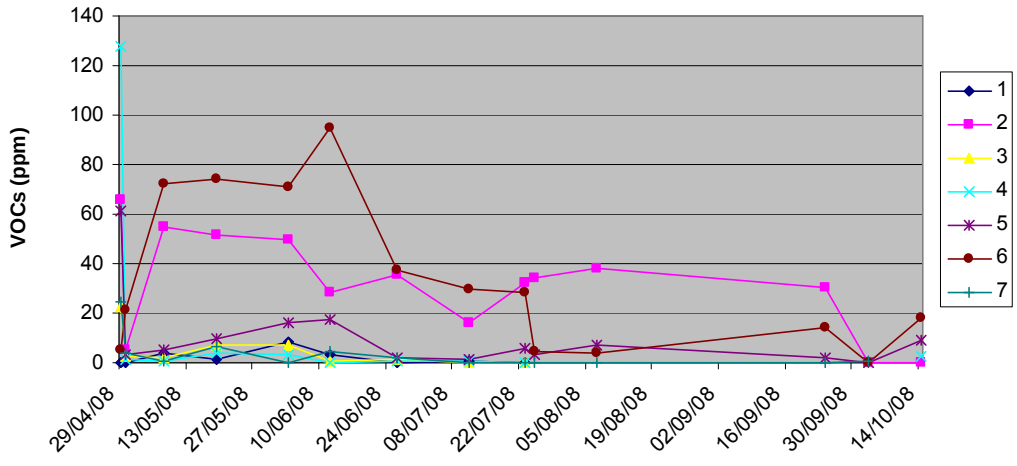
All excavated areas were reinstated to original specification and all fixtures in the kitchen were reinstated to original specification.

3.3 Soil Vapour Extraction (SVE) System

RAW installed an SVE system to remediate the soils at the properties using this in-situ technique which comprised of 7 no. vapour extraction points. 3 no. SVE points were located within the soils beneath the kitchen floor of No. 10, and 2 no. SVE points were within the soils below the kitchen of no. 12. A further 2 no. SVE points were located within the rear garden of No. 10 adjacent to the third party property. During the remediation of the soils, a total of 12 no. SVE points were also installed into the cavity wall between the two properties. Figure 3 within Appendix A illustrates the extraction point locations associated with the SVE system. Summary data from the SVE extraction points in the soils and structures are provided in Appendix E.

Graph 1 below provides an illustration of the general reduction in VOC concentrations determined using a MiniRae 2000 Photo-ionisation Detector (PID) calibrated on 100ppm isobutylene, used to obtain measurements from each SVE extraction point in the soils over the treatment period.

Graph 1: VOC concentrations measured in SVE extraction points 1 -7 within in-situ treated soils



Graph 1 above and the graphs provided with the summary data sheets in Appendix E confirm the reduction in VOC concentrations during the SVE treatment of the soils and structures at both No.10 and No.12 Bangor Street.

3.4 Internal Air Quality Assessment

RAW Group mobilised to site on 30th October 2008 to collect validation air samples using Tenax thermal desorption tubes. On this occasion samples of the ambient air at both properties were collected over a seven day time period and a return visit was made to site to collect the Tenax thermal desorption tubes on 6th November 2008. Final validation air samples were collected using Tenax thermal desorption tubes on the 7th April 2009 with air sampling having been undertaken over a two week period to achieve the required detection limits for naphthalene. On both monitoring occasions Tenax thermal desorption tubes were used to collect samples of ambient air within the kitchens and the top of the stairs within both properties. Further details of the sampling and analysis are provided in section 4.2 below.

4 LABORATORY ANALYSIS

4.1 Soil Analysis

A total of 8 no. validation soil samples were analysed for speciated Total Petroleum Hydrocarbons (TPH) across the C_6-C_{35} carbon range by GC-FID and the VOCs; benzene, toluene, ethyl-benzene and xylenes (BTEX)) by GC-MS. All soil analysis was performed by Scientific Analysis Laboratories Ltd (SAL) using UKAS and MCERTS approved analytical techniques where available.

All soil samples collected from the site were transported to the laboratory under appropriate preservation and chain-of-custody procedures.

4.2 Air Analysis

Tenax thermal desorption tubes were used to collect passive (or diffuse) samples of ambient air to assess the concentration of VOCs within the kitchen and upstairs rooms in both properties. The samples were submitted to SAL for analysis. Samples were obtained in general accordance with the method outlined in BS EN1441-2:2004 – "Indoor air quality: Diffusive samplers for the determination of concentrations of gases and vapours – Guide for selection, use and maintenance".

All air samples collected from the site were transported to the laboratory under appropriate preservation and chain-of-custody procedures.

4.3 Quality Assurance / Quality Control

As part of the RAW Group Quality Assurance/Quality Control (QA/QC) programme, samples were collected to evaluate the integrity (and assess the accuracy) of the sampling and analysis process. The QA/QC samples collected are summarised in the table below:

QA/QC type	Sample Name	Analysis	Purpose
Field duplicate (soil)	QS-1 (V-6 0.8m)	TPH, BTEX	Ensuring a representative sample is collected, evaluating differences in soil heterogeneity and ensuring the integrity of the sampling and analysis process
Field Duplicate (air)	QA-1 (VA-3) QA-1 (VA-7)	Air analysis suite	Ensuring a representative sample is collected and ensuring the integrity of the sampling and analysis process

5 RESULTS AND DISCUSSION

5.1 Soil Analytical Results

Concentrations of TPH and BTEX reported for the soil samples collected from site are presented in Table 1, Appendix B and laboratory reports are provided in Appendix D.

Following the excavation of grossly contaminated soils within the kitchen of the two properties, validation soil samples were collected. The soils returned concentrations below laboratory detection limits with the exception of V-3 at 0.70mBGL and V-4 at 0.70mBGL which recorded TPH concentrations of 5 and 4,400mg/kg respectively. The elevated concentration of 4,400mg/kg was recorded within soils beneath the property's foundations; however, the samples were collected prior to the installation of the SVE system. As indicated in section 3.3 above, upon remediation of the soils using the SVE system, the concentrations of VOCs within the soils were significantly reduced from an average of 44ppm in April 2008 to an average of 7 ppm in October 2008.

5.2 Air Analytical Results

The concentrations of hydrocarbon compounds recorded in the validation air samples collected from site are presented within Appendix B (Tables 2 – 11) and laboratory reports are provided in Appendix D.

All eight of the ambient air samples (VA-1 to VA-8) collected within the kitchens and upstairs of both properties returned no detectable concentrations of the principal contaminant of concern (naphthalene). The final validation air samples collected from both properties in April 2009 confirmed that there were no detectable concentrations of naphthalene in either property above the agreed threshold concentration of 0.00244 mg/m^3.

Other hydrocarbon compounds were identified in the laboratory analysis undertaken on both validation sampling occasions (including aliphatic TPH C_6-C_8, C_8-C_{10}, C_{10}-C_{12} and C_{12} –C_{16} xylenes and toluene), however, in all cases the detectable concentrations were below the threshold criteria as outlined in section 1.2 of this report.

5.3 Quality Assurance / Quality Control (QA/QC)

The results of the QA/QC samples are provided in the analytical summary tables section (Appendix B). The validation field duplicate and original soil sample collected (QS-1/V-6 0.8m) both returned BTEX and TPH concentrations below laboratory detection limits.

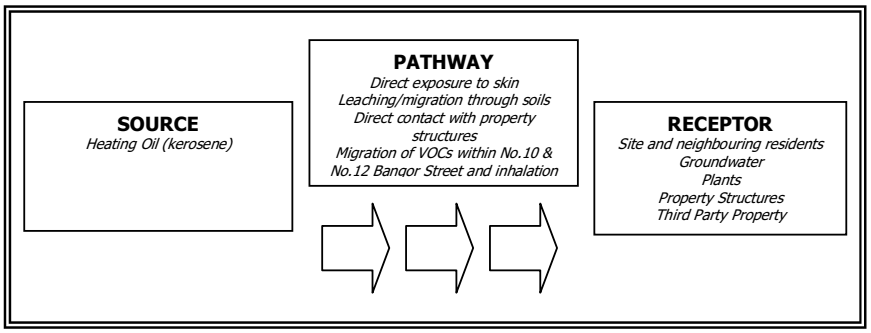
Validation air sample VA-3 and duplicate sample QA-1 both returned similar concentrations of aliphatic TPH C_{10}-C_{12} and C_{12}-C_{16} found in the ambient air of the property. During the final validation air sampling round in April 2009, parent sample VA-7 and duplicate sample QA-1 both returned similar concentrations of aliphatic TPH C_8-C_{10}, C_{10}-C_{12} and C_{12}-C_{16}.

Copies of all analytical results including the results of the QA/QC sampling can be found in the appended laboratory reports (Appendix D).

6 QUALITATIVE RISK ASSESSMENT

6.1 Risk Assessment

This section provides an assessment of the risks associated with the residual contamination identified at site. In line with current guidelines, this takes the form of a qualitative source – pathway – receptor assessment which enables the construction of a conceptual site model. The conceptual site model is a simplification of reality, which aims to identify the key processes that affect the contaminant transport behaviour. Within a qualitative risk assessment context it is simply an identification of the potential contaminants sources, pathways and receptors.



If any one of these elements is missing then it is considered that there is no significant risk associated with the contamination and the site cannot be determined as being contaminated land.

Following completion of the initial intrusive investigation the potential source-pathway-receptor linkages have been identified as shown below:

	Contaminant Source	Pathway	Receptors	Pre-Remediation Qualitative Risk	Comments	Post Remediation Qualitative Risk
1	Hydrocarbons in soils (kerosene)	Direct contact with contaminated soils	Site Residents	Medium	Removal of grossly contaminated soils and remediation of impacted soils and masonry has reduced the risk to site residents to low.	Low
2	Volatile hydrocarbons (VOCs including naphthalene)	Inhalation of vapours emitted from impacted materials.	Current and future users of the site	High	Removal of grossly contaminated soils and treatment of masonry has removed the contaminant source reducing the risk to current and future site users to low. Validation air sampling has demonstrated the efficacy of the remediation at both properties reducing naphthalene concentrations to below the agreed threshold criteria.	Low
3	Hydrocarbons in soils (kerosene)	Migration of contaminants through soils to groundwater	Groundwater	Medium	Removal of grossly contaminated soils and validation of the excavation has confirmed removal of impacted soils and reduced the risk to groundwater to low.	Low
4	Hydrocarbons in soils (kerosene)	Direct contact with contaminated soils	Property structure	High	Removal of grossly contaminated soils and remediation of impacted soils and structures has reduced the risks to property structures to low.	Low
5	Hydrocarbons in soils (kerosene)	Migration of contaminants through soils	Off-site receptors, third party property	Medium to high	The oil spill originated at no. 10 and was found to impact the property of no. 12. The removal and in-situ treatment of grossly contaminated soils has reduced the risk to third party property to low.	Low
6	Hydrocarbons in soils (kerosene)	Migration of contaminants through soils to groundwater	Plants	Medium to High	Removal of grossly contaminated soils and remediation of impacted soils removed the risk to plants to low.	Low

The above source-pathway-receptor assessment indicates that the remedial works have been successful in eliminating the potential risks to the identified receptors. In summary following completion of remedial works and validation the risks have been identified as follows:

- Low risk to human health of occupants;
- Low risk to groundwater;
- Low risk to property structures;
- Low risk to third party property; and
- Low risk to plants.

The validation works undertaken at the property have demonstrated that the concentrations of the contaminants of concern including naphthalene have been reduced to concentrations below the agreed threshold criteria as set out in Section 1.2 of this report.

6.2 Explanation of the Risk Classification

A qualitative risk classification is provided for all of the identified pollutant linkages and these are explained as outlined in the following table.

Classification	Interpretation
High	The nature of the contaminant source, the pathway and the vulnerability of the receptors are such that with little or no mitigation works undertaken it is considered highly likely that a significant risk exists to site users, buildings, services and environmental receptors both on and off site. Further investigation and assessment is required in order to quantify the risks posed to the receptor.
Medium-High	The nature of the contaminant source, the pathway and the vulnerability of the receptors are such that with little or no mitigation works undertaken it is considered likely that a significant risk exists to site users, buildings, services or environmental receptors both on and off site. Further investigation and assessment is required in order to quantify the risks posed to the receptor.
Medium	The nature of the contaminant source, the pathway and the vulnerability of the receptors are such that with little or no mitigation works undertaken it is considered likely that a risk exists to site users, buildings, services and environmental receptors both on and off site. Further investigation and assessment is required in order to quantify the risks posed to the receptor.
Low-Medium	The nature of the contaminant source, the pathway and the vulnerability of the receptors are such that with little or no mitigation works undertaken it is considered possible that a risk exists to site users, buildings, services and environmental receptors both on and off site. Some further investigation and assessment is required in order to quantify the risks posed to the receptor.
Low	Owing to the absence of any identifiable source, pathway, or the lack of any vulnerable receptor, it is considered unlikely that any risk exists to site users, buildings, services and environmental receptors both on and off site. No further investigation or assessment is required.

7 CONCLUSIONS

RAW Group were instructed to undertake and validate remedial works at no. 10 and no. 12 Bangor Street, Y Felinheli, Gwynedd, further to the release of an unknown quantity of kerosene from No. 10 first reported to Gwynedd Council in 2005.

Remedial works undertaken by RAW Group consisted of the excavation and disposal of contaminated soils within the kitchens of No. 10 and No. 12. The exposed foundations and masonry were treated with a bio-remedial solution. A soil vapour extraction (SVE) system was installed in the residually contaminated soils at both properties to remove hydrocarbon vapours from the soils at depth beneath both kitchens. The SVE system was also installed into the cavity wall above ground between the two kitchens to remove hydrocarbon vapours being emitted from residually impacted lime mortar.

All of the ambient air samples collected by RAW within the kitchens and upstairs of both properties returned no detectable concentrations of the principal contaminant of concern (naphthalene). The final validation air samples collected from both properties in April 2009 confirmed that there were no detectable concentrations of naphthalene in either property above the agreed threshold concentration of 0.00244 mg/m^3. Other hydrocarbon compounds were identified in the laboratory analysis undertaken on both validation sampling occasions, however, in all cases the detectable concentrations were below the threshold criteria required by Gwynedd County Council. Therefore validation air sampling has confirmed that naphthalene and other hydrocarbon compounds related to the kerosene release are no longer considered to pose a significant risk to human health at either no. 10 and no. 12 Bangor Street.

On completion of the remedial works, RAW consider that the risks posed to surrounding environmental receptors, property structures, third party property and the health of the occupants, attributable to the spill have been reduced to acceptable levels.

8 RECOMMENDATIONS

RAW Group is satisfied that remedial works undertaken on this site meet the objectives outlined in Section 1.2, reducing the risks posed to building structures, health and safety of the residents and potential surrounding environmental receptors to an acceptable level, thereby restoring residential amenity to the property. It is therefore considered that no further works are required on this site at this time.

9 GLOSSARY

Carbon range	*Grouping of hydrocarbons between a minimum and maximum number, applied to the carbon atoms in the chain linked together in the hydrocarbon molecule (e.g C_8-C_{35}).*
Controlled Waters	*(as defined by Water Resources Act 1991, Part III, Section 104) All rivers, canals, lakes, groundwaters, estuaries and coastal waters to three nautical miles from the shore.*
Hydrocarbon	*Hydrocarbons are compounds that contain hydrogen and carbon. The nature of which, either gas or liquid is distinguished by molecular structure (number of carbon and hydrogen atoms in each molecule).*
Laboratory detection limits	*Minimum levels detectable using the designated laboratory techiques.*
Migration/migrated	*Flow of contamination from one place to another.*
Pathway	*A route along which a particle of water, substance or contaminant moves through the environment.*
QA/QC	*Quality assurance and qualilty control procedures.*
Receptor	*An entity/organism or a controlled water that is being or could be harmed by a potential pollutant.*
Borehole	*Hole drilled or augered into the ground to otain information on the soils or aquifers to delineate contamination and obtain groundwater samples.*
Source	*Origin of any contamination.*
TPH	*Total Petroluem Hydrocarbons.*
UKAS	*United Kingdom Accreditation Service.*
MCERTS	*Monitoring certification scheme requested by the Environment Agency*

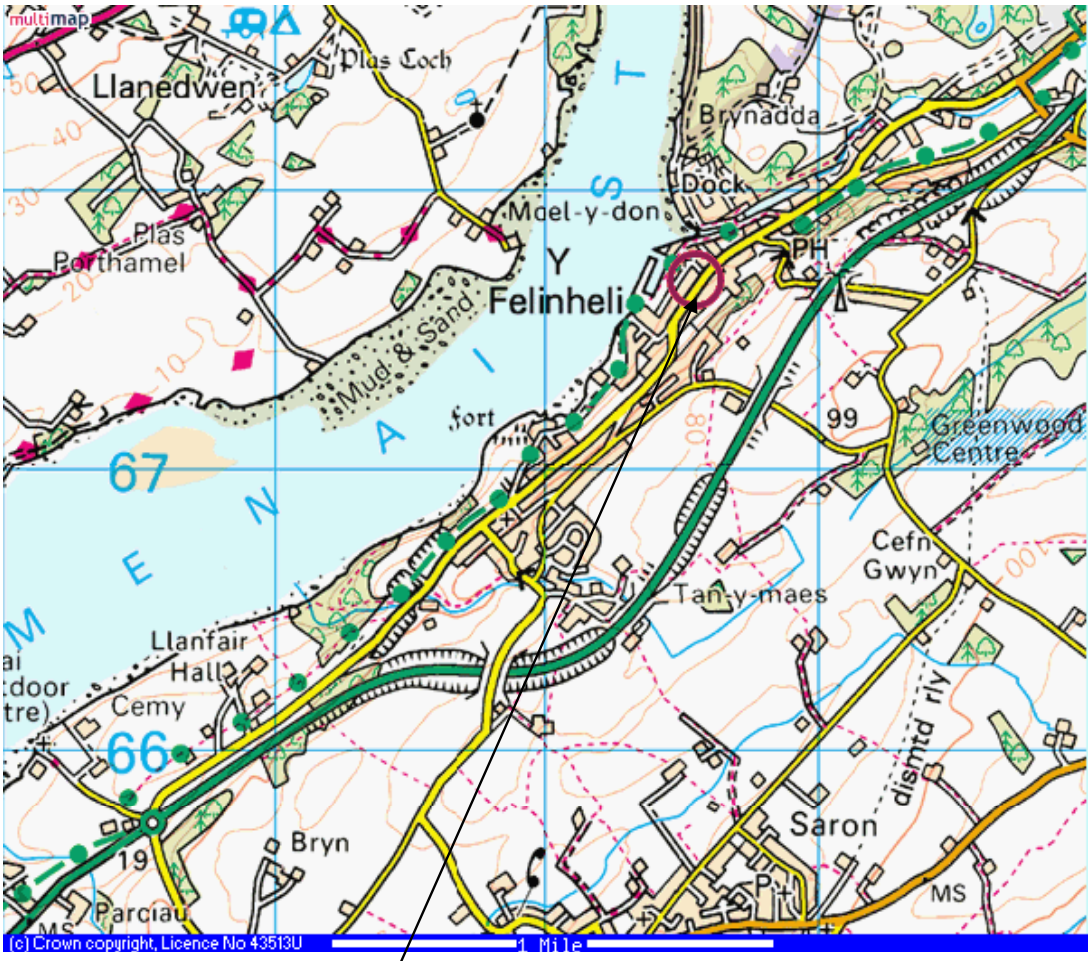
10 LIMITATIONS

The samples collected and conclusions reported herein are merely believed broadly representative of the observed site conditions at the time of collection. Whilst every attempt is made to adequately characterise site conditions, no warranty can be supplied for the contents of this report as a result of laboratory analysis performed by subcontractors, variations in heterogeneous or variable subsurface features, contaminant distributions or as a result of unencountered details. Environmental Site Assessments are by their nature an inexact science and all care should be taken in any interpretation of any aspect of the findings contained herein.

The assessment undertaken considers only those areas within the boundaries of the sites concerned. Care should be taken with evaluating any remedial requirements or costs and the existence or presence of off-site contaminant impact may need to be further considered. In addition, the investigation only considers those potential subsurface contaminants evaluated in this investigation.

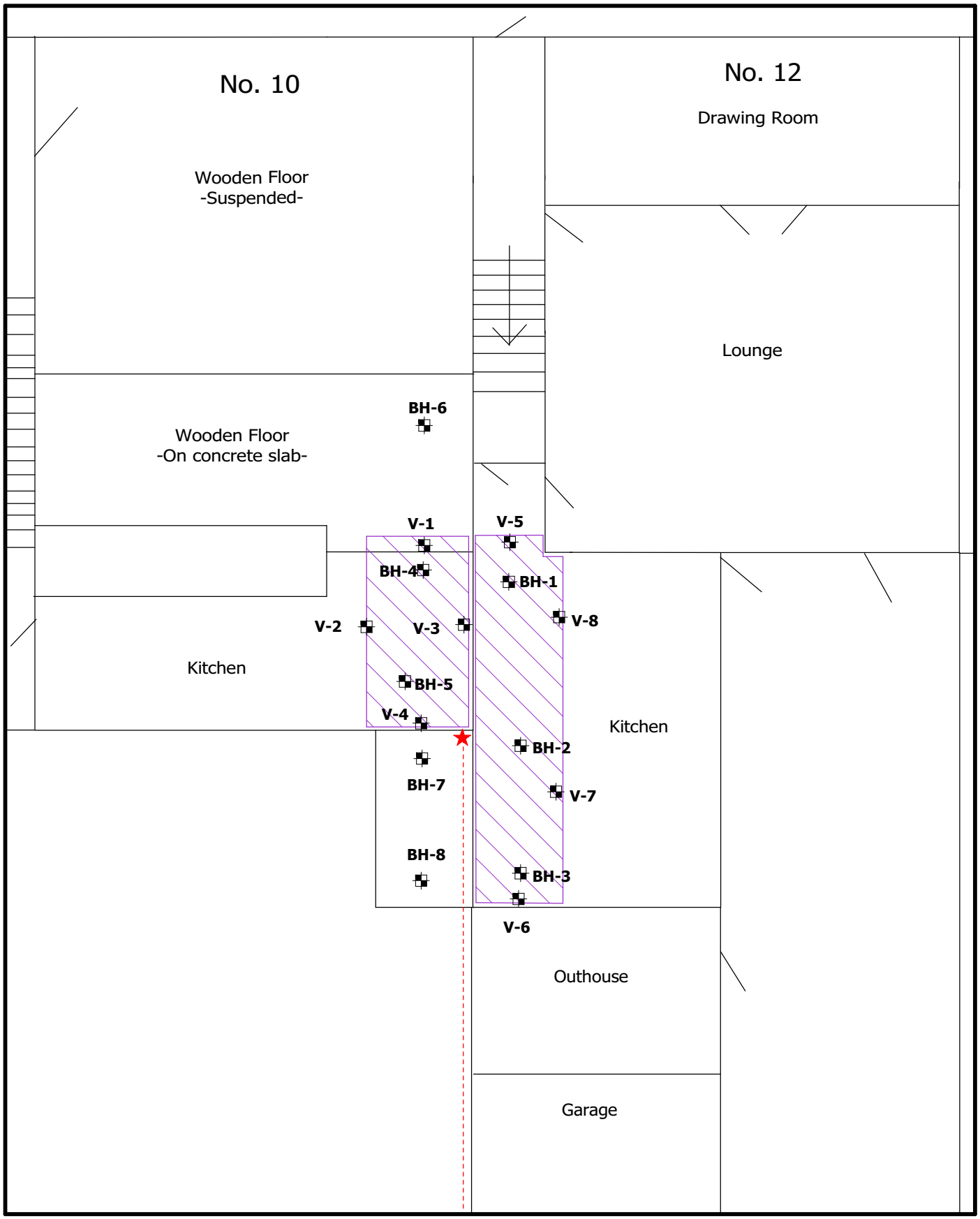
This report has been prepared solely for the use of Quest Gates Ltd and their appointed agents. If any other third party comes into possession of this report they rely on it at their peril and the authors offer no duty of care or skill, warranty (either implied or not), condition or other term, any duty at common law for any loss of profit or any indirect, special or consequential loss, damage, costs, expenses or other claims which arise out of or in connection with the use of this report for any purpose.

APPENDIX A
FIGURES AND PLANS



Approximate Location of Site

Remedial Works & Validation 10 & 12 Bangor St. Y Felinheli RAW Ref: 07RB239	RAW
FIGURE 1: Site vicinity plan	Version: 1
APPROXIMATE SCALE: As shown Drawn By: CS Checked By: AK	S:RAW/Projects/07RB239/Vicmap



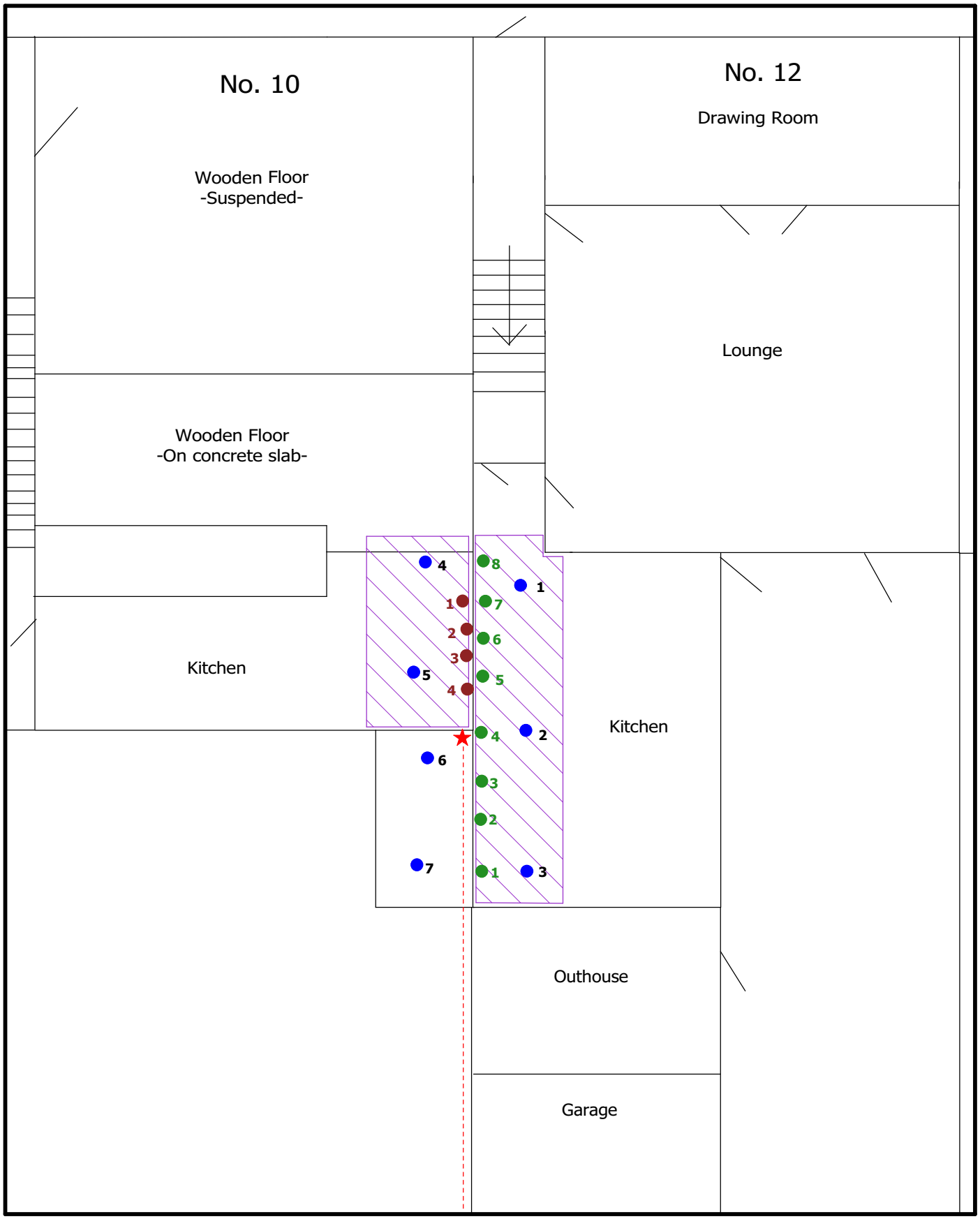
Legend

- Spill Origin
- Location of Oil Feed Line
- **BH-9** Borehole location
- **V-8** Validation sample location
- Excavated area

N

1 metres

Remedial Works & Validation 10 & 12 Bangor Street Y Felinheli RAW Ref: 07RB239	RAW
Figure 2: Remedial Works	Version 1
Approximate Scale: As Shown Drawn by: CS Checked by: AK	S:RAW/Projects/07RB239/fig2plan



Legend

- Spill Origin
- Location of Oil Feed Line
- SVE location points in soils
- SVE location points in wall of No. 10
- SVE location points in wall of No. 12
- Excavated area

N

1 metres

Remedial Works & Validation 10 & 12 Bangor Street Y Felinheli RAW Ref: 07RB239	RAW
Figure 3: SVE Works	Version 1
Approximate Scale: As Shown Drawn by: CS Checked by: AK	S:RAW/Projects/07RB239/fig3plan

APPENDIX B
SUMMARY OF ANALYTICAL RESULTS

TABLE 1: VALIDATION SOIL ANALYTICAL SUMMARY
PETROLEUM HYDROCARBONS AND BTEX

Sample ID and Depth (m)	Date Collected	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Petroleum Hydrocarbons						TPH
						$>C_6$-C_8	$>C_8$-C_{10}	$>C_{10}$-C_{12}	$>C_{12}$-C_{16}	$>C_{16}$-C_{21}	$>C_{21}$-C_{35}	$>C_6$-C_{35}
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
V-1 0.70m	25-Mar-08	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	1
V-2 0.70m	25-Mar-08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
V-3 0.70m	25-Mar-08	ND	ND	ND	ND	ND	ND	1	4	ND	ND	5
V-4 0.70m	25-Mar-08	ND	ND	ND	ND	ND	4	580	3400	310	67	4400
V-5 0.40m	04-Apr-08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
V-6 0.80m	04-Apr-08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
V-7 0.50m	04-Apr-08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
QS-1 duplicate of V-6 0.80m		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Method detection limits		0.01	0.01	0.01	0.01	0.1	1	1	1	1	1	1
Lab Methodology		Headspace / GC-MS				Solvent Extraction / GC-FID						

NOTES: i) The locations of all soil samples are depicted on the Site Map.
ii) "ND" denotes sample tested below laboratory method detection limits.
iii) TPH - Total Petroleum Hydrocarbons

TABLE 2: AIR ANALYTICAL SUMMARY
PETROLEUM HYDROCARBONS AND VOCs
(Tenax tube sampling media)

Sample Ref	Location and Date	Analyte	Thresholds (mg/m^3)	Concentration mg/m^3
VA-1	Property No. 10 Kitchen	Benzene	<0.0028	<0.0048
	30/10/08 to 6/11/08	Ethyl Benzene	<0.770	<0.0043
		Meta/Para-Xylene	<0.185*	<0.0047
		Methyl-tert-Butyl-Ether	N/T	<0.011
		n-butane*†	N/T	<0.023
		n-hexane	N/T	<0.011
		Naphthalene	<0.00244	<0.004
		Ortho-Xylene	<0.185*	<0.0047
		Toluene	<0.219	<0.0045
		C5-C6 aliphatic	N/T	<0.023
		C6-C8 aliphatic	N/T	<0.023
		C8-C10 aliphatic	<1	<0.023
		C10-C12 aliphatic	<1	<0.023
		C12-C16 aliphatic	<1	0.095
		C5-C7 aromatic	N/T	<0.024
		C7-C8 aromatic	N/T	<0.023
		C8-C10 aromatic	<0.2	<0.023
		C10-C12 aromatic	N/T	<0.023
		C12-C16 aromatic	N/T	<0.023

Duration of air sampling	10080	mins
Air sampling pump rate	N/A	cm3/min
Analysed volume of air	N/A	litres
N/T	No Threshold	

TABLE 3: AIR ANALYTICAL SUMMARY
PETROLEUM HYDROCARBONS AND VOCs
(Tenax tube sampling media)

Sample Ref	Location and Date	Analyte	Thresholds (mg/m^3)	Concentration mg/m^3
VA-2	Property No. 10 Upstairs	Benzene	<0.0028	<0.0048
	30/10/08 to 6/11/08	Ethyl Benzene	<0.770	<0.0043
		Meta/Para-Xylene	<0.185*	<0.0047
		Methyl-tert-Butyl-Ether	N/T	<0.011
		n-butane*†	N/T	<0.023
		n-hexane	N/T	<0.011
		Naphthalene	<0.00244	<0.004
		Ortho-Xylene	<0.185*	<0.0047
		Toluene	<0.219	<0.0045
		C5-C6 aliphatic	N/T	<0.023
		C6-C8 aliphatic	N/T	<0.023
		C8-C10 aliphatic	<1	<0.023
		C10-C12 aliphatic	<1	<0.023
		C12-C16 aliphatic	<1	0.05
		C5-C7 aromatic	N/T	<0.024
		C7-C8 aromatic	N/T	<0.023
		C8-C10 aromatic	<0.2	<0.023
		C10-C12 aromatic	N/T	<0.023
		C12-C16 aromatic	N/T	<0.023

Duration of air sampling	10080	mins
Air sampling pump rate	N/A	cm3/min
Analysed volume of air	N/A	litres
N/T	No Threshold	

TABLE 4: AIR ANALYTICAL SUMMARY
PETROLEUM HYDROCARBONS AND VOCs
(Tenax tube sampling media)

Sample Ref	Location and Date	Analyte	Thresholds (mg/m^3)	Concentration mg/m^3
VA-3	Property No. 12 Kitchen	Benzene	<0.0028	<0.0048
	30/10/08 to 6/11/08	Ethyl Benzene	<0.770	<0.0043
		Meta/Para-Xylene	<0.185*	<0.0047
		Methyl-tert-Butyl-Ether	N/T	<0.011
		n-butane*†	N/T	<0.023
		n-hexane	N/T	<0.011
		Naphthalene	<0.00244	<0.004
		Ortho-Xylene	<0.185*	<0.0047
		Toluene	<0.219	<0.0045
		C5-C6 aliphatic	N/T	<0.023
		C6-C8 aliphatic	N/T	<0.023
		C8-C10 aliphatic	<1	<0.023
		C10-C12 aliphatic	<1	0.036
		C12-C16 aliphatic	<1	0.34
		C5-C7 aromatic	N/T	<0.024
		C7-C8 aromatic	N/T	<0.023
		C8-C10 aromatic	<0.2	<0.023
		C10-C12 aromatic	N/T	<0.023
		C12-C16 aromatic	N/T	<0.023

Duration of air sampling	10080	mins
Air sampling pump rate	N/A	cm3/min
Analysed volume of air	N/A	litres
N/T	No Threshold	

TABLE 5: AIR ANALYTICAL SUMMARY
PETROLEUM HYDROCARBONS AND VOCs
(Tenax tube sampling media)

Sample Ref	Location and Date	Analyte	Thresholds (mg/m^3)	Concentration mg/m^3
VA-4	Property No. 12 Upstairs	Benzene	<0.0028	<0.0048
	30/10/08 to 6/11/08	Ethyl Benzene	<0.770	<0.0043
		Meta/Para-Xylene	<0.185*	<0.0047
		Methyl-tert-Butyl-Ether	N/T	<0.011
		n-butane*†	N/T	<0.023
		n-hexane	N/T	<0.011
		Naphthalene	<0.00244	<0.004
		Ortho-Xylene	<0.185*	<0.0047
		Toluene	<0.219	<0.0045
		C5-C6 aliphatic	N/T	<0.023
		C6-C8 aliphatic	N/T	<0.023
		C8-C10 aliphatic	<1	<0.023
		C10-C12 aliphatic	<1	0.023
		C12-C16 aliphatic	<1	0.095
		C5-C7 aromatic	N/T	<0.024
		C7-C8 aromatic	N/T	<0.023
		C8-C10 aromatic	<0.2	<0.023
		C10-C12 aromatic	N/T	<0.023
		C12-C16 aromatic	N/T	<0.023

Duration of air sampling	10080	mins
Air sampling pump rate	N/A	cm3/min
Analysed volume of air	N/A	litres
N/T	No Threshold	

TABLE 6: AIR ANALYTICAL SUMMARY
PETROLEUM HYDROCARBONS AND VOCs
(Tenax tube sampling media)

Sample Ref	Location and Date	Analyte	Thresholds (mg/m^3)	Concentration mg/m^3
QA-1	Duplicate property No. 12 kitchen	Benzene	<0.0028	<0.0048
	30/10/08 to 6/11/08	Ethyl Benzene	<0.770	<0.0043
		Meta/Para-Xylene	<0.185*	<0.0047
		Methyl-tert-Butyl-Ether	N/T	<0.011
		n-butane*†	N/T	<0.023
		n-hexane	N/T	<0.011
		Naphthalene	<0.00244	<0.004
		Ortho-Xylene	<0.185*	<0.0047
		Toluene	<0.219	<0.0045
		C5-C6 aliphatic	N/T	<0.023
		C6-C8 aliphatic	N/T	<0.023
		C8-C10 aliphatic	<1	<0.023
		C10-C12 aliphatic	<1	0.041
		C12-C16 aliphatic	<1	0.36
		C5-C7 aromatic	N/T	<0.024
		C7-C8 aromatic	N/T	<0.023
		C8-C10 aromatic	<0.2	<0.023
		C10-C12 aromatic	N/T	<0.023
		C12-C16 aromatic	N/T	<0.023

Duration of air sampling	10080	mins
Air sampling pump rate	N/A	cm3/min
Analysed volume of air	N/A	litres
N/T	No Threshold	

TABLE 7: AIR ANALYTICAL SUMMARY
PETROLEUM HYDROCARBONS AND VOCs
(Tenax tube sampling media)

Sample Ref	Location and Date	Analyte	Thresholds (mg/m^3)	Concentration mg/m^3
VA-5	No. 10 kitchen	Benzene	<0.0028	<0.0024
	24/03/09 to 07/04/09	Ethyl Benzene	<0.770	<0.0022
		Meta/Para-Xylene	<0.185*	<0.0024
		Methyl-tert-Butyl-Ether	N/T	<0.0056
		n-butane*†	N/T	<0.023
		n-hexane	N/T	<0.011
		Naphthalene	<0.00244	<0.0020
		Ortho-Xylene	<0.185*	<0.0024
		Toluene	<0.219	<0.0023
		C5-C6 aliphatic	N/T	<0.011
		C6-C8 aliphatic	N/T	<0.11
		C8-C10 aliphatic	<1	<0.11
		C10-C12 aliphatic	<1	0.018
		C12-C16 aliphatic	<1	0.062
		C5-C7 aromatic	N/T	<0.012
		C7-C8 aromatic	N/T	<0.011
		C8-C10 aromatic	<0.2	<0.011
		C10-C12 aromatic	N/T	<0.011
		C12-C16 aromatic	N/T	<0.011

Duration of air sampling	20160	mins
Air sampling pump rate	N/A	cm3/min
Analysed volume of air	N/A	litres
N/T	No Threshold	

TABLE 8: AIR ANALYTICAL SUMMARY
PETROLEUM HYDROCARBONS AND VOCs
(Tenax tube sampling media)

Sample Ref	Location and Date	Analyte	Thresholds (mg/m^3)	Concentration mg/m^3
VA-6	No. 10 Landing	Benzene	<0.0028	<0.0024
	24/03/09 to 07/04/09	Ethyl Benzene	<0.770	<0.0022
		Meta/Para-Xylene	<0.185*	<0.0024
		Methyl-tert-Butyl-Ether	N/T	<0.0056
		n-butane*†	N/T	<0.023
		n-hexane	N/T	<0.011
		Naphthalene	<0.00244	<0.0020
		Ortho-Xylene	<0.185*	<0.0024
		Toluene	<0.219	0.0023
		C5-C6 aliphatic	N/T	<0.011
		C6-C8 aliphatic	N/T	<0.11
		C8-C10 aliphatic	<1	<0.11
		C10-C12 aliphatic	<1	<0.11
		C12-C16 aliphatic	<1	0.024
		C5-C7 aromatic	N/T	<0.012
		C7-C8 aromatic	N/T	<0.011
		C8-C10 aromatic	<0.2	<0.011
		C10-C12 aromatic	N/T	<0.011
		C12-C16 aromatic	N/T	<0.011

Duration of air sampling	20160	mins
Air sampling pump rate	N/A	cm3/min
Analysed volume of air	N/A	litres
N/T	No Threshold	

TABLE 9: AIR ANALYTICAL SUMMARY
PETROLEUM HYDROCARBONS AND VOCs
(Tenax tube sampling media)

Sample Ref	Location and Date	Analyte	Thresholds (mg/m^3)	Concentration mg/m^3
VA-7	No. 12 Kitchen	Benzene	<0.0028	<0.0024
	24/03/09 to 07/04/09	Ethyl Benzene	<0.770	<0.0022
		Meta/Para-Xylene	<0.185*	0.003
		Methyl-tert-Butyl-Ether	N/T	<0.0056
		n-butane*†	N/T	<0.023
		n-hexane	N/T	<0.011
		Naphthalene	<0.00244	<0.0020
		Ortho-Xylene	<0.185*	<0.0024
		Toluene	<0.219	0.003
		C5-C6 aliphatic	N/T	<0.011
		C6-C8 aliphatic	N/T	0.018
		C8-C10 aliphatic	<1	0.035
		C10-C12 aliphatic	<1	0.14
		C12-C16 aliphatic	<1	0.048
		C5-C7 aromatic	N/T	<0.012
		C7-C8 aromatic	N/T	<0.011
		C8-C10 aromatic	<0.2	<0.011
		C10-C12 aromatic	N/T	<0.011
		C12-C16 aromatic	N/T	<0.011

Duration of air sampling	20160	mins
Air sampling pump rate	N/A	cm3/min
Analysed volume of air	N/A	litres
N/T	No Threshold	

TABLE 10: AIR ANALYTICAL SUMMARY
PETROLEUM HYDROCARBONS AND VOCs
(Tenax tube sampling media)

Sample Ref	Location and Date	Analyte	Thresholds (mg/m^3)	Concentration mg/m^3
VA-8	No. 12 Landing	Benzene	<0.0028	<0.0024
	24/03/09 to 07/04/09	Ethyl Benzene	<0.770	<0.0022
		Meta/Para-Xylene	<0.185*	<0.0024
		Methyl-tert-Butyl-Ether	N/T	<0.0056
		n-butane*†	N/T	<0.023
		n-hexane	N/T	<0.011
		Naphthalene	<0.00244	<0.0020
		Ortho-Xylene	<0.185*	<0.0024
		Toluene	<0.219	0.0043
		C5-C6 aliphatic	N/T	<0.011
		C6-C8 aliphatic	N/T	<0.011
		C8-C10 aliphatic	<1	0.033
		C10-C12 aliphatic	<1	0.14
		C12-C16 aliphatic	<1	0.065
		C5-C7 aromatic	N/T	<0.012
		C7-C8 aromatic	N/T	<0.011
		C8-C10 aromatic	<0.2	<0.011
		C10-C12 aromatic	N/T	<0.011
		C12-C16 aromatic	N/T	<0.011

Duration of air sampling	20160	mins
Air sampling pump rate	N/A	cm3/min
Analysed volume of air	N/A	litres
N/T	No Threshold	

TABLE 11: AIR ANALYTICAL SUMMARY
PETROLEUM HYDROCARBONS AND VOCs
(Tenax tube sampling media)

Sample Ref	Location and Date	Analyte	Thresholds (mg/m^3)	Concentration mg/m^3
QA-1	Duplicate property No. 12 kitchen	Benzene	<0.0028	<0.0024
	24/03/09 to 07/04/09	Ethyl Benzene	<0.770	<0.0022
		Meta/Para-Xylene	<0.185*	0.003
		Methyl-tert-Butyl-Ether	N/T	<0.0056
		n-butane*†	N/T	<0.023
		n-hexane	N/T	<0.011
		Naphthalene	<0.00244	<0.0020
		Ortho-Xylene	<0.185*	<0.0024
		Toluene	<0.219	0.003
		C5-C6 aliphatic	N/T	<0.011
		C6-C8 aliphatic	N/T	<0.011
		C8-C10 aliphatic	<1	0.033
		C10-C12 aliphatic	<1	0.12
		C12-C16 aliphatic	<1	0.056
		C5-C7 aromatic	N/T	<0.012
		C7-C8 aromatic	N/T	<0.011
		C8-C10 aromatic	<0.2	<0.011
		C10-C12 aromatic	N/T	<0.011
		C12-C16 aromatic	N/T	<0.011

Duration of air sampling	20160	mins
Air sampling pump rate	N/A	cm3/min
Analysed volume of air	N/A	litres
N/T	No Threshold	

APPENDIX C

PHOTOGRAPHS

Photograph 1: The excavated floor in the kitchen of No. 10 to remove impacted soils to foundation level.

Photograph 2: The excavated floor in the kitchen of No. 12 to remove impacted soils to foundation level.

Photograph 3: View of the exterior SVE system to treat soils beneath the ground.

Photograph 4: Two SVE points installed in the soils within the kitchen of No.10.

Randall and Walsh Associates Limited
1st Floor Offices
Michael Ward
Lynstock Way
Lostock
Bolton
BL6 4SA

Client: **QuestGates Ltd**

Project: **10 & 12 BANGOR STREET**
Y FELINHELI
GWYNEDD

Project No. 07RB239

Photograph 5: View of the SVE points installed into the soils within the kitchen of No. 12.

Photograph 6: View of the SVE system installed into the wall within property No. 10.

Photograph 7: View of the SVE system installed into the wall within property No. 12.

Photograph 8: View of the reinstated kitchen floor and wall in property No.10.

Randall and Walsh Associates Limited
1st Floor Offices
Michael Ward
Lynstock Way
Lostock
Bolton
BL6 4SA

Client: **QuestGates Ltd**

Project: **10 & 12 BANGOR STREET**
Y FELINHELI
GWYNEDD

Project No. 07RB239

APPENDIX D
LABORATORY ANALYTICAL REPORTS

Scientific Analysis Laboratories

Certificate of Analysis

Report Number:	128204-1
Date of Report:	04-Apr-2008
Client:	RAW Consulting, 1st Floor Offices, Michael Ward, Lynstock Way, Lostock, Bolton. BL6 4SA
Client Contact:	Mr [redacted]
Client Job Reference:	07RB239
Client Site Reference:	Nelmes y Felinheli
Client Purchase Order:	9907393
Date Job Received at SAL:	27-Mar-2008
Date Analysis Started:	31-Mar-2008
Date Analysis Completed:	03-Apr-2008

The results reported relate to samples received at the laboratory
Opinions and interpretations expressed herein are outside the scope of UKAS or MCERTS accreditation
This report should not be reproduced except in full without the written approval of the laboratory
Tests covered by this certificate were conducted in accordance with SAL SOPs

Key to symbols used in this report:
W: Analysis was sub-contracted and performed at another SAL Laboratory
S: Analysis was sub-contracted
N: Analysis is not UKAS accredited
U: Analysis is UKAS accredited
M: Analysis is MCERTS accredited

Report checked and authorised by: Mr Ross Walker, Assistant Customer Services Manager

UKAS TESTING 1549 Group

MCERTS 1549

Index to caveats used in this report

Value	Description
AR	As Received
A105	Assisted dried at 105C
13	Results have been blank corrected.

Notes:
Fill samples are outside the scope of our accreditation. Results are UKAS only

SAL Reference: 128204
Project Site: Nelmes y Felinheli
Customer Reference: 07RB239

Soil Analysed as Soil
MCERTS Preparation

				SAL Reference	**128204 001**	**128204 002**	**128204 003**	**128204 004**	**128204 005**
				Customer Sample Reference	**V-1**	**V-2**	**V-3**	**V-4**	**BH-1**
				Test Sample	**AR**	**AR**	**AR**	**AR**	**AR**
				Type	**Clay**	**Clay**	**Clay**	**Clay**	**Clay**
				Date Sampled	**25-MAR-2008**	**25-MAR-2008**	**25-MAR-2008**	**25-MAR-2008**	**25-MAR-2008**
				Depth	**0.7**	**0.7**	**0.7**	**0.7**	**1.8**
Determinand	**Technique**	**LOD**	**Units**	**Symbol**					
Moisture @ 105 C	Grav (1 Dec) (105 C)	0.1	%	N	**12**	**11**	**12**	**9.1**	**14**

SAL Reference: 128204
Project Site: Nelmes y Felinheli
Customer Reference: 07RB239

Soil Analysed as Soil
MCERTS Preparation

				SAL Reference	**128204 006**	**128204 007**	**128204 008**	**128204 009**	**128204 010**
				Customer Sample Reference	**BH-1**	**BH-1**	**BH-2**	**BH-2**	**BH-3**
				Test Sample	**AR**	**AR**	**AR**	**AR**	**AR**
				Type	**Sand**	**Sand**	**Clay**	**Fill**	**Clay**
				Date Sampled	**25-MAR-2008**	**25-MAR-2008**	**25-MAR-2008**	**25-MAR-2008**	**25-MAR-2008**
				Depth	**2.5**	**3.4**	**0.9**	**3.3**	**0.9**
Determinand	**Technique**	**LOD**	**Units**	**Symbol**					
Moisture @ 105 C	Grav (1 Dec) (105 C)	0.1	%	N	**13**	**11**	**14**	**11**	**12**

SAL Reference: 128204
Project Site: Nelmes y Felinheli
Customer Reference: 07RB239

Soil Analysed as Soil
MCERTS Preparation

				SAL Reference	**128204 011**	**128204 012**	**128204 013**
				Customer Sample Reference	**BH-3**	**BH-4**	**BH-4**
				Test Sample	**AR**	**AR**	**AR**
				Type	**Fill**	**Clay**	**Fill**
				Date Sampled	**25-MAR-2008**	**25-MAR-2008**	**25-MAR-2008**
				Depth	**2.3**	**0.9**	**2.1**
Determinand	**Technique**	**LOD**	**Units**	**Symbol**			
Moisture @ 105 C	Grav (1 Dec) (105 C)	0.1	%	N	**6.4**	**12**	**7.7**

SAL Reference: 128204
Project Site: Nelmes y Felinheli
Customer Reference: 07RB239

Soil Analysed as Soil
BTEX (MCERTS)

				SAL Reference	**128204 001**	**128204 002**	**128204 003**	**128204 004**	**128204 005**
				Customer Sample Reference	**V-1**	**V-2**	**V-3**	**V-4**	**BH-1**
				Test Sample	**A105**	**A105**	**A105**	**A105**	**A105**
				Type	**Clay**	**Clay**	**Clay**	**Clay**	**Clay**
				Date Sampled	**25-MAR-2008**	**25-MAR-2008**	**25-MAR-2008**	**25-MAR-2008**	**25-MAR-2008**
				Depth	**0.7**	**0.7**	**0.7**	**0.7**	**1.8**
Determinand	**Technique**	**LOD**	**Units**	**Symbol**					
Benzene	GC/MS(Head Space)(MCERTS)	10	µg/kg	M	<10	<10	<10	<10	<10
EthylBenzene	GC/MS(Head Space)(MCERTS)	10	µg/kg	M	<10	<10	<10	<10	<10
Meta/Para-Xylene	GC/MS(Head Space)(MCERTS)	10	µg/kg	M	<10	<10	<10	<10	<10
Ortho-Xylene	GC/MS(Head Space)(MCERTS)	10	µg/kg	M	<10	<10	<10	<10	<10
Toluene	GC/MS(Head Space)(MCERTS)	10	µg/kg	M	(13)<10	(13)<10	(13)<10	(13)<10	(13)<10

SAL Reference: 128204
Project Site: Nelmes y Felinheli
Customer Reference: 07RB239

Soil Analysed as Soil
BTEX (MCERTS)

				SAL Reference	**128204 006**	**128204 007**	**128204 008**	**128204 010**	**128204 012**
				Customer Sample Reference	**BH-1**	**BH-1**	**BH-2**	**BH-3**	**BH-4**
				Test Sample	**A105**	**A105**	**A105**	**A105**	**A105**
				Type	**Sand**	**Sand**	**Clay**	**Clay**	**Clay**
				Date Sampled	**25-MAR-2008**	**25-MAR-2008**	**25-MAR-2008**	**25-MAR-2008**	**25-MAR-2008**
				Depth	**2.5**	**3.4**	**0.9**	**0.9**	**0.9**
Determinand	**Technique**	**LOD**	**Units**	**Symbol**					
Benzene	GC/MS(Head Space)(MCERTS)	10	µg/kg	M	<10	<10	<10	<10	<10
EthylBenzene	GC/MS(Head Space)(MCERTS)	10	µg/kg	M	<10	<10	<10	<10	<10
Meta/Para-Xylene	GC/MS(Head Space)(MCERTS)	10	µg/kg	M	<10	<10	<10	<10	<10
Ortho-Xylene	GC/MS(Head Space)(MCERTS)	10	µg/kg	M	<10	<10	<10	<10	<10
Toluene	GC/MS(Head Space)(MCERTS)	10	µg/kg	M	(13)<10	(13)<10	(13)<10	(13)<10	(13)<10

SAL Reference: 128204
Project Site: Nelmes y Felinheli
Customer Reference: 07RB239

Soil Analysed as Soil
BTEX (UKAS)

				SAL Reference	**128204 009**	**128204 011**	**128204 013**
				Customer Sample Reference	**BH-2**	**BH-3**	**BH-4**
				Test Sample	**A105**	**A105**	**A105**
				Type	**Fill**	**Fill**	**Fill**
				Date Sampled	**25-MAR-2008**	**25-MAR-2008**	**25-MAR-2008**
				Depth	**3.3**	**2.3**	**2.1**
Determinand	**Technique**	**LOD**	**Units**	**Symbol**			
Benzene	GC/MS(Head Space)(MCERTS)	10	µg/kg	U	<10	<10	<10
EthylBenzene	GC/MS(Head Space)(MCERTS)	10	µg/kg	U	**200**	<10	<10
Meta/Para-Xylene	GC/MS(Head Space)(MCERTS)	10	µg/kg	U	**1000**	<10	<10
Ortho-Xylene	GC/MS(Head Space)(MCERTS)	10	µg/kg	U	**1700**	<10	<10
Toluene	GC/MS(Head Space)(MCERTS)	10	µg/kg	U	(13) **10**	<10	<10

SAL Reference: 128204
Project Site: Nelmes y Felinheli
Customer Reference: 07RB239

Soil Analysed as Soil
TPH (MCERTS)

				SAL Reference	**128204 001**	**128204 002**	**128204 003**	**128204 004**	**128204 005**
				Customer Sample Reference	**V-1**	**V-2**	**V-3**	**V-4**	**BH-1**
				Test Sample	**A105**	**A105**	**A105**	**A105**	**A105**
				Type	**Clay**	**Clay**	**Clay**	**Clay**	**Clay**
				Date Sampled	**25-MAR-2008**	**25-MAR-2008**	**25-MAR-2008**	**25-MAR-2008**	**25-MAR-2008**
				Depth	**0.7**	**0.7**	**0.7**	**0.7**	**1.8**
Determinand	**Technique**	**LOD**	**Units**	**Symbol**					
Total Petroleum Hydrocarbons (C6-C8)	GC/MS (Headspace)	0.1	mg/kg	N	<0.1	<0.1	<0.1	<0.1	<0.1
Total Petroleum Hydrocarbons (C8-C10)	GC/FID	1	mg/kg	U	<1	<1	<1	**4**	<1
Total Petroleum Hydrocarbons (C10-C12)	GC/FID	1	mg/kg	U	<1	<1	**1**	**580**	<1
Total Petroleum Hydrocarbons (C12-C16)	GC/FID	1	mg/kg	U	**1**	<1	**4**	**3400**	**1**
Total Petroleum Hydrocarbons (C16-C21)	GC/FID	1	mg/kg	U	<1	<1	<1	**310**	<1
Total Petroleum Hydrocarbons (C21-C35)	GC/FID	1	mg/kg	U	(13) <1	(13) <1	(13) <1	(13) **67**	(13) <1
Total Petroleum Hydrocarbons	GC/FID	1	mg/kg	M	**1**	<1	**5**	**4400**	**1**

SAL Reference: 128204
Project Site: Nelmes y Felinheli
Customer Reference: 07RB239

Soil Analysed as Soil
TPH (MCERTS)

				SAL Reference	**128204 006**	**128204 007**	**128204 008**	**128204 010**	**128204 012**
				Customer Sample Reference	**BH-1**	**BH-1**	**BH-2**	**BH-3**	**BH-4**
				Test Sample	**A105**	**A105**	**A105**	**A105**	**A105**
				Type	**Sand**	**Sand**	**Clay**	**Clay**	**Clay**
				Date Sampled	**25-MAR-2008**	**25-MAR-2008**	**25-MAR-2008**	**25-MAR-2008**	**25-MAR-2008**
				Depth	**2.5**	**3.4**	**0.9**	**0.9**	**0.9**
Determinand	**Technique**	**LOD**	**Units**	**Symbol**					
Total Petroleum Hydrocarbons (C6-C8)	GC/MS (Headspace)	0.1	mg/kg	N	<0.1	<0.1	<0.1	<0.1	<0.1
Total Petroleum Hydrocarbons (C8-C10)	GC/FID	1	mg/kg	U	<1	<1	**130**	**2**	<1
Total Petroleum Hydrocarbons (C10-C12)	GC/FID	1	mg/kg	U	<1	<1	**1900**	**24**	**2**
Total Petroleum Hydrocarbons (C12-C16)	GC/FID	1	mg/kg	U	**2**	<1	**8800**	**79**	**12**
Total Petroleum Hydrocarbons (C16-C21)	GC/FID	1	mg/kg	U	<1	<1	**560**	**7**	**1**
Total Petroleum Hydrocarbons (C21-C35)	GC/FID	1	mg/kg	U	(13)<1	(13)<1	**31**	**2**	**6**
Total Petroleum Hydrocarbons	GC/FID	1	mg/kg	M	**2**	<1	**11000**	**110**	**21**

SAL Reference: 128204
Project Site: Nelmes y Felinheli
Customer Reference: 07RB239

Soil Analysed as Soil
TPH (UKAS)

				SAL Reference	**128204 009**	**128204 011**	**128204 013**
				Customer Sample Reference	**BH-2**	**BH-3**	**BH-4**
				Test Sample	**A105**	**A105**	**A105**
				Type	**Fill**	**Fill**	**Fill**
				Date Sampled	**25-MAR-2008**	**25-MAR-2008**	**25-MAR-2008**
				Depth	**3.3**	**2.3**	**2.1**
Determinand	**Technique**	**LOD**	**Units**	**Symbol**			
Total Petroleum Hydrocarbons (C6-C8)	GC/MS (Headspace)	0.1	mg/kg	N	<0.1	<0.1	<0.1
Total Petroleum Hydrocarbons (C8-C10)	GC/FID	1	mg/kg	U	**520**	<1	<1
Total Petroleum Hydrocarbons (C10-C12)	GC/FID	1	mg/kg	U	**1800**	**1**	<1
Total Petroleum Hydrocarbons (C12-C16)	GC/FID	1	mg/kg	U	**3900**	**8**	**2**
Total Petroleum Hydrocarbons (C16-C21)	GC/FID	1	mg/kg	U	**190**	**2**	<1
Total Petroleum Hydrocarbons (C21-C35)	GC/FID	1	mg/kg	U	**16**	**7**	(13) <1
Total Petroleum Hydrocarbons	GC/FID	1.0	mg/kg	U	**6300**	**18**	**2.0**

Scientific Analysis Laboratories

Certificate of Analysis

Report Number:	148175-1
Date of Report:	14-Nov-08
Client:	RAW 1st Floor Offices Michael Ward Lynstock Way Lostock Bolton BL6 4SA
Client Contact:	Mr [redacted]
Client Job Reference:	07RB239-I
Project Site:	Nelmes Felinheli
Date Job Received at SAL:	7-Nov-08
Date Analysis Started:	11-Nov-08

The results reported relate to samples received at the laboratory
Opinions and interpretations expressed herein are outside the scope of UKAS accreditation
This report should not be reproduced except in full without the written approval of the laboratory
Tests covered by this certificate were conducted in accordance with SAL SOPs

Key to symbols used on this report:

W: Analysis was performed at another SAL laboratory
S: Analysis was subcontracted
N: Analysis is not UKAS accredited
U: Analysis is UKAS accredited

Report written by: Saber Chaudhry
Senior Analyst

Report checked and authorised by: Sarah Cooke
Analyst

UKAS TESTING
1549

Report Number: 148175-1
Client Job Reference: 07RB239-I
Project Site: Nelmes Felinheli

SAL Ref.	148175 001	148175 002	148175 003	148175 004	148175 005
Client Ref.	VA-1	VA-2	VA-3	VA-4	QA-1
Type	Tube (Tenax)	Tube (Tenax)	Tube (Tenax)	Tube (Tenax)	Tube (Tenax)

Determinand	Method	Units	LOD	Symbol					
Benzene	GC/MS	ng/tube	20	U	<20	<20	<20	<20	<20
Ethylbenzene	GC/MS	ng/tube	20	U	<20	<20	<20	<20	<20
m+p Xylene	GC/MS	ng/tube	20	U	<20	<20	<20	<20	<20
Methyl-tert-Butyl Ether	GC/MS	ng/tube	50	N	<50	<50	<50	<50	<50
n-Butane	GC/MS	ng/tube	100	N	<100	<100	<100	<100	<100
n-Hexane	GC/MS	ng/tube	50	N	<50	<50	<50	<50	<50
Naphthalene	GC/MS	ng/tube	20	U	<20	<20	<20	<20	<20
o Xylene	GC/MS	ng/tube	20	U	<20	<20	<20	<20	<20
Toluene	GC/MS	ng/tube	20	U	<20	<20	<20	<20	<20
TPH (C5 - C6 aliphatic)	GC/MS	ng/tube	100	N	<100	<100	<100	<100	<100
TPH (C6-C8 aliphatic)	GC/MS	ng/tube	100	N	<100	<100	<100	<100	<100
TPH (C8-C10 aliphatic)	GC/MS	ng/tube	100	N	<100	<100	<100	<100	<100
TPH (C10-C12 aliphatic)	GC/MS	ng/tube	100	N	<100	<100	**160**	**100**	**180**
TPH (C12-C16 aliphatic)	GC/MS	ng/tube	100	N	**420**	**220**	**1500**	**420**	**1600**
TPH (C5 - C7 aromatic)	GC/MS	ng/tube	100	N	<100	<100	<100	<100	<100
TPH (C7-C8 aromatic)	GC/MS	ng/tube	100	N	<100	<100	<100	<100	<100
TPH (C8-C10 aromatic)	GC/MS	ng/tube	100	N	<100	<100	<100	<100	<100
TPH (C10-C12 aromatic)	GC/MS	ng/tube	100	N	<100	<100	<100	<100	<100
TPH (C12-C16 aromatic)	GC/MS	ng/tube	100	N	<100	<100	<100	<100	<100

Report Number: 148175-1
Client Job Reference: 07RB239-I
Project Site: Nelmes Felinheli

SAL Ref.	148175 001	148175 002	148175 003	148175 004	148175 005
Client Ref.	VA-1	VA-2	VA-3	VA-4	QA-1
Time(min)	10080	10080	10080	10080	10080
Type	Tube (Tenax)	Tube (Tenax)	Tube (Tenax)	Tube (Tenax)	Tube (Tenax)

Determinand	Method	Units	LOD	Symbol					
Benzene	GC/MS	mg/m3		N	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
Ethylbenzene	GC/MS	mg/m3		N	<0.0043	<0.0043	<0.0043	<0.0043	<0.0043
m+p Xylene	GC/MS	mg/m3		N	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047
Methyl-tert-Butyl Ether	GC/MS	mg/m3		N	<0.011	<0.011	<0.011	<0.011	<0.011
n-Butane	GC/MS	mg/m3		N	<0.023	<0.023	<0.023	<0.023	<0.023
n-Hexane	GC/MS	mg/m3		N	<0.011	<0.011	<0.011	<0.011	<0.011
Naphthalene	GC/MS	mg/m3		N	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
o Xylene	GC/MS	mg/m3		N	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047
Toluene	GC/MS	mg/m3		N	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045
TPH (C5 - C6 aliphatic)	GC/MS	mg/m3		N	<0.023	<0.023	<0.023	<0.023	<0.023
TPH (C6-C8 aliphatic)	GC/MS	mg/m3		N	<0.023	<0.023	<0.023	<0.023	<0.023
TPH (C8-C10 aliphatic)	GC/MS	mg/m3		N	<0.023	<0.023	<0.023	<0.023	<0.023
TPH (C10-C12 aliphatic)	GC/MS	mg/m3		N	<0.023	<0.023	**0.036**	**0.023**	**0.041**
TPH (C12-C16 aliphatic)	GC/MS	mg/m3		N	**0.095**	**0.050**	**0.34**	**0.095**	**0.36**
TPH (C5 - C7 aromatic)	GC/MS	mg/m3		N	<0.024	<0.024	<0.024	<0.024	<0.024
TPH (C7-C8 aromatic)	GC/MS	mg/m3		N	<0.023	<0.023	<0.023	<0.023	<0.023
TPH (C8-C10 aromatic)	GC/MS	mg/m3		N	<0.023	<0.023	<0.023	<0.023	<0.023
TPH (C10-C12 aromatic)	GC/MS	mg/m3		N	<0.023	<0.023	<0.023	<0.023	<0.023
TPH (C12-C16 aromatic)	GC/MS	mg/m3		N	<0.023	<0.023	<0.023	<0.023	<0.023

Scientific Analysis Laboratories is a limited company registered in England and Wales (No 2514788) whose address is at Hadfield House, Hadfield Street, Manchester M16 9FE

Scientific Analysis Laboratories

Certificate of Analysis

Hadfield House
Hadfield Street
Cornbrook
Manchester
M16 9FE
Tel : 0161 874 2400
Fax : 0161 874 2404

Report Number: Supplement to 161752-1

Date of Report: 16-Apr-2009

Customer: RAW
1st Floor Offices
Michael Ward
Lynstock Way
Lostock
Bolton
BL6 4SA

Customer Contact: Ms [redacted]

Customer Job Reference: 07RB239
Customer Purchase Order: 9913340
Customer Site Reference: Felinheli
Date Job Recieved at SAL: 09-Apr-2009
Date Analysis Started: 09-Apr-2009
Date Analysis Completed: 16-Apr-2009

The results reported relate to samples received in the laboratory
Opinions and interpretations expressed herein are outside the scope of UKAS accreditation

Tests covered by this certificate were conducted in accordance with SAL SOPs

UKAS TESTING
1549

Report checked
and authorised by :
Mr Nicholas Moore
Project Manager

Issued by :

Index to symbols used in this report

Value	Description
AR	As Received
U	Analysis is UKAS accredited
N	Analysis is not accredited

Notes

Supplement issued to report correct calcs.

SAL Reference: 161752
Project Site: Felinheli
Customer Reference: 07RB239

Tube (Tenax) Analysed as Tube (Tenax)
Suite A

				SAL Reference	**161752 001**	**161752 002**	**161752 003**	**161752 004**	**161752 005**
				Customer Sample Reference	**QA-1**	**VA-5**	**VA-6**	**VA-7**	**VA-8**
				Test Sample	**AR**	**AR**	**AR**	**AR**	**AR**
				Sampling Time (min)	**20160**	**20160**	**20160**	**20160**	**20160**
Determinand	**Method**	**LOD**	**Units**	**Symbol**					
Benzene	GC/MS (TD)	20	ng	U	<20	<20	<20	<20	<20
	C	C	mg/m3		<0.0024	<0.0024	<0.0024	<0.0024	<0.0024
	C	C	ppm		<0.00076	<0.00076	<0.00076	<0.00076	<0.00076
EthylBenzene	GC/MS (TD)	20	ng	U	<20	<20	<20	<20	<20
	C	C	mg/m3		<0.0022	<0.0022	<0.0022	<0.0022	<0.0022
	C	C	ppm		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Meta/Para-Xylene	GC/MS (TD)	20	ng	U	**25**	<20	<20	**25**	<20
	C	C	mg/m3		**0.0030**	<0.0024	<0.0024	**0.0030**	<0.0024
	C	C	ppm		**0.00023**	<0.00018	<0.00018	**0.00023**	<0.00018
Methyl-tert-Butyl Ether	GC/MS (TD)	50	ng	N	<50	<50	<50	<50	<50
	C	C	mg/m3		<0.0056	<0.0056	<0.0056	<0.0056	<0.0056
	C	C	ppm		<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
n-butane	GC/MS (TD)	100	ng	N	<100	<100	<100	<100	<100
n-hexane	GC/MS (TD)	50	ng	N	<50	<50	<50	<50	<50
Naphthalene	GC/MS (TD)	20	ng	U	<20	<20	<20	<20	<20
	C	C	mg/m3		<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	C	C	ppm		<0.00039	<0.00039	<0.00039	<0.00039	<0.00039
Ortho-Xylene	GC/MS (TD)	20	ng	U	<20	<20	<20	<20	<20
	C	C	mg/m3		<0.0024	<0.0024	<0.0024	<0.0024	<0.0024
	C	C	ppm		<0.00054	<0.00054	<0.00054	<0.00054	<0.00054
Toluene	GC/MS (TD)	20	ng	U	**27**	<20	**20**	**27**	**38**
	C	C	mg/m3		**0.0030**	<0.0023	**0.0023**	**0.0030**	**0.0043**
	C	C	ppm		**0.00081**	<0.00060	**0.00060**	**0.00081**	**0.0011**
Total Petroleum Hydrocarbons (C10-C12 aliphatic)	GC/MS (TD)	100	ng	N	**1100**	**160**	<100	**1200**	**1200**
	C	C	mg/m3		**0.12**	**0.018**	<0.011	**0.14**	**0.14**
	C	C	ppm		**0.033**	**0.0048**	<0.0030	**0.036**	**0.036**
Total Petroleum Hydrocarbons (C10-C12 aromatic)	GC/MS (TD)	100	ng	N	<100	<100	<100	<100	<100
	C	C	mg/m3		<0.011	<0.011	<0.011	<0.011	<0.011
	C	C	ppm		<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Total Petroleum Hydrocarbons (C12-C16 aliphatic)	GC/MS (TD)	100	ng	N	**500**	**550**	**210**	**430**	**580**
	C	C	mg/m3		**0.056**	**0.062**	**0.024**	**0.048**	**0.065**
	C	C	ppm		**0.015**	**0.016**	**0.0063**	**0.013**	**0.017**
Total Petroleum Hydrocarbons (C12-C16 aromatic)	GC/MS (TD)	100	ng	N	<100	<100	<100	<100	<100
	C	C	mg/m3		<0.011	<0.011	<0.011	<0.011	<0.011
	C	C	ppm		<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Total Petroleum Hydrocarbons (C5 - C6 aliphatic)	GC/MS (TD)	100	ng	N	<100	<100	<100	<100	<100
	C	C	mg/m3		<0.011	<0.011	<0.011	<0.011	<0.011
	C	C	ppm		<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Total Petroleum Hydrocarbons (C5-C7 aromatic)	GC/MS (TD)	100	ng	N	<100	<100	<100	<100	<100
	C	C	mg/m3		<0.012	<0.012	<0.012	<0.012	<0.012
	C	C	ppm		<0.0038	<0.0038	<0.0038	<0.0038	<0.0038
Total Petroleum Hydrocarbons (C6-C8 aliphatic)	GC/MS (TD)	100	ng	N	<100	<100	<100	**160**	<100
	C	C	mg/m3		<0.011	<0.011	<0.011	**0.018**	<0.011
	C	C	ppm		<0.0030	<0.0030	<0.0030	**0.0048**	<0.0030
Total Petroleum Hydrocarbons (C7-C8 aromatic)	GC/MS (TD)	100	ng	N	<100	<100	<100	<100	<100
	C	C	mg/m3		<0.011	<0.011	<0.011	<0.011	<0.011
	C	C	ppm		<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Total Petroleum Hydrocarbons (C8-C10 aliphatic)	GC/MS (TD)	100	ng	N	**290**	<100	<100	**310**	**290**
	C	C	mg/m3		**0.033**	<0.011	<0.011	**0.035**	**0.033**
	C	C	ppm		**0.0087**	<0.0030	<0.0030	**0.0093**	**0.0087**
Total Petroleum Hydrocarbons (C8-C10 aromatic)	GC/MS (TD)	100	ng	N	<100	<100	<100	<100	<100
	C	C	mg/m3		<0.011	<0.011	<0.011	<0.011	<0.011
	C	C	ppm		<0.0030	<0.0030	<0.0030	<0.0030	<0.0030

APPENDIX E
SVE MONITORING SUMMARY SHEETS

SVE MONITORING REPORT

Project Name:	Nelmes - Y Felinheli
Project Number:	07RB239
Project Manager:	[redacted]
Project Engineer:	
Date of Installation:	29/04/2008

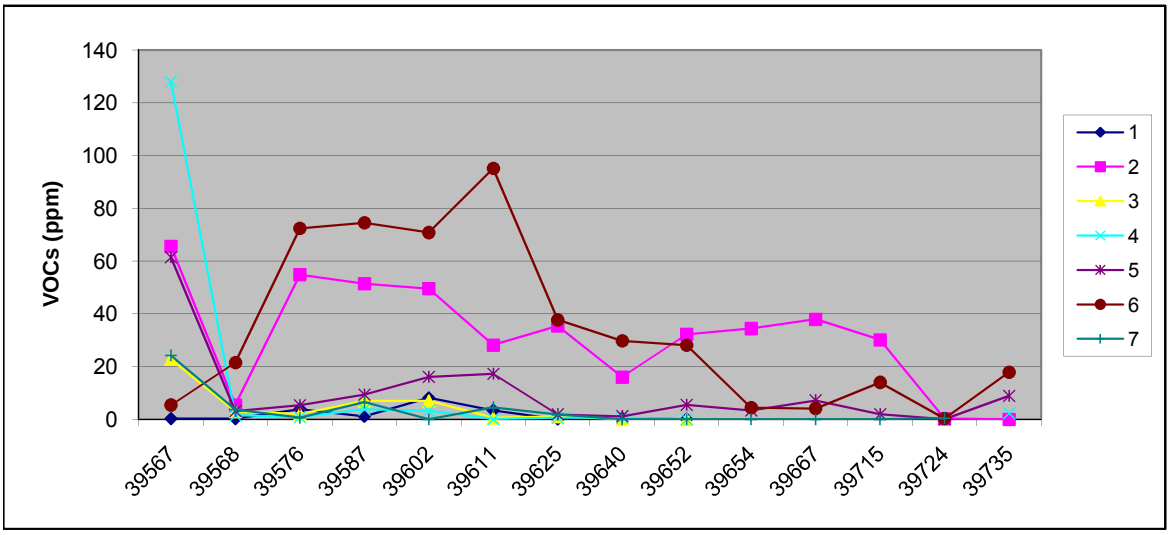
	DATE							
	29/04/2008		30/04/2008		08/05/2008		19/05/2008	
SVE Point	PID	mb	PID	mb	PID	mb	PID	mb
1	0.3	0	0.3	0	3.9	5	1.2	5
2	65.5	7	5.4	7	54.8	5	51.4	5
3	22.8	7	2.9	7	2	5	7	5
4	128	10	1.5	10	0.8	5	3.8	5
5	61.4	7	3.2	7	5.4	5	9.4	5
6	5.4	5	21.5	5	72.4	5	74.5	5
7	24.2	5	3.7	5	0.6	5	6.5	5

	DATE							
	03/06/2008		12/06/2008		26/06/2008		11/07/2008	
SVE Point	PID	mb	PID	mb	PID	mb	PID	mb
1	8.2	5	3.4	5	0.1	0	0.4	0
2	49.5	5	28.1	5	35.4	10	16	5
3	7	5	0.6	5	1.1	10	0	0
4	3.2	5	0.1	5	0.6	10	0.6	0
5	16.1	5	17.3	5	1.9	10	1.2	10
6	70.8	5	95.1	5	37.7	10	29.7	10
7	0	5	4.5	5	1.8	10	0	0

	DATE							
	23/07/2008		25/07/2008		07/08/2008		24/09/2008	
SVE Point	PID	mb	PID	mb	PID	mb	PID	mb
1	0.1	0						
2	32.2	10	34.4	10	37.9	10	30.1	5
3	0	0						
4	0	off						
5	5.5	5	3.4	5	7.2	5	2	5
6	28.1	10	4.4	10	4.1	5	14	5
7	0	off	0	0	0		0	off

	DATE							
	03/10/2008		14/10/2008					
SVE Point	PID	mb	PID	mb	PID	mb	PID	mb
1								
2	0.2		0					
3								
4			2.3					

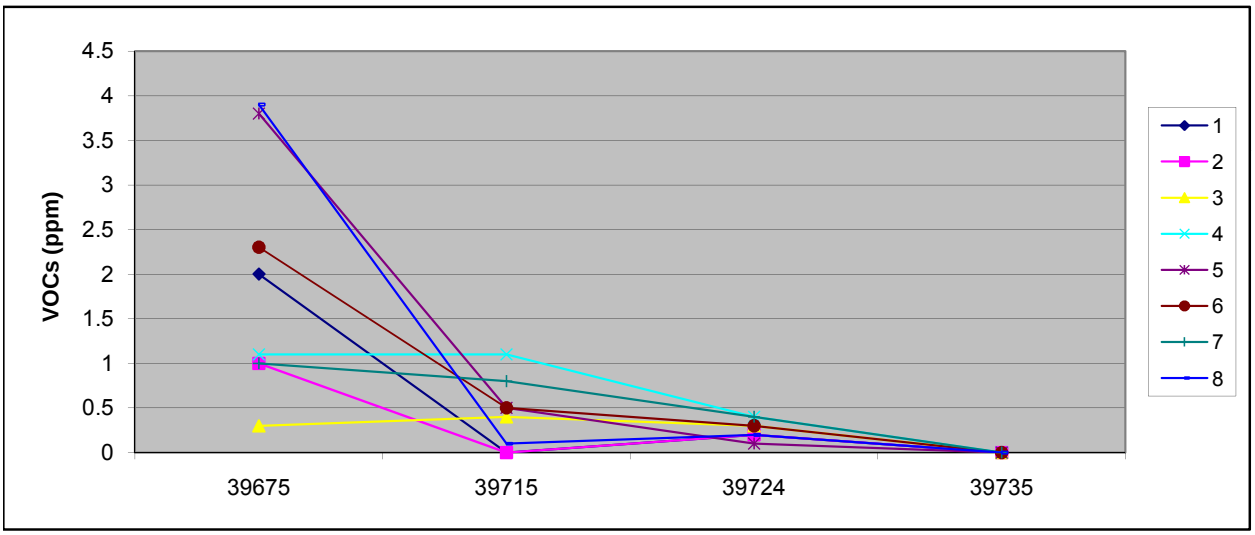
5	0.1		8.9					
6	0.3		17.8					
7	0.4							



SVE MONITORING REPORT

Project Name:	Nelmes - Y Felinheli
Project Number:	07RB239
Project Manager:	[redacted]
Project Engineer:	
Date of Installation:	15/08/2008

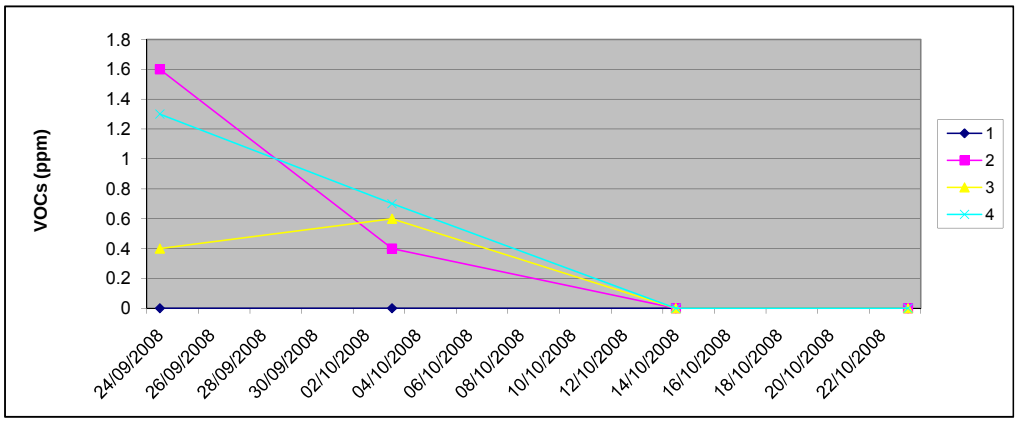
SVE Point	DATE							
	15/08/2008		24/09/2008		03/10/2008		14/10/2008	
1	2	0.5	0	0.5	0.2	off	0	off
2	1	0.5	0	0.5	0.2	off	0	off
3	0.3	0.5	0.4	0.5	0.3	off	0	off
4	1.1	0.5	1.1	0.5	0.4	off	0	off
5	3.8	0.5	0.5	0.5	0.1	off	0	off
6	2.3	0.5	0.5	0.5	0.3	off	0	off
7	1	0.5	0.8	0.5	0.4	off	0	off
8	3.9	0.5	0.1	0.5	0.2	off	0	off



SVE MONITORING REPORT

Project Name:	Nelmes - Y Felinheli
Project Number:	07RB239
Project Manager:	[redacted]
Project Engineer:	
Date of Installation:	29/04/2008

SVE Point	DATE							
	24/09/2008		03/10/2008		14/10/2008		23/10/2008	
1	0	5	0	off	0	off	0	off
2	1.6	5	0.4	off	0	off	0	off
3	0.4	5	0.6	off	0	off	0	off
4	1.3	5	0.7	off	0	off	0	off



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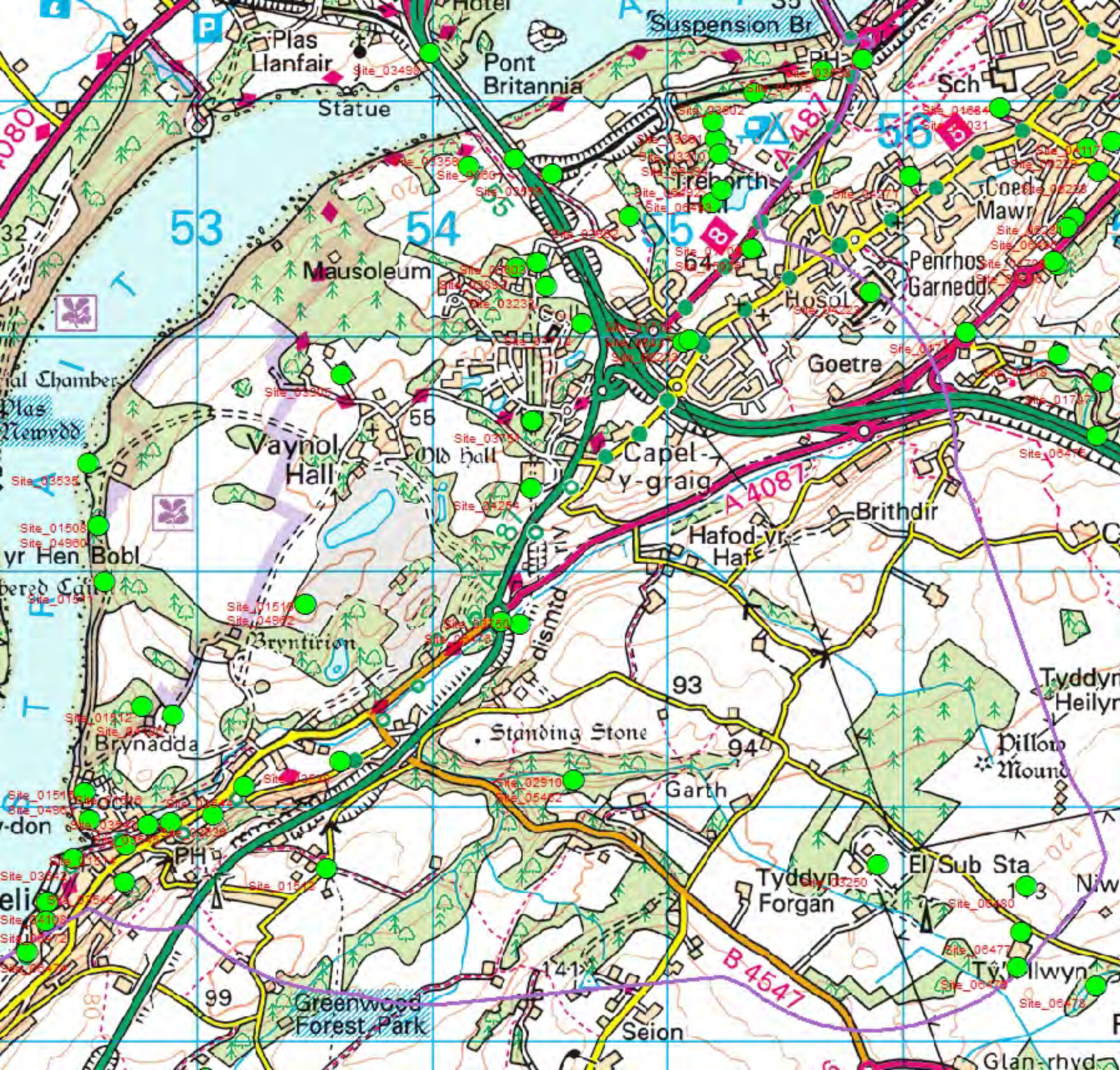
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Pont Britannia
Suspension Br
Statue
Mausoleum
Treborth
Coed Mawr
Penrhos Garnedd
Hosol
Goetre
Vaynol Hall
Old Hall
Capel-y-graig
Brithdir
Hafod-yr-Haf
Bryntirion
Brynadda
Standing Stone
Garth
Tyddyn Heilyn
Pillow Mound
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El Sub Sta
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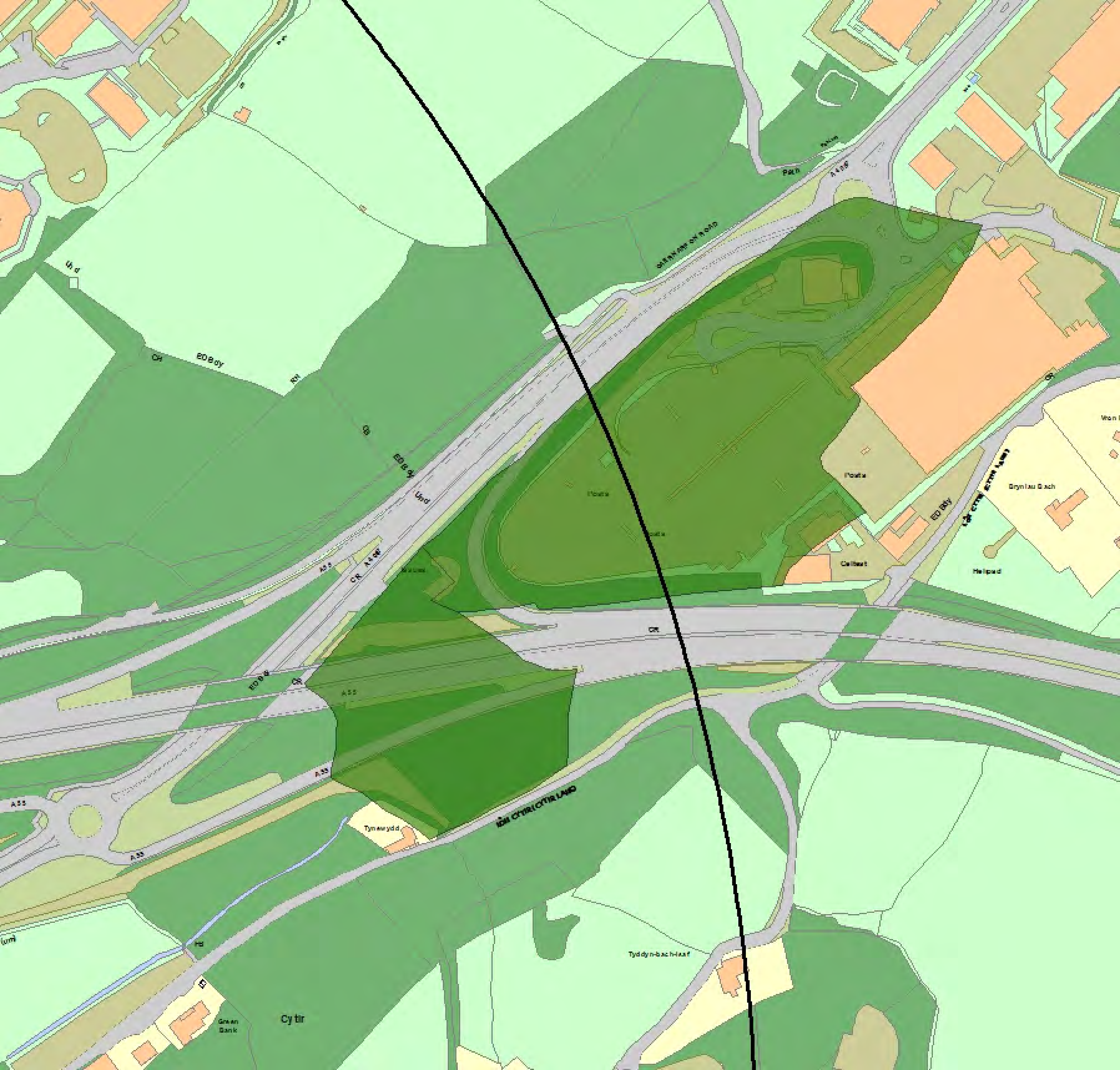

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Green Bank
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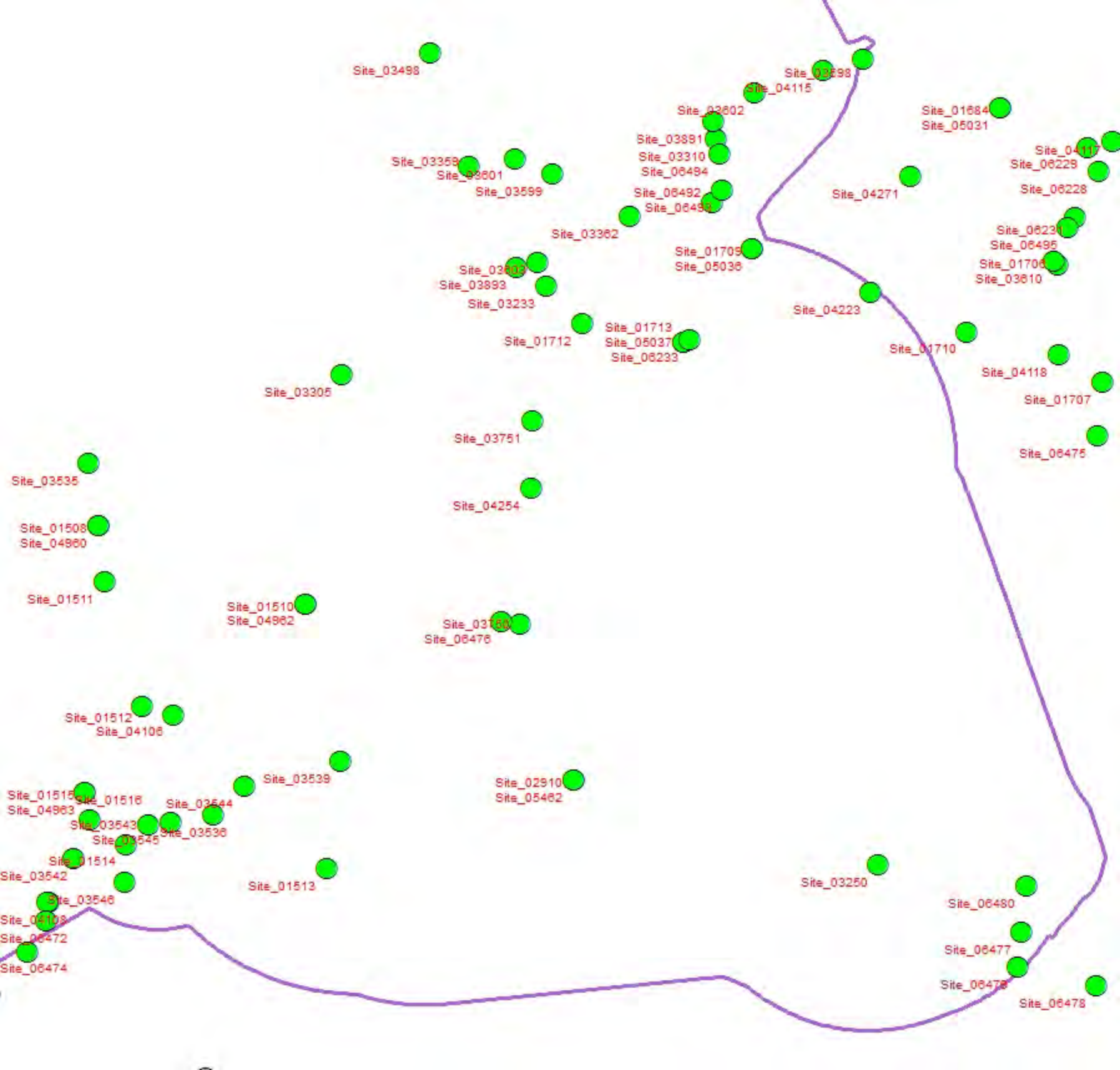
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Site_04103
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Site_06474
Site_06479
Site_06478

1.3 ISLE OF ANGLESEY COUNTY COUNCIL

Hi [redacted]

Yep, no problems this end as we can still meet up and go through the data sets we hold.

Also to confirm, no charges would be placed against this work as we are not in a position yet to produce the reports you seek.

I trust tis will be agreeable to yourselves owing to the delay in this matter.

[redacted]
BSc.(Hons.) PG Dip. MSc. AMIOA MCIEH MIEnvSc

Swyddog Iechyd Yr Amgylchedd / Environmental Health Officer
Adran Datblygu Cynaladwy / Sustainable Development Department
Cyngor Sir Ynys Môn / Isle of Anglesey County Council
Llangefni
Ynys Môn
LL77 7 TW

Direct Dial [redacted]
E-bost / e-mail [redacted]

Adborth am ein gwasanaeth / Feedback on our service
http://www.surveymonkey.com/s/8T97JF3

From: [redacted]
Sent: 30 June 2016 13:28
To: [redacted]
Cc: [redacted]
Subject: RE: NWC - Provisional Meeting with CLOs

Hi [redacted]

Hope you are both well I can confirm that we are ok to go ahead with this meeting on the 14th and the 15th of July if this is still a good time for you both.

Best Regards,

[redacted]

From: [redacted]
Sent: 24 June 2016 10:38
To: [redacted]
Cc: [redacted]
Subject: RE: NWC - Provisional Meeting with CLOs

Hello [redacted]

We can confirm that the 14th and 15th July 2016 is agreeable to us. We have booked a room and can run our GIS data in parallel with the Contaminated Land Risk Assessment programme; GeoEnviron.

So, we'll see you here in Llangefni quite soon.

All the best,

[redacted]

BSc.(Hons.) PG Dip. MSc. AMIOA MCIEH MIEnvSc

Swyddog Iechyd Yr Amgylchedd / Environmental Health Officer
Adran Datblygu Cynaladwy / Sustainable Development Department
Cyngor Sir Ynys Môn / Isle of Anglesey County Council
Llangefni
Ynys Môn
LL77 7 TW

Direct Dial [redacted]
E-bost / e-mail [redacted]

Adborth am ein gwasanaeth / Feedback on our service
http://www.surveymonkey.com/s/8T97JF3

From: [redacted]
Sent: 24 June 2016 10:31
To: [redacted]
Cc: [redacted]
Subject: NWC - Provisional Meeting with CLOs

Hi [redacted]

[redacted] of Anglesey council rang me and suggested that the most efficient way of getting the information we want may be a visit in person to work through the records they have.

Since I am doing ecology work over there anyway it's a good opportunity to tie it in and provisionally I have booked a meeting for the 14-15th of July. This is after the route options for the scheme are finalised which will hopefully reduce the amount as well as clarify the information that we require for the EIA.

Let me know your thoughts.

[redacted]

[redacted] BSc AEnvSc
Environmental Scientist, Remediation Services, UK & Ireland
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Hello [redacted]

Sincere apologies for the delay in this matter.

It is most unfortunate that we are still not in a position to be able to furnish you with the information you require owing to the scale and scope of the search area due to on-going GIS and IT data issues.

Therefore, can you possibly confirm that such information is still required by National Grid please as per you original email dated 29th February 2016 please? If the data is still required, then we need to agree on a charging mechanism.

I have attached a PDF of the Public Protection Department's fees and charges and would draw your attention to the Contaminated Land search; an individual property area search attracts a fee of £220.50 (inc VAT) and an individual Private Water Supply search would be a similar fee of £200.00 (inc VAT). Unfortunately given the scale of this search area it is difficult to cost this search as it will be much more than this given the extent of the search area of the proposed route.

Therefore, we may be in a positon to provide data to you as a GIS layer as an alternative, although given the complexities of the problems we are currently facing we are still endeavouring to resolve the issues.

Once again, sincere apologies for the delay and please feel free to contact me directly at any time.

Kind regards,

[redacted]

BSc.(Hons.) PG Dip. MSc. AMIOA MCIEH MIEnvSc

Swyddog Iechyd Yr Amgylchedd / Environmental Health Officer
Adran Datblygu Cynaladwy / Sustainable Development Department
Cyngor Sir Ynys Môn / Isle of Anglesey County Council
Llangefni
Ynys Môn
LL77 7 TW

Direct Dial [redacted]
E-bost / e-mail [redacted]

Adborth am ein gwasanaeth / Feedback on our service
http://www.surveymonkey.com/s/8T97JF3

From: [redacted]
Sent: 29 February 2016 13:18
To: [redacted]
Cc: [redacted]
Subject: North Wales Connection - Request for Environmental Information - Local Authorities

Dear [redacted]

I understand that you both are responsible for issues relating to Contaminated Land and pollution within your respective councils and would be best placed to direct the following information request to you.

National Grid Electricity Transmission plc (National Grid) is developing a new 400,000 volt (400kV) connection between the proposed extension to the existing Horizon Nuclear Power Station at Wylfa on Anglesey and the existing electricity transmission network in North Wales.

Following consultation, and subsequent feedback, and taking into account considerations including the environment and technical factors, and public consultation, National Grid has developed its proposals which were consulted on in late 2015. Those proposals will be the subject of an Environmental Impact Assessment (EIA) Scoping Report, and will be taken forward to the next stage of Project development and consultation.

National Grid is proposing to use a combination of overhead line and underground cables for the connection. Cable sealing end compounds are proposed at the interface points between the overhead and underground connections. The proposals (which remain subject to further development and consultation) include: substation extension works at Wylfa and Pentir; approximately 30km of new overhead line (OHL) between Wylfa and the existing substation at Pentir; underground section across the Menai Strait; two new sealing end compounds (SECs) and potentially Tunnel Head Houses either side of the Menai Strait.

As part of the Geology, Hydrogeology and Ground Conditions Chapter we would be very grateful if you could provide any data you hold with regards to the following:

1. Status of land within the scoping corridor including any Enforcement Notices, under Part IIA EPA
2. Any known records of landfilling, waste management sites or remediation on or in the vicinity of the scoping corridor
3. Any correspondence or Enforcement Notices connected to the land or site within the scoping corridor with regard to nuisance issues (odours, dust, smoke, vermin etc.)
4. Records on the nature and locations of groundwater and surface water abstractions and records of Private Water Supplies covered by your jurisdiction that fall within 2km of the scoping corridor.
5. Any other information with regards to Contaminated Land or ground conditions within the scoping corridor.

Details of the scoping corridor are provided in the figures attached with a shapefile to make GIS enquiries easier.

Please could you detail any costs or charges applied to the data before starting your investigation.

Your help in this matter is much appreciated.

Best Regards,

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[redacted]

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A yw'r e-bost hwn wedi ei farcio'n 'Swyddogol-Sensitif'? Os ydyw, rhaid i chi ystyried a oes gennych hawl i'w ddyblygu, ei argraffu neu ai anfon ymlaen. Os oes, sicrhewch os gwelwch yn dda fod yr e-bost ynghyd ag unrhyw atodiadau'n cael eu marcio'n 'Swyddogol-Sensitif'. Eich cyfrifoldeb chi yw sicrhau fod mesurau'n cael eu cymryd i ddiogelu, storio a chael gwared ar y wybodaeth mewn modd priodol. Mae hyn yn golygu fod rhaid diogelu'r wybodaeth gyda chyfrinair neu ei chadw mewn cwpwrdd ffeilio y mae modd ei gloi. Rhaid cael gwared ar ddogfennau 'Swyddogol-Sensitif' yn y biniau gwastraff y mae modd eu cloi. Os ydych yn ansicr ynghylch sut i ddefnyddio gwybodaeth 'Swyddogol-Sensitif', yna cysylltwch os gwelwch yn dda gyda [redacted]

Croeso i chi ddelio gyda'r Cyngor yn Gymraeg neu'n Saesneg. Cewch yr un safon o wasanaeth yn y ddwy iaith.

Has this e-mail been marked 'Official-Sensitive'? If so you must consider whether you have the right to duplicate, print or forward it on. If so please ensure that the e-mail and any attachments are marked as 'Official-Sensitive. It is your responsibility to ensure that appropriate measures are taken to protect, store and dispose of this information properly. This means that the information must be password protected or kept in a lockable filing cabinet. 'Official-Sensitive' documents must be disposed of in the lockable waste bins. If you are unsure about how to use Official-Sensitive information please contact [redacted]

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Mae'r neges e-bost hon a'r ffeiliau a drosglwyddyd ynghlwm gyda hi yn gyfrinachol ac efallai bod breintiau cyfreithiol ynghlwm wrthynt. Yr unig berson sydd 'r hawl i'w darllen, eu copio a'u defnyddio yw'r person y bwriadwyd eu gyrru nhw ato. Petaech wedi derbyn y neges e-bost hon mewn camgymeriad yna, os gwelwch yn dda, rhowch wybod i'r Rheolwr Systemau yn syth gan ddefnyddio'r manylion isod, a pheidiwch datgelu na chopio'r cynnwys i neb arall.

Mae cynnwys y neges e-bost hon yn cynrychioli sylwadau'r gyrrwr yn unig ac nid o angenrheidrwydd yn cynrychioli sylwadau Cyngor Sir Ynys Mon. Mae Cyngor Sir Ynys Mon yn cadw a diogelu ei hawliau i fonitro yr holl negeseuon e-bost trwy ei rwydweithiau mewnol ac allanol.

Croeso i chi ddelio gyda'r Cyngor yn Gymraeg neu'n Saesneg. Cewch yr un safon o wasanaeth yn y ddwy iaith.

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